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Enrico Cotta Ramusino

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Contents

Introduction

The financial crisis, with its effects on the economy and therefore also on daily life, has greatly monopolised the interest of researchers and market participants, determining an extraordinary flow of research and publications on this subject.

The effort to interpret events, single out responsibilities, point out solutions for various problems and, in particular, tracing different regulations for the financial industry, has involved specialists in different disciplines and from various backgrounds. Each of the above, thanks to knowledge and experience gained professionally, has attempted to give an interpretative contribution, by proposing directions to tackle the new problems which surfaced with the crisis. By now, we have ample literature and excellent contributions on the subject. As is natural, each author attempted to tackle the subject by examining most significant or more familiar aspects, on the basis of personal knowledge and experience.

Within this framework, Enrico Cotta Ramusino's contribution is distinguished by a systemic approach, its purpose being the overall financial industry in its complexity and declension by major international financial centres. All the big issues proposed by the crisis are dealt with and contain a wealth of data and analysis. The unusual completeness of this work can also be seen in the huge quantity of documents regarding projects and re-regulation action at the international level, with special attention paid to the measures adopted in Europe and the United States, but also as regards the rather incisive measures taken in Switzerland.

It is interesting to see how, thanks to wide-ranging information, this book in some way gives regulators their dues. They are certainly to be blamed for the lack of effectiveness shown in opposing unorthodox behaviour, causing total lack of trust by market participants, therefore of markets, but they cannot be accused of not having reacted. Public opinion's conviction that regulator behaviour continues to be distinguished by complete inertia has, by now, become deep-rooted. They are considered incapable of timely reaction in defining new rules of the game, rules which would rapidly be able to ensure the collective well-being represented by financial stability. The book provides evidence that this widespread opinion is groundless. This work, requiring enormous patience and covering global aspects, is documented with precision, sets forth a variety of problems in all their complexity, explains solutions chosen and often discusses various alternatives examined. Regulation of the financial industry must continuously search for solutions able to simultaneously meet stability requirements on one side and the need to support economic activity on the other. Substantially, we are dealing with two different objectives, as reducing instability risks inevitably involves a decrease in economic support. It follows that there is a need for continuous research to find a point of equilibrium between two different objectives, both deserving protection. This task is made even harder by the pressure put on by organised interests, aiming at defending and possibly enlarging their operative frameworks, even to the detriment of the interest of all.

Heated controversy inevitably arising each time new rules for the financial industry are made public, bear witness to the depth of the conflicts created by this activity. The particular virulence of debates on these issues is further fed and weighed down by single ideological options, as regards choices. Viewpoints drawing inspiration from extreme liberalism on the one hand, and those featuring a strongly state-governed set up on the other, have often taken the place of more rational assessments, based on the objective analysis of problems, weighing advantages and limits of the various feasible solutions, without considering *a priori* positions.

From this point of view too, this book deserves special appreciation. Considerations on various issues are always carried out with great equilibrium and are never based on mechanical use of rigid interpretative models. The entire book bears witness to rationality and equilibrium which translates into a continuously clear exposition of facts, typical of an author writing with perfect command of the issues and clarity of ideas.

On reading the text, we get an overall comforting picture regarding re-regulation of the sector. The great number of interventions, the careful analysis of different issues, the caution and progression in proposing solutions emerge clearly and bear witness to the formidable joint effort made by regulators with different competences representing all leading countries.

The theoretical model for reference, prudential supervision, is substantially also confirmed by this aggregate of measures. As compared to the past, intervention corresponding to the logics of structural supervision also emerge. This kind of control, which absolutely dominated in the past, has been drastically reorganised at the end of the last century. Experience has shown how this choice, while being generally shared, ignored the strong points of the past (structural) approach, only underlining limits and inefficiencies they caused. The return of these instruments must be considered as evidence of a less ideological approach on the issue of control. Obviously, confrontation and disagreement are permissible, as regards relative weight to ascribe to the two different regulation models. On assessing experience accrued with equilibrium, we must however acknowledge that both models can contribute to achievement of stability and efficiency objectives in the financial industry. The latter finds its main reason for existence in its capacity to curb risks which market participants in various sectors transfer to intermediaries. Real economy seeks answers for its own safety requirements by transferring risks of all kinds to the financial system (credit risk, market risk, settlement risk, operating risk, etc.). Compensation received by intermediaries represents, to a great extent, payment for having assumed these burdens. By over-simplifying, we could say that the financial industry ‘sells safety’ to counterparts in various categories (households, companies, public bodies). Consequently, its reason for existence is totally inconsistent with production of instability, therefore, of uncertainty. The system must not, in any case whatsoever, transfer risks to counterparts, thereby creating stability crises. On the contrary, it should be able to absorb and transform the risks which real economy physiologically creates on performing its activities. On this subject, we must recall that shouldering this responsibility can only take place within certain limits. It is unreasonable to ascribe the financial industry with the task of containing every kind of risk created by economic activity in the name of the latter's supremacy. We are dealing with a practically impossible objective to achieve, further to being destabilising, regulation also being indispensable to protect these illusions.

We must be aware of the fact that there are limits as to what we can ask of the financial industry and of the risks it has to knowingly face. It is certainly unimaginable that financial intermediaries could guarantee stability even in situations of insolvency through public debt. The financial industry itself, in order to achieve various risk transformation processes, needs to be anchored. The State, by means of its institutions, typically the Treasury and the Central Bank, performs this role. Should it transform from being a supporting structure to becoming an instability factor, the overall foundations of the system's architecture would irremediably collapse.

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Foreword

This work is set within a much broader research project called *Market and company governance in the wake of the global crisis* and was financed by the "Alma Mater Ticinensis" Foundation of the University of Pavia.

The following took part in this project: the "Riccardo Argenziano" Department of Management and Law Research, the Department of Economics and Quantitative Methods, the Centre for International Business and International Economy (CIBIE), which is part of Pavia University's Economics Faculty, as well as Pavia's IUSS, a University Institute for advanced studies in Economics and Law.

The project is of an interdisciplinary nature and engaged scholars in disciplines such as economics, finance, management and law. The target was to analyse how the crisis we are going through, which started in the summer of 2007, still underway, will change the rules of governance regarding economic and financial systems and, consequently, all types of firms.

The research group, split into four units, specialised per subject, has, to date, achieved a great number of initiatives oriented towards both analysing research themes and encouraging circulation of results at local, domestic and international levels (on this subject, refer to the following website: <http://economia.unipv.it/alma/index_ita.html>).

This work is part of the research project analysing the financial crisis phenomenon and the subsequent triggering off, on an international scale, of the international financial system's reform process. The aim is to supply a wide-ranging framework, through which to better understand the development of the regulatory process underway, its size, complexity and presumable effectiveness. The first chapter examines the main evolutionary features of the international financial industry during the pre-crisis period, highlighting both the macro aspects, connected to the logics of regulations, and the micro aspects, connected to governance of leading financial institutions. The second chapter examines the coordination process, featuring relevant elements of innovation as compared to the past, coordination which started during the crisis between authorities of the major countries involved, under the supervision of international bodies. One of the main crisis outcomes is certainly reinforcement of the principle that an industry with an international range must be regulated by criteria and rules in common through tight collaboration between domestic authorities. The next chapters, in sequence, analyse action taken and put forward, in the main areas of financial activities:

- innovations on the subject of bank regulations and supervision, with special reference to reforms launched in Europe and the United States, stressing similarities and differences (Chapter 3);
- reform of capital requirements which led to the third version of the Basel Agreement (Chapter 4);
- derivatives market regulations (Chapter 5);
- measures launched in Europe and the United States having the aim of regulating the activity of rating agencies (Chapter 6);
- the principles followed as regards executive compensation in financial institutions (Chapter 7);
- new legislation launched in the aim of regulating areas which were poorly or not-regulated in the past, such as hedge funds (Chapter 8);
- regulations undergoing approval or currently in the process of being proposed in the aim of taking action on how financial markets work (Chapter 9).

In summing up, the difficulties of implementing the reform process are examined, within a macro-economic and financial framework featuring unfavourable conditions, such as the low growth of Western economies and widespread lack of balance in public finances.

As the reform process is still underway and is continuously being reshuffled through action taken by the authorities, we would like to specify that the writing of this volume was finished at the end of August 2011.

Chapter 1

Medium-Term Evolution of the International Financial Industry

This chapter[1] examines how the financial industry developed in the period leading up to the crisis, paying special attention to two complementary aspects. The first was the governance of the above, entrusted to institutions which, as facts have widely shown, proved inadequate in carrying out this task effectively. The reasons for failure, as shown in the analysis below, are mainly ascribable to the contradictions which became increasingly clear between the domestic features of government authorities and the international nature of the financial industry. Totally insufficient coordination mechanisms, at a supranational level, enabled significant differences to persist in how domestic authorities regulated and controlled their countries. The ensuing governance structure, in the wake of these contradictions, created a void in regulations, as well as opportunities for arbitrage, leading to the build-up of an overall risk profile which became very evident on the outbreak of the crisis.

The second analytical viewpoint focuses on the behaviour of large financial companies, the targets pursued, strategies implemented, and weaknesses that emerged. Ownership and governance structures for these companies, dissimilar within different domestic contexts, have encouraged taking directions marked by risk, which, together with gaps in the governance system, have contributed towards undermining the stability of this sector. Examining these two related aspects is important to understand and assess the reform process currently underway, as analysed in subsequent chapters.

1.1. Before the crisis

In the two decades prior to the outbreak of the crisis, the financial industry – an aggregate of companies and markets that is usually referred to using the term international financial system and that is discussed below – went through a phase of significant development and great prosperity.

The framework within which this development was achieved – the great process of globalisation – increasingly permeated all areas of economic activity from the mid-

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[1] This chapter is a new text, but it is based on a report presented at the Annual Congress of *Sinergie* (called *La governabilità dei sistemi complessi tra creazione e distruzione di valore. L'impresa e oltre l'impresa*, Rome, October 22nd-23rd, 2009), published in no. 81 of the review. See Cotta Ramusino (2010).

Eighties on. Since the symptoms that caused this process are clear, this chapter shall go no further than a brief outline of the key aspects.

The first is the radical change of the world's economic 'geography'. In the period mentioned above, some countries, that were initial marginal or even excluded from economic and financial transactions appeared on the scene and some have even taken on leading roles today.

The second aspect is the structural growth of international trade, as seen from the growth rates being systematically higher than gross world product. These different dynamics led economies to increasingly open up, providing more business opportunities for firms operating internationally.

The third factor is to be found in the development of foreign investments, where the growth rate was even higher than that of international trade.

The fourth factor marking the globalisation process is the whirlwind growth in international financial investments, as witnessed by the increasing diversification of assets and liabilities portfolios of surplus and deficit units, by the growth of cross-border financial institutions,[2] and by non-stop financial innovation.

Within this framework, the financial industry developed, at an international level, with previously unknown vigour because of essentially three fundamental factors that characterised how this industry worked.

The first, enabling factor relates to the very nature of what was traded. Financial resources are intangible, best lending themselves to intensive and repeated trading within potentially unrestricted ranges of space and time at near zero costs.

The second, decisive factor can be linked to the dizzying growth of information technology, greatly increasing trading and settlement capacity, the dissemination of information and the power to perform economic calculations.

The third factor is to be found in the progressive and by now completed liberalisation of transactions across an increasingly wide geographic area, including not only advanced economies but also a growing number of emerging nations.

These trends have produced some significant results: they have strengthened the individual intelligence of market participants, widened their range of action and opened up their attitude towards innovation. Summing up, these trends have greatly increased the range of opportunities for doing business in this sector.

The effects of these enabling factors can also be seen by looking at empirical evidence from three distinct areas.

The first concerns the size of the financial industry, comparing the growth of financial and real variables. Indeed, the 'financialisation' of the economy is shown by research comparing this growth (see Tamburini 2009; Cotta Ramusino 1998).

The second involves estimating the growing integration of the system and is measured by the degree of internationalisation of the assets and liabilities of institutional

[2] This phenomenon concerns both companies (banks, investment companies, insurance companies, intermediaries of all kinds) and markets which by now have become profit-making companies, gradually expanding their activities in foreign countries, according to a concentration process that is now clearly visible.

sectors,[3] including banks operating internationally. The indexes that researchers generally use to measure this compare the total of financial assets and liabilities towards foreign markets to measurements of real activity such as gross domestic product or foreign trade in specific countries or groups of countries. Both measurements provide evidence that financial integration is increasing much faster than production, trade and direct foreign investments (see Lane, Milesi Ferretti 2007).

The third piece of empirical evidence bears witness to the capacity of the international financial system to effectively carry out its institutional role, which is to 'balance' real 'macro imbalances', by guaranteeing global growth through the transfer of financial resources from large creditors to big debtors.[4]

The driving forces behind this development have been the big international banks, which have played a leading role in ensuring growth in size, business diversification and profitability over a lengthy period. From the Nineties to the outbreak of the crisis was a time of great prosperity for global finance. The data in the following tables demonstrate that the largest banks were very profitable in spite of signals that the level of risk was growing and there were doubts about the sustainability of the business model producing this kind of profitability. Moreover, within a context of growth and prosperity, criticism seemed to lack grounds.

A few thoughts on profitability and risk in banking

The tables below have, for the years immediately prior to the crisis, some summarised data on bank profitability and the risk to which this could potentially be connected.

As can be gathered by looking at the data (Tables 1.1 and 1.3), for a representative sample of major European and American banks, the level of profitability, as measured using the ROE index, is very high indeed, peaking in 2006, the last year before the crisis. The overall size of these results, from a long-term point of view, leads to obvious questions about the sustainability of the business model creating such profitability.

On the other hand, the following years, 2007 and 2008, were marked by generalized contraction. Only a restricted number of banks were able to maintain satisfactory remuneration for their own capital, whereas many recorded losses, some of them heavy.

The second piece of evidence, as shown in Tables 1.2 and 1.4, concerns bank leverage. Both European and American banks reached the outbreak of the crisis in the summer of 2007 with wholly insufficient capital to tackle the complex risks accrued in

[3] Households, companies and the public sector. The first have gradually diversified their assets and increased acquisition of foreign securities; in contrast, companies and states have diversified their own funding sources, increasingly relying on liabilities towards foreign counterparts.

[4] The international financial system has operated according to logic similar to that prevailing within a domestic framework, transferring resources from surplus to deficit to compensate for imbalances between accumulated savings, investment and consumption. Within this framework, when looking at the great imbalances compensated for by the international financial market, the most obvious ones relate to the American deficit and to the related excessive indebtedness of the household sector in that country. In fact, overall growth of the US economy was often sustained, for many years, as a dynamic component, by household consumption. This, in turn, was made possible by households becoming increasingly indebted (with a debt/income ratio rising above 130%). For comparative analysis on the international level of household debt, see Irer (2008).

their asset portfolios. The data regarding American banks, as described in the note to Table 1.2, underestimated the real degree of leverage of these banks, owing to the different accounting principles used in drawing up balance-sheets and, as explained in the text, owing to non-consolidated items recorded off-balance sheet. The high levels of leverage built up in the years prior to the crisis were largely ascribable to accruing the highest rated securities, resulting in very low capital absorption. The consequence was a large increase in the size of total assets, which turned out to be much more risky than expected following the outbreak of the crisis, making significant recapitalization by States necessary.

Since banks were so leveraged to begin with, the deleveraging forced on them at the outbreak of the crisis clearly highlighted the inherently procyclical nature of how financial structures are set up. The adjusting mechanism was triggered by the slump in the price of (financial) assets, which brought about a decrease in capital and an automatic move to further increase leveraging. To counteract this effect, banks were compelled to sell off assets in order to meet pre-established leveraging targets. This contributed towards further pushing down the price of assets and to limiting the credit available for the real economy (see Panetta, Angelini 2009).

	2003	**2004**	**2005**	**2006**	**2007**	**2008**
CITIGROUP	19.5	16.6	22.3	18.7	3.1	-22.2
BANK OF AMERICA	22	18.8	16.3	18.1	10.8	1.8
JP MORGAN	15.4	5.9	8	13	12.8	3.8
WELLS FARGO	19.1	19.4	19.6	19.8	17.4	4.9
US BANCORP	19.8	21.5	22.7	23.3	21.2	14.6
BNY MELLON	15.3	16.2	16.4	26.7	10	5.1
GOLDMAN SACHS	14.8	19.5	21.8	31.9	31.5	4.7
MORGAN STANLEY	16.2	16.9	17.2	23.5	9.7	5.1
MERRIL LYNCH	14.9	14.8	15.8	21.2	-25.3	-156.5
LEHMAN BROTHERS	16.2	17.9	21.8	23.3	20.9	

Table 1.1. Profitability of major US banks (ROE: return on equity)
Source: Bloomberg

	2003	2004	2005	2006	2007	2008
CITIGROUP	12.90	13.58	13.28	15.73	19.28	13.69
BANK OF AMERICA	15.00	11.08	12.72	10.79	11.69	10.27
JP MORGAN	16.70	10.95	11.18	11.67	12.68	13.03
WELLS FARGO	11.25	11.30	11.85	10.51	12.08	13.22
US BANCORP	9.85	9.99	10.43	10.34	11.29	10.11
BNY MELLON	10.96	10.18	10.34	9.03	6.72	8.47
GOLDMAN SACHS	17.62	19.76	22.68	20.67	22.37	13.40
MORGAN STANLEY	21.73	26.43	30.72	31.65	33.43	12.96
MERRIL LYNCH	17.18	20.02	19.13	21.55	31.94	33.37
LEHMAN BROTHERS	21.55	23.94	24.42	26.24	30.73	

Table 1.2. Leverage ratio of major US banks (total assets/equity - US GAAP)[5]
Source: Bloomberg

	2004	2005	2006	2007	2008
HSBC	16.0	16.8	15.8	16.4	5.3
SANTANDER	12.1	15.8	18.1	32.8	19.3
BNP PARIBAS	16.1	16.6	17.5	17.0	6.7
CREDIT SUISSE	16.0	16.9	26.4	17.9	-21.8
BBVA	18.8	25.9	25.0	25.2	19.0
UNICREDIT	15.1	9.8	14.8	12.3	7.1
INTESA SAN PAOLO	13.2	19.7	14.7	20.8	5.1
UBS	23.1	36.0	26.2	-12.1	-60.0
DEUTSCHE BANK	8.3*	11.3*	18.3	18.5	-11.3
BARCLAYS	20.6	21.1	24.6	20.5	14.6

Table 1.3. Profitability of major European banks (ROAE: return on average equity)
Source: Credit Suisse Fixed Income Research, European Banks, June 30th, 2009
* Calculated according to US GAAP

5 US GAAP allows items to be netted, in some cases significantly decreasing balance-sheet total assets. This is crucial to bear in mind when, on one hand, comparing data from different countries and, on the other, assessing the overall risk levels inherent in bank assets. Using IFRS accounting would lead to significant differences in the leverage data shown in the table. For example, at the end of 2008, with the deleveraging process already underway, the data for Goldman Sachs would be equivalent to 20 (instead of 13.4), for Morgan Stanley 23 (instead of 12.96), and for Citigroup 20 (instead of 13.7). The case of Deutsche Bank, shown in the following table, is exemplary on this subject: from a balance-sheet total of 2.2 trillion dollars under IFRS, one goes down to a total of 1.03 trillion after netting the assets and liabilities on derivatives and lesser items. See the presentation made by Deutsche Bank during the roadshow held for North-American investors in February 2009. As regards the theme of leveraging at American banks, also see Papanikolaou, Wolff (2010).

TOTAL ASSETS/EQUITY	2004	2005	2006	2007	2008
HSBC	15.4	15.6	16.7	17.9	27.0
SANTANDER	18.2	18.9	17.9	15.9	17.5
BNP PARIBAS	29.4	31.3	30.3	33.3	45.5
CREDIT SUISSE*	25.6	27.0	21.3	22.7	25.0
BBVA	23.8	22.7	18.5	17.9	20.4
UNICREDIT	16.7	20.0	19.2	16.4	17.9
INTESA SAN PAOLO	18.9	15.6	15.4	11.0	12.8
UBS	47.6	43.5	47.6	62.5	58.8
DEUTSCHE BANK**	29.4	29.4	47.6	52.6	71.4
BARCLAYS	47.6	47.6	45.5	47.6	52.6

Table 1.4. Leverage ratio of major European banks (total assets/equity)
Source: Credit Suisse Fixed Income Research, European Banks, June 30th, 2009
* US GAAP
** US GAAP for 2004 and 2005; in 2006 the leverage ratio calculated according to US GAAP would have been 31.2 instead of the value shown in the Table, equivalent to 47.6, calculated according to IFRS

Looking at stock-market returns confirms what is shown above and inferred from the accounting data. Table 1.5 compares returns offered by financial and non-financial companies.

From 2001-2006, one can see how the financial sector offered investors higher returns than other sectors. What is more, on a parallel with these higher returns, one can also observe fairly clear signs that investors perceived a higher level of risk (measured in terms of the volatility of yearly returns). The special case of big investments banks, at the core of the crisis, would appear to be symbolic. As is highlighted by Table 1.5, they produced, up to the outbreak of the crisis, very high returns for investors, much higher than those produced by the rest of the financial sector, but with far greater overall risks compared to a general or financial index.

		2001	2002	2003	2004	2005	2006	2007	2008	2009*	CAGR-AVG**
MSCI WORLD F -	Return (%)	-14	-24	26	12	16	16	5	-38	24	0
	Volatility (%)	17	22	15	9	7	9	13	32	23	16
MSCI WORLD FINANCIAL	Return (%)	-14	-21	30	14	19	19	-12	-51	33	-2
	Volatility (%)	19	25	17	9	7	10	16	44	40	21
HSBC HDG. (ORD)	Return (%)	-15	-11	36	5	11	4	-5	-16	26	3
	Volatility (%)	37	27	19	14	10	13	17	45	59	27
BARCLAYS - TOT	Return (%)	13	-30	37	23	9	25	-28	-66	135	1
	Volatility (%)	38	44	34	20	17	20	34	81	132	47
BNP PARIBAS - T	Return (%)	11	-20	34	11	33	26	-7	-57	88	6
	Volatility (%)	28	51	34	18	16	22	26	62	69	36
SOCIETE GENERAL	Return (%)	-1	-8	34	12	45	30	-20	-61	39	1
	Volatility (%)	37	54	34	20	16	22	29	71	64	38
UBS 'R' - TOT R	Return (%)	-5	-18	30	16	35	22	-27	-68	24	-6
	Volatility (%)	36	40	30	18	14	21	25	85	71	38
CREDIT SUISSE G	Return (%)	-3	-55	51	7	44	31	-18	-56	104	0
	Volatility (%)	40	62	42	23	16	22	23	79	61	41
BANCO SANTANDER	Return (%)	-16	-28	49	0	26	31	8	-49	71	4
	Volatility (%)	40	50	33	19	14	18	21	54	50	33
JP MORGAN CHASE	Return (%)	-17	-31	60	10	6	26	-7	-25	47	4
	Volatility (%)	43	57	30	17	14	17	27	84	91	42
BANK OF AMERICA	Return (%)	43	15	20	22	2	21	-19	-63	27	1
	Volatility (%)	34	32	20	13	13	13	22	100	138	43
LEHMAN BROS. HDG	Return (%)	-1	-20	46	14	48	23	-15	-100		
	Volatility (%)	52	42	26	22	20	28	41	383		77
CITIGROUP - TOT	Return (%)	0	-24	42	3	5	20	-45	-76	-28	-20
	Volatility (%)	36	49	24	16	12	14	29	117	140	49
DEUTSCHE BANK -	Return (%)	-9	-44	54	1	29	27	-9	-67	94	-3
	Volatility (%)	41	45	36	22	17	20	23	70	71	38
GOLDMAN SACHS G	Return (%)	-13	-26	46	6	24	57	9	-60	124	7
	Volatility (%)	45	37	26	19	18	23	34	79	67	39
MORGAN STANLEY	Return (%)	-28	-27	48	-2	4	46	-20	-69	97	-6
	Volatility (%)	58	48	32	24	21	20	36	139	90	52
WACHOVIA DEAD -	Return (%)	16	20	32	17	4	12	-30	-85		-15
	Volatility (%)	32	35	20	15	17	17	27	195		45
MERRILL LYNCH &	Return (%)			8	7	3	13	6	-27	2	1
	Volatility (%)			17	10	9	9	12	18	7	12
INTESA SAN PAOLO	Return (%)	-44	-27	55	16	30	37	-1	-49	22	-2
	Volatility (%)	37	54	38	24	17	22	18	58	56	36
UNICREDIT - TOT	Return (%)	-17	-13	17	3	44	18	-12	-67	74	-3
	Volatility (%)	37	35	23	13	18	20	26	68	68	34
WELLS FARGO & C	Return (%)	-20	10	29	9	4	17	-12	2	4	4
	Volatility (%)	26	25	18	12	12	13	27	83	118	37
MIZUHO FINL. GP.	Return (%)	-62	-58	193	60	83	-9	-37	-51	-28	-13
	Volatility (%)	65	76	77	37	28	24	35	74	55	52
NOMURA - TOT RE	Return (%)	8	7	26	79	128	-18	-5	-55	2	9
	Volatility (%)	45	47	30	37	27	37	25	45	34	36
SUMITOMO - TOT	Return (%)	-26	-14	59	12	75	19	-9	-49	20	3
	Volatility (%)	44	40	40	30	25	34	37	64	39	39

Table 1.5. Return and risk offered by major international banks (%)
Source: Datastream
* Mid October
** CAGR, average volatility

Finally, it is worth remembering how not even difficult moments, even though they had surfaced during this period,[6] under different forms and with a certain regularity, affected the system's overall development and the foundations on which the system stood. In each of these episodes, the system displayed great 'resilience', overcoming new criticism and probably acquiring the sensation of being immune to the risks of failure. In fact, the belief that the model in place was the best possible one became, given how it developed, widespread.

The arguments presented thus far seem to suggest the gradual surfacing of an increasingly larger, more integrated international financial system that was perfectly functional for the financial requirements of a fast-growing world economy. The next paragraph deals with the weak points of this approach.

1.1.1. An 'incomplete' system

This powerful global infrastructure developed in a deeply asymmetric way, as the crisis very clearly highlighted. As financial firms and markets became increasingly international, the governance of their activities remained domestic, resulting in a contradiction that manifest itself all too clearly in the crisis.

What is generally termed the international financial system[7] is actually an aggregate of domestic systems that are reciprocally connected through the activities of international financial firms, yet still regulated by profoundly differing governance mechanisms. The inability to set forth common rules lies at the very heart of the current crisis, whereas the ability to take action on this aspect forms the basis for sustainable growth. The next part of this chapter will provide a few comments to make these statements clearer and to help understand the reform process currently underway, as described in the subsequent chapters.

[6] The major aspects: the Japanese financial crisis, which started in 1989, was triggered by the property bubble and the explosion of bad bank loans; the crisis of junk bonds, owing to the insolvency of many issuers, which started the same year; the crisis of the Swedish, Norwegian and Finnish banking systems, between the end of the Eighties and the beginning of the Nineties; the crisis of the European Monetary System in 1992; the crisis of the international bond market occurred in 1994 following a heavy increase in medium-term interest rates on major international currencies; the Mexican crisis in 1994; Barings resounding default, one of the most prestigious British merchant banks, taken over by ING, following the logic of a rescue, at the symbolic price of one pound sterling; the Asian crisis in 1997, created by the incapacity of many countries in the area to preserve the established exchange rate with the dollar, consequently leading to a banking and financial crisis; the currency crisis involving Brazil in 1997; the Russian crisis in 1998 and consequent default of this country's government securities; the crisis of an important hedge fund, the Long Term Capital management, in 1998; the outbreak, at the end of the first quarter of 2000, of the dot-com bubble; the crisis, the same year, of Turkish debt securities; a new crisis in the junk bonds market in 2001; the systemic crisis caused by the attacks on the Twin Towers, September 11th, 2001; Argentina's economic crisis and default; the crisis of the Brazilian bond market in 2002; corporate scandals at the beginning of the millennium which involved prestigious listed companies, whose securities were held in the portfolios of worldwide institutional investors. For a review of this phenomenon, see Reinhart, Rogoff (2008); Leaven, Valencia (2008).

[7] For in-depth discussion of the problems inherent to the management of complex systems see *Sinergie*, 81, 2010.

The governing body of a financial system is made up of the authorities that have joint jurisdiction for regulating the financial industry. It is their job to give form and order to regulations able to guarantee the conditions required for medium to long-term sustainability and stability.

The governing body has a number of different parts, including the obvious ones like the central bank, regulatory and supervisory bodies for financial companies, but the list does not end here. There are – and here only the main elements of a governance system are noted – the regulations governing accounting principles used by companies to draw up their balance-sheets, the tax implications of financial activities and corporate governance rules. The overall effectiveness of governance depends on the degree of coordination between these composite parts.

The third comment concerns the system of relations between the financial system's governing body and other systems. More specifically, for the matter in hand, the focus quickly becomes the relationships with the political and institutional spheres. The basic tasks the governing body has to perform are influenced by the shared and majority values found in the relevant domestic context. In other words, they are connected to the 'type of capitalism' in which the domestic financial system has developed and of which it is a crucial part. In other words, the governing body matures and expresses an orientation, which could be called 'country specific', leading this governing body, through a dialectic process on a political-institutional level, to determine the dominant target for that time. This orientation can essentially be broken down into two fronts.

The first refers to the macro-economic 'targets', particularly as regards growth, that the financial system can make a significant contribution to by providing credit in a number of different technical formats. These targets are established by the political sphere which has to schematically choose between two alternative options: one favouring economic growth through the support of aggregate demand; the other more oriented towards a rigorous approach and the correction of macro-economic imbalances. Movement in monetary variables logically follows the above choices, thus creating an initial element that influences how the financial system works.

The second crucial turning point that defines a market's orientation, as said above, is the 'way' in which regulatory and supervisory actions are taken, especially as regards the choice of a reasonable balance between efficiency and stability. Indeed, as the literature has clearly shown, there are obvious 'trade-offs'[8] between these two aspects. The search for efficiency translates into policies able to encourage more competition between market participants on the logical assumption that there is a direct correlation between the first and second goals. According to this logic, 'market institutions' are expected to adequately control risk levels. On the other hand, privileging stability creates governance models built on more pervasive and less permissive regulations, designed to prevent crisis at the expense of a degree of efficiency. It is possible to place choices between regulation and self-regulation in this context, the first being typically 'top down'

[8] Carletti, Hartmann (2002). A comment on the theme of regulating the banking system in the wake of the recent crisis is to be found in Masera (2009).

and the second more confident that 'automatic' market adjustment is feasible through pressure from the institutions that were automatically created in such an environment.

In the last twenty years, the financial industry has developed as the context has moved from domestic to international, meaning the framework has inevitably become more complicated.

Internationally, there are effectively two options for international governance. The first option – and, at least as an abstract concept, the main route to follow – is the creation of a supranational governing body granted complete power to perform its functions. The second is to create coordination mechanisms between domestic governance bodies. In abstract terms, it is obvious that the effectiveness of the latter concept depends on the degree of coordination which domestic authorities feel they should achieve. In light of the governing body's orientation, as defined above, it would seem immediately clear that coordination represents a real challenge. If, on the one hand, it is true that all authorities, in principle, are interested in the financial system functioning soundly and that this is the reason for putting in place a certain 'number of regulations', it is just as true, on the other hand, that deciding on how much regulation is always left to the subjective assessment of domestic authorities.

Returning to financial firms, the first issue is the influence the financial system's governing body, as described above, has on the company. The overall regulatory framework, specific controls on financial activities, financial supervision, and civil, accounting and tax laws, all define degrees of freedom or constraints (see Golinelli 2005a, p. 202; 2000) and are the context within which the company makes its strategic and operative choices. The second factor is stakeholder activity in the company and their relationships with the subjects entrusted with company governance and management.

There are many options on both fronts. The way in which the governing body of a financial system exerts its influence on financial companies can draw inspiration from different objectives and, as noted above, can be exerted in differing ways. On the other hand, the ability of stakeholders to influence a company is heavily dependent on the overall nature of the capitalist system within which the company operates. It has already been noted – and will be focused on again below – that the above-mentioned factors can result in companies making different decisions in terms of the medium-term balance between competitiveness and stability, producing different targets. This aspect is dealt with more thoroughly in the second part of this chapter.

By analysing the last twenty years, it becomes clear that the financial industry developed through the creation of a vast arena for international competition into which market participants from different domestic systems entered, bringing different models for interacting with their own stakeholders (see Cotta Ramusino 2007; 1998; Golinelli 1994). This meant both different targets and degrees of freedom. The absence of a supranational governing authority resulted in insufficient coordination between domestic government bodies, ensuring the system was never completed. In truth, it remained in a dangerous transition phase in which superficial solidity concealed structural fragility.

Therefore, financial companies operating internationally gradually built an increasingly integrated network, hinged on a very hermetic system of relations, made manifest by the many intersections between assets, liabilities and off-balance transactions. This reached the point of creating objective difficulty for domestic governing authorities to interpret and understand the real dynamics.

In recent year, the long road that international financial supervision has travelled down has produced some noteworthy results but, as the crisis has shown, these results are absolutely insufficient in guaranteeing stability. This happened because the new regulations, despite being important, remained incomplete, such as, the jurisdiction of the body issuing a regulation. This resulted in a clear contradiction between the increasingly international financial markets and the lack of an international regulator.

1.1.2. The moral hazard of the leading country

The arguments set out above make it possible to position and understand the current crisis. It is known where it started – the American financial system –, the asset class involved – mortgages which were subsequently securitized –, and the vehicles of contagion – mortgage-backed securities created by securitizations and subsequently structured into ever more complex forms to then be distributed to investors worldwide. Its effects are also known, namely the widespread crisis between the world's premiere financial institutions, the considerable injection of resources by States into banks, the contraction of credit and the ensuing massive economic recession.

It is worth looking at the main hinges of the crisis since these provide indications about the reform process underway, a goal-oriented process focused on preventing a repeat of past experiences.

In the lengthy period leading up to the crisis, American governance of the financial system drew inspiration from two principles; first, it adopted the political choice of establishing, as an absolute priority, a target for economic growth, with a policy of low interest rates to support consumption and investment; secondly, structural changes were made to liberalise and deregulate the industry (or non-regulation).[9]

As regards support for economic growth, questionable choices were made, mainly from the beginning of this decade. However, these choices were absolutely clear in terms of their objectives: an enduring policy of artificially lowered interest rates aimed at meeting internal demand and, through this, encouraging GDP growth. The case of the property market provides a clear example of how these choices were applied. Massive liquidity and low interest rates sustained income and made it possible for households to go into debt while creating an incentive for property investment (a kind of financial 'road' towards the American dream of owning a house). When the 'prime' market was saturated, the 'subprime' market opened up very quickly, bringing new debtors into the

[9] The orientation towards deregulation or non-regulation of the financial system was, to a certain extent, encouraged by 'contiguity', as noted by numerous many authors, among the top representatives of the American financial industry and institutional-political world. In this way, those who were 'regulated' were able to influence, through political intervention, the regulator's behaviour. This set-up, which is described in various ways, is analysed in different works, including Onado (2009) and Consumer Education Foundation (2009). The latter examines lobbying by representatives of the financial industry and compensation given by the latter to various representatives of the political world in, what is more, compliance with legislation and rules of transparency.

market, debtors who would never have obtained credit normal circumstances.[10] The result rapidly overwhelmed the American property mortgage market, the biggest in the world.[11] Non-conforming (or non-agency) mortgages grew rapidly in terms of number and total amount owed (see Ashcraft, Shuermann 2008; Gorton 2008). An increasing percentage of these 'new' mortgages was securitized, ending up in the portfolios of numerous financial institutions all over the world. There is some very revealing data on this issue: in 2006, subprime mortgages represented 22% of the mortgages issued and 80% of these were securitized.

Such aggressive macro-economic behaviour resulted in the financial system becoming subservient to the growth of the economic system. This behaviour should have found its own logical counterweight in stricter governance of the financial system. If one takes the basic concept of governance introduced above, it is possible to further refine this concept by adding two elements that, in normal times, are essential: regulation, which defines the general framework for the behaviour of market participants, and supervision, aimed at ensuing regulatory compliance. In a period of turmoil, the governance of the system is enriched by a third equally important dimension called crisis management, which is all the actions required to preserve the system's overall stability.

As will become ever more apparent, the reverse actually happened as increasingly permissive regulations went hand in hand with totally inadequate supervision and really questionable crisis management procedures.

1.1.3. The hinges of the crisis

This section examines some of the basic elements underlying the reasoning above.

a) In 1999, the United States introduced the Financial Modernization Act,[12] which abolished the 1933 Glass Stegall Act and fundamentally changed the country's financial system. The old legislation had aimed to create a clear separation between investment banking, with its inherent risks, and the traditional banking system (called 'pure commercial banking'). The removal of this barrier and the subsequent creation of giant conglomerates ('too big to fail' or 'too big to be saved'?) certainly cannot be considered the direct cause of the crisis. There never has been a Glass Stegall Act in Germany or in many other European Union countries. Moreover, the banking law from the early Nineties means no separation exists in these countries as regards different banking activities. In spite of this, the adoption of a universal banking model did not prevent European banks from growing and evolving in conditions of greater stability (one could say 'stability net of contagion').

[10] In the subprime sector, individuals are often unable to objectively assess the mortgage proposals received by financial intermediaries, consequently causing asymmetric distribution of negotiating powers which led to acceptance of mortgage conditions, thereby causing a net decrease in customer well-being. This is the so-called practice of 'predatory lending', today subject to investigation by the FBI. See Morgan (2005).

[11] See Gorton (2008); Ashcraft, Shuermann (2008); Caprio, Demirgüç-Kunt, Kane (2008, pp. 4-17, pp. 25-29, pp. 48-56).

[12] See Gramm-Leach-Bliley Act, issued by the American Congress on November 12th, 1999.

The problem lay when the effects of this institutional change were added to the factors indicated below.

b) Supervision of the banking system was, in fact, split between the Federal Reserve Bank, having jurisdiction on banks and Bank Holding Companies, and the Securities and Exchange Commission, having jurisdiction on investment banks. The latter turned out to be at the core of the crisis – three of the five biggest banks operating before the crisis no longer exist as autonomous entities, one actually having gone bankrupt and the remaining two having been transformed into Bank Holding Companies – accumulating increasing and higher risks in the face of totally inadequate capital reserves. It is now clear that the reason for this was the legislative gap in supervising these entities, which, from 2004, became Consolidated Supervised Entities, which meant they were subject to a supervision programme on a voluntary basis governed by the SEC.[13] A consequence of this set-up was that investment banks could establish their own capital requirements through internally developed capital calculation models. This set-up does not seem, on its own, to lack validity. In the spirit of agreements regarding international supervision, promoted by the Basel Committee, the banks can, in fact, decide to calculate prudential capital requirements by means of internally developed calculation algorithms. However, the basic and natural corollary to this set-up is that supervisory authorities must check and validate these models to make sure that banks have adequate protection for different types of risk. This is exactly what they did not do. In fact, nobody supervised the soundness of the models and this enabled investment banks – initially required to have an overall leverage ratio below 15 on the basis of an empirical criterion that was much criticised by members of this industry for its rough and approximate nature – to expand the ratio between assets and capital till higher thresholds were exceeded (equivalent to 30 or 40). The result is what everyone saw: after the Lehman Brothers' bankruptcy, the SEC's Chairman acknowledged the failure of this supervisory set-up[14] and supervision of the remaining institutions fell to the Federal Reserve Bank.

c) Another pillar of the modernization process of the system is the Commodity Futures Modernization Act (CFMA), launched in 2000. This effectively gave the green light for the growth of the over-the-counter derivatives market. These instruments are traded directly between parties, rather than on a regulated market. The difference between the two choices is clear: trading on a regulated market is more transparent (in terms of prices, volumes, standardization and liquidity of the contracts traded, details about counterparties and so on) and is more easily controlled by the supervisory bodies. Finally, in terms of risk, it also benefits from the central role played by the clearing house which, by means of a guarantee system involving all market participants, removes the 'counterparty risk' that each participant faces. When CFMA was approved, it was a victory for a regulatory approach that left financial innovation in the hands of the 'market' over an alternative ap-

[13] Securities and Exchange Commission (2004; 2008a).
[14] Securities and Exchange Commission (2008d).

proach proposing stricter and more disciplined market regulation. The subject of the debate was not theoretical but about an actual, existing market that, by June 2008, would be worth 683 trillion American dollars.[15] Once the deregulation or non-regulation path had been adopted, the market developed around a restricted number of dealers that were internationally acknowledged as 'market makers' for this segment, with obvious repercussions for the system (notably, any crisis faced by one of these participants could involve all the others).

d) While regulation and supervision might not have produced the desired results, there were other institutions – defined here as 'in the middle' – that were essential to the structure of the system (notably rating agencies)[16] that completely failed to comply with the tasks given to them. It is important to recall that these subjects play an essential role in financial markets since their ratings are important for regulating international banking. International capital adequacy agreements – better known as the Basel Agreements – make ratings from agencies a key, formal part of measuring risk. The same principle is shared by regulatory and supervisory bodies in leading countries. An asset given a top rating by the agencies can be acquired by a bank for a lower capital charge. However, should a rating later prove to be unfounded, the bank's capital reserves to protect against this risk would be insufficient. Rating agency assessments were a crucial hinge on which the crisis spread: sub-prime mortgages were transformed into securities that were rated by agencies in a manner that was totally inconsistent with the underlying credit worthiness. Such assessments had a major impact on the spread of problems: on one hand, 'safe' securities were acquired by international investors, meaning market participants usually reluctant to take on risks were 'infected'; on the other hand, positive assessments by agencies made it possible for the banks themselves to buy back those securities which, because of the low capital absorption, were able to increase their assets almost without any capital charges (see Foglia 2009). On the subject of banks buying back securities which then proved to be toxic, there is another problem to add to this sorry picture, namely the fact that banks bought back these securities using 'investment vehicles' that, because of the accounting standards used, allowed these banks to post such investments 'off balance sheet', thus creating an

[15] The information shown, which is often cited, partly because of its impressive evocative capacity (the value quoted is 11 times gross world product in 2008), is expressed in terms of 'notional amount outstanding', in other words, the value of notional capital to which contracts refer, involving exchange of cash flows equivalent to a small percentage of the notional capital itself (moreover, these flows are never subject to exchange, except for some currency contracts). Other information regarding market size, regularly published by the Bank for International Settlements, concerns the so-called 'gross market value', which is much more representative of the risk profile faced by market participants than 'notional amount outstanding'. On June 30th, 2008, this figure stood at 20.4 trillion dollars, less than a thirtieth of the 'notional amount outstanding', but always equivalent, to give an idea of its magnitude to approximately 9 to 10 times Italy's gross domestic product. A final piece of information that can help to understand the real risk profile to which market participants are exposed is the so-called 'gross credit exposure', in which starting with the gross exposure mentioned above, 'netting' between the parties is carried out on opposing signs. Statistical data on this figure, obviously lower than the first two, are not available on a systematic basis. See BIS, Monetary and Economic Department (2009); International Swap & Derivatives Association (2008).

[16] The reference also involves other subjects, such as financial analysts, who proved unable to distinguish between sustainable value creation and short term speculative results, as well as audit companies.

out and out 'shadow banking system' (see Adrian, Shin 2009). There are detailed reports available today documenting this failure,[17] including various proposals for regulations that are dealt with in subsequent chapters. What is most striking is the symbolic value of this failure. There has been a lot of debate about conflicts of interest distorting the rating process – where the risk assessor is compensated for its services by the subject assessed –, but the argument against this supposedly malicious point of view was that the conflict at issue was overcome because of the very interest of agencies to preserve their reputation and subsequent goodwill[18] since the ratings business was based on market prestige and reputation. Again, the market itself contained, according to its supporters, the very enzymes needed to guarantee its sound functioning.[19] Investigations carried out by the SEC after the outbreak of the crisis showed a very different reality from the one put forward by those who supported allowing market mechanisms to produce automatic adjustments.

e) The last ring in the chain of controls is the internal bodies and functions of financial institutions, especially, the risk management function, internal control committees and boards appointed, on the one hand, to support and, on the other, to control actions taken by top management. For now, it shall have to suffice to notice that these control mechanisms failed. Despite the substantial development and increased sophistication of management tools, internal control systems played second fiddle to business expansion, with risk protection measures fading into the background. In the second half of this first chapter, the reasons for this development will be focused on again,[20] especially since it occurred consistently in the governance frameworks of all the major companies involved in the crisis.

1.1.4. Crisis management

Crisis management procedures further highlighted the fragmentation and disorder beneath an apparently systemic global infrastructure. As is clear from the introduction above, the first symptoms of instability arose in the market of (subprime) mortgage backed securities. The collapse of their market value was a consequence of the growing insolvencies of these mortgages. Rating agency downgrades immediately followed[21] – proof of how groundless assessments had been shortly beforehand – and investors who had borrowed to buy these securities were immediately in trouble. 2007 saw the North-

[17] Securities and Exchange Commission (2008a; 2008b).
[18] See Sy (2009); Opp, Opp (2009); Hill (2010).
[19] The notion that the market is however able to find an equilibrium and, therefore, to preserve its own stability without needing action by regulating authorities, is strongly and effectively disputed in a recent essay by Akerlof, Shiller (2009).
[20] See Senior Supervisors Group (2008); *The Economist* (2008); G-20 Working Group 1 (2009).
[21] In June 2007, Moody's downgraded 131 issues (250 were put under observation for a subsequent downgrade). In July, S&P downgraded securities totalling 7.3 billion dollars, followed by Moody's with a 5 billion dollar downgrade. In the same days CDOs were put under observation and Fitch announced the downgrade of 33 issues of structured products. Moody's announced the revision of the methodologies used to estimate expected loss on securities backed by Alt-A mortgages; rating revisions continued through the autumn. See Borio (2008).

ern Rock crisis in the United Kingdom and the crisis of two Bear Stearns hedge funds in the United States. The inability of government authorities to estimate the dimensions and consequences of the crisis appear clear in their official statements. They declared presumed losses which are only a fraction of those actually incurred.[22] In spring 2008, Bear Stearns was rescued – taken over by J.P. Morgan thanks to financing by the Federal Reserve Bank – and, in the summer, the Freddie Mac and Fannie Mae crises occurred, both being semi-public agencies having a crucial role in the workings of the American market for real estate mortgages.

These are the conditions under which one reaches the crucial hinge of the crisis, namely the bankruptcy of Lehman Brothers. Faced with the insolvency of the third biggest investment bank in the United States, government authorities felt it correct to stop the rescue policy and let 'market forces' go their way, believing that this was the way to punish a market participant who had made a mistake. The issue is clear from a theoretical point of view: according to some, rescues, by removing the risk of bankruptcy, place management in a situation of moral hazard, in which they benefit from the positive effects of their own behaviour without having to face negative consequences. On the basis of this simple reasoning, Lehman was left to its own destiny. It seems legitimate to express more than a slight doubt on the soundness of this choice, insofar as the penalty was not shifted on to Lehman (alone), but onto the entire international financial system. Trust in financial institutions, a public value, was demolished and the crisis spiralled across the world, as has been proven by the international interbank market drying up and by the collapse of prices in financial assets and the steep rise in risk premiums.

The Lehman effect

The Lehman bankruptcy, as shown in the diagram below, triggered off an escalation of the crisis and tremendous contagion. The first effect was a steep rise in the risk premiums demanded by the market for debt securities. The drastic increase heavily involved AAA securities, usually the safest to trade on the market. Risk premiums, compared to government securities, went up from about 80 basis points in July 2007 to 180 in July 2008, then to over 400 basis points almost immediately after the bankruptcy. The third Table highlights how the volatility of the spreads for these securities was higher than that of securities with lower ratings. The second Table shows how the rise in spreads was even steeper for debt securities issued by financial companies.

The consequence of this rise in risk premiums was, obviously, a steep fall in the prices of the debt securities held by banks and other financial intermediaries. As the crisis played out, this raised doubts about the ability of the system to resist. The result of

[22] The reference here is to statements by Fed President, Ben Bernanke, who estimated losses connected to subprimes at 50 to 100 billion dollars, and to the estimates made the following month by the International Monetary Fund of approximately 200 billion dollars. These circumstances highlight how the system's complexity grew to extremes, going well over the ability of skilled operators and internal bodies within the system to directly and immediately understand what was happening. A great number of market participants, spread all over the world – therefore subject to different laws, supervisory regulations, accounting principles and tax regulations – but fully integrated in a system of exchange organised outside official markets, dealing with highly complex and sophisticated products, had, in fact, created such a complex "system" that it even became undecipherable to its internal players and experts.

the Lehman decision became very clear as market participants ended up by being convinced that the vicious circle of the crisis might never end.

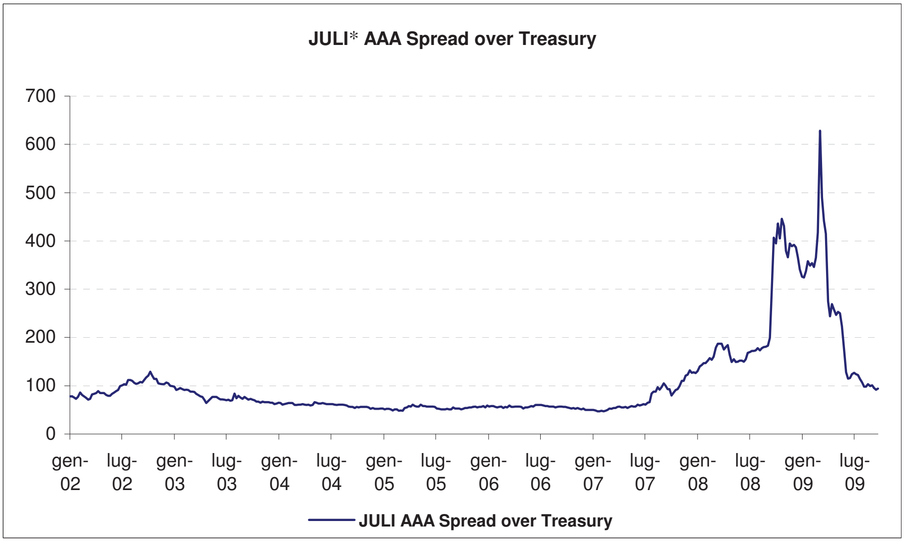

Table 1.1. United States: spread evolution between AAA and Treasury securities
* JULI: JP Morgan US Liquid Index

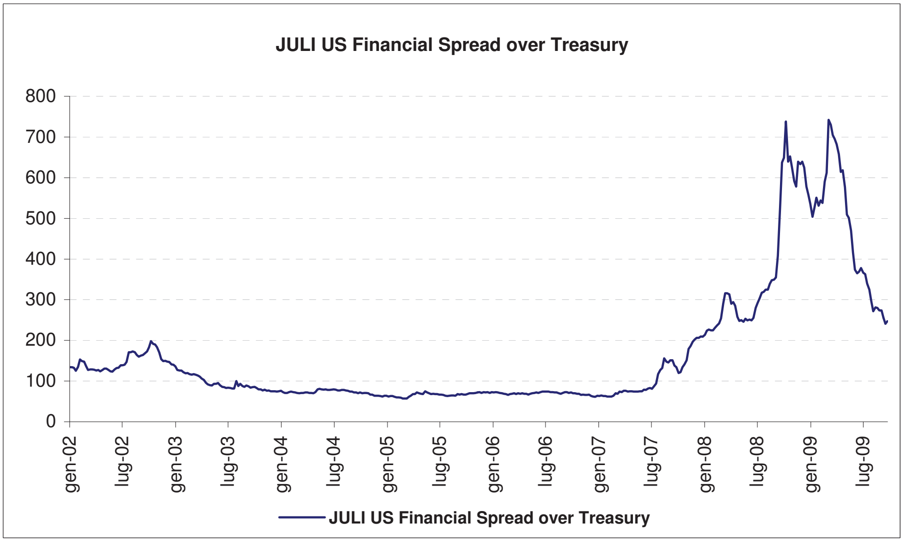

Table 1.2. United States: spread evolution between financial securities and government securities

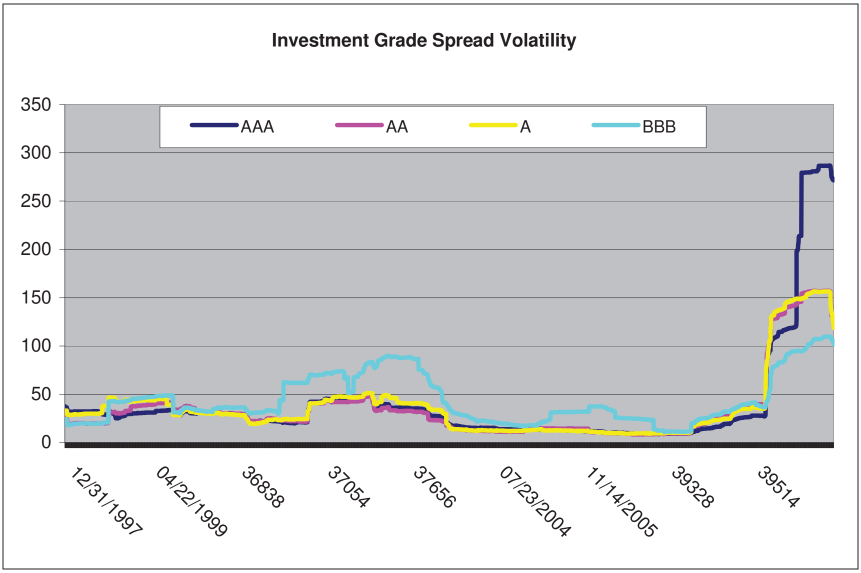

Table 1.3. United States: spread of volatility in 'investment grade' securities

There is additional analysis that looks at the evolution in prices of contracts, showing the risk rate ascribed by markets to big international banks. The systemic nature of the crisis is obvious: it shot up at the same time as the Lehman bankruptcy and only came down after various countries announced action plans and support for banks.

Two empirical assessments of the performance of 'CDS premiums' provide some interesting evidence: first, they seem to be more closely correlated to the ability of the relevant countries to take action to help their banks than to the specific risk of the bank; secondly, there is a positive cross-over effect, insofar as CDS premiums for banks in various countries benefit from action in other countries (see Panetta *et al.* 2009). Therefore, in spreading and treating the crisis, the system appears to be perfectly cohesive.

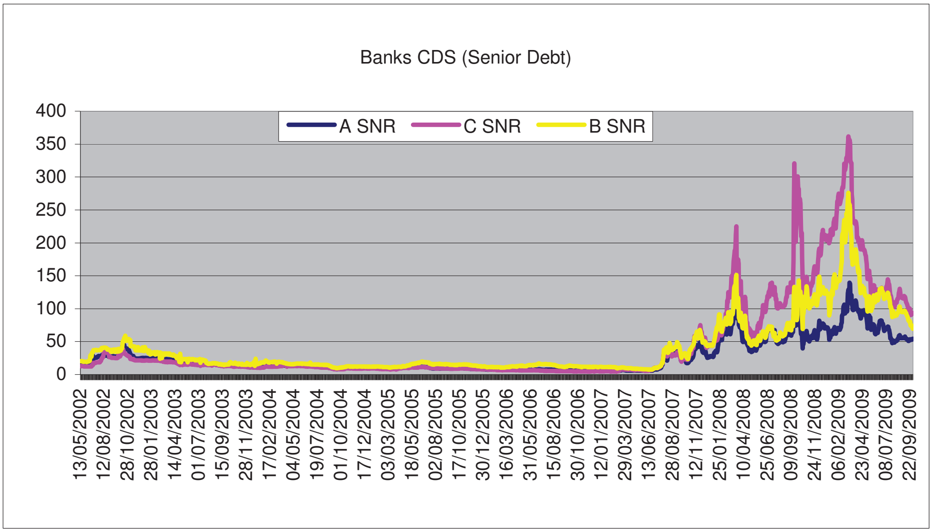

Table 1.4. United States: credit default swap performance for senior bank securities

It is clear that American authorities quickly regretted the Lehman decision as, just one day later, the insurance giant AIG was rescued thanks to an 85 billion dollar injection and other considerable subsidies in the following days and months.

In the wake of the hesitation by American authorities, all the countries involved in the crisis decided to take action to save what remained of the international financial system. Recent research, covering the first eleven countries involved in the crisis, has highlighted the scale of the intervention by the various countries. A total of 5 trillion dollars was made available, including 2.5 trillion in the United States, equivalent to 18.6% of the gross domestic product of the countries in question. The resources actually disbursed totalled 2 trillion, equivalent to 7.6% of the gross domestic product in the countries mentioned (see Panetta *et al.* 2009).[23]

Such reasoning clearly seems to highlight the incomplete nature of the international financial system. The participants in this system became increasingly integrated, but the domestic regulatory and supervisory authorities were unable to keep pace with this process, resulting in a serious delay that the crisis so evidently underscored.

In a similar situation, even if the authorities of one country did believe that the actions of equivalent bodies in other countries could generate global risk, what tools or influence might they yield to actually change the result? The answer is none. The European Union or Japan, for example, were not in a position to exert any influence on American authorities when it came to crucial issues such as the supervision of investment banks, monitoring rating agencies or managing the crisis. It will become clearer

[23] The following countries were analysed: United States (2,491 billion dollars committed, 825 disbursed); Great Britain (845; 690), France 368; 104), Germany (799; 151), Holland (265; 99), Italy (10; 2), Spain (31 committed), Japan (113; 3), Switzerland (31 committed), Australia (62 committed) and Canada (0).

below, but these are the essential points on which the reconstruction of the system needs to begin.

1.2. Governance of financial companies and its impact on the crisis

The second way to analyse the causes behind the crisis is to examine the 'entrepreneurial behaviour' of a large number of major international financial institutions, particularly the kind of conduct which contributed substantially to the outbreak of the crisis. It is worth immediately specifying that the 'entrepreneurial' attribute refers, in the case of companies like those under the spotlight here – where there is structural separation between ownership and control –, to decisions taken by the management group entrusted with governing the company. To fully understand the crisis, it is necessary to consider the rationality of the company's governing body. It has already been noted that financial institutions have come up against each other in the arena of international competition, each bringing rather different entrepreneurial orientations, by virtue of belonging to differing domestic contexts and on the basis of the system of relations which each of these companies has with its own regulator and stakeholders.

The thesis presented in this work is that the perverse workings of managerial incentive mechanisms, by distorting the entrepreneurial behaviour of companies, has gradually generated a conflict between individual and collective interests. This was the result of a process that, over time, meant the system developed and gained increasing layers, but that became more marked over the last two decades. It has involved the public company model in general, starting from the system which this model created, Anglo-Saxon capitalism. In the particular case of financial companies, specific factors were added to the general ones, further exasperating them.

1.2.1. Public company 'betrayal'

Looking back, one of the more remote causes of the crisis is undoubtedly the malfunctioning of corporate and economic democracy, especially and ever more sharply, the governance model of big American companies. The theme is not restricted to that particular economic system, but it is important to understand the future evolutionary dynamics of the institutions of capitalism on a global scale. Further proof for this statement comes from the fact that the number of companies which, even when based in economic systems other than the Anglo-Saxon one, are adopting the structural format of the latter, a format naturally inclined towards sustaining global growth of companies.[24] In short, the correct management of governance procedures in this model is essential for guaranteeing a satisfactory balance among the interests of the stakeholders of

[24] The opening up of ownership structures helps companies grow, as history has shown us, especially in the United States. This process means one can turn to the financial market for risk capital and the company manages to disconnect its own growth from the controlling shareholder's access to capital. See Cotta Ramusino (2007).

major global companies, thus also benefiting the system's overall stability. Otherwise, persevering with set-ups such as those which have contributed to the crisis and its global exportation – through imitating processes already in place within other systems, even if on a lesser scale – will more than likely produce a return to the situation currently being faced.

What does, in the context of this work, public company 'betrayal' involve? Summing up very briefly, its essence is by now a clear inadequacy of this model, as used in the United States, to provide a balanced representation of the instances and interests of the two categories of stakeholders that define this structure, namely shareholders and managers. A development process which started in the mid-Eighties has, in fact, profoundly changed the distribution of what is usually called 'bargaining power', pushing it markedly in favour of the second category. This issue is of interest not only for the purposes of assessing fairness or, while important, ethics. The real area of interest here – when dealing with the causes of the crisis – is to understand how the development which took place has objectively called into question the claim of economic efficiency that seemed to naturally underlie this kind of company architecture (see Becht, Bolton, Röell 2002).

This work shall seek to highlight the phenomenon's logical roots, the empirical evidence of a shift away from the premises and promises, and the structural reasons for this shift.

The historical reasons for the arrival of the public company model are clear: extremely rapid growth in the size of companies, opening of ownership structures, the disappearance of major shareholder and the consequent more widespread ownership, and control fully entrusted to the managing body.

The managing body has very clear engagement rules: the legitimization of its role rests on its capacity to show how actions are in line with shareholder interests, therefore, for the good of all (see Golinelli 2005b; Cotta Ramusino 2007). Proof of this capacity is measured by the company's economic performance, assessed over time by gradually more sophisticated metrics.

This is the point from which 'value creation' starts and about which it is probably useful to make a preliminary comment. Following the crisis, there have been a number of attacks on the principle of value creation for shareholders. It has been said that this principle is at the root of speculative behaviour by the banks who triggered the crisis and that this principle should be carefully reviewed. The thesis presented here is that it is not the principle which is guilty; indeed, there are no credible alternatives. The problem lies in how the principle was put into practice. As shown by the varying but converging empirical evidence, which is examined later, management tended to act to create value for itself and not the shareholders.

Returning to the general theme of the structural development of the public company model, the model basically provides three alternatives to verify the compliance of management with the rules of engagement mentioned above:

- management control by means of internal governance procedures, hinged on the board's role, the long arm of shareholders;

- launching incentive plans aimed at aligning the interests of managers (basically their compensation) with those of shareholders;
- finally, 'market discipline', mainly exerted by large investors, and the last resort of a hostile takeover, hanging like a sword over the head of non-performing managers.

It is evident that, by looking at the past, these mechanisms stopped working together some time ago. One needs to go back to the second half of the Eighties to find the period when these deterrents were first 'defused'. Since then, managerial powers have undisputedly increased and, in parallel, ownership has disappeared. There are various reasons for this and they have been highlighted by the research into this subject.[25]

a) The functioning of the Board – which should execute primary management control, establishing a balance between management powers and shareholder powers – has not, according to many observers, achieved the required degree of efficiency.[26] It has been stressed how the creation of close relations between members of the Board – elected, as a rule, on the basis of lists prepared by management – and top management tend to encourage excessive agreement of the former with the action taken by the latter.[27] Not even the independence of directors requirement – a feature of most listed companies[28] – has appeared sufficient to guarantee either an adequate level of control on management action or concrete results on a company's medium to long-term performance.[29] Analysis carried out on a significant number of members of Boards has shown that these subjects are the first to be aware of the gap between the way they exert their role and the expectations placed on them.[30]

Finally, some widespread practices in many public companies, such as the 'staggered board',[31] have actually put Board members in the position of being an obstacle to

[25] See Bebchuk (2005, pp. 833-917; 2006; 2007); Cotta Ramusino (2007).

[26] See, among others, Becht, Bolton, Röell (2002).

[27] See Bebchuk, Fried (2005b); Bebchuk, Cohen, Wang (2010a; 2010b). Completely contrasting positions to the authors quoted in these notes – in particular, positions taken by Bebchuk – can be found in Lipton, Savitt (2007).

[28] Many listed companies have Boards of Directors formed by more than two-thirds of nominally independent directors. NYSE and Nasdaq 'listing rules' require that there be a majority of independent directors and in many listed companies there are boards entirely formed by independent directors, except for the CEO, who sometimes is even Chairman of the Board. Added to the above, one must remember how empirical verifications do not in any way lead back to unequivocal conclusions on the subject of relations between board composition and company performance. On this subject, see Dallas, Scott (2005).

[29] See Bhagat, Black (2002, pages 231-274).

[30] In a 2002 survey quoted by the National Bureau of Economic Research, it was observed that many directors (71% of those interviewed) believed that it would be advisable to strengthen monitoring by the Board (for example, by organising 'executive sessions' with the CEO, which only took place in 45% of cases); moreover, 60% of those interviewed felt it would be advisable to have a figure such as a 'lead director' (only present in 37% of cases). See Kaplan, Holmström (2003). A survey carried out by *McKinsey* in February 2009 focused on procedures by which boards have faced the crisis, again revealing a state of ample dissatisfaction about the gap between expectations and concrete results. The data would seem to be interesting as it is based on surveys carried out on members of Boards themselves; see "Governance in the Crisis", *McKinsey Quarterly*, 3, 2009.

[31] The case in point occurs when company directors are elected for different periods of time, so that the term of office does not take place just once. Thus, the potential buyer (but also the shareholders who are promoting action to change Board members) does not have the opportunity of replacing the majority of

action by shareholders, resulting in the economic interests of the latter being damaged (see Bebchuk, Coates, Subramanian 2002).

b) Even the second mechanism for the settlement of conflicts – the well-known mechanism of stock options granted to top managers to align their interests with shareholder interests – has not achieved the expected results. Incentive plans were widespread in public companies as of the mid-Eighties on the logical assumption that managers/shareholders – current or potential – would, owing to these incentives, be encouraged to behave in a manner consistent with the principle of value creation. By observing the procedures used and the ensuing consequences leads to conclusions which are far from the expected ones for a variety of reasons. These are discussed below.

The first comment to be made is a general one. As a rule, it is reasonable to think that plans of this kind should be the result of stringent negotiations between managers and shareholders, by virtue of which the second should validate, by means of board action, the suitability of the proposed schemes in relation to their own interests. Once again, it is necessary for corporate democracy to be working properly for this to occur since if the shareholders are not sufficiently involved in running the company and the Board is not stringent in performing its control function, it is not hard to see how such schemes can be in the interests of management. When stock options concern large numbers of shares – and trading them involves compensation in the order of tens, at times hundreds of millions of dollars – one gets back to the central problem of governance: who establishes the rules for distributing the value created?

The second comment is more specific and concerns the structure and distribution of incentives over time. This cannot be relegated to a mere technical problem since the way it is put into practice can have a major impact on how healthy these mechanisms actually are. Two distinct cases can be noted. The first leads back to the circumstance in which the close correlation between top management compensation and stock market performance can persuade management to act to maximise short-term share prices (over the period in which options can be exercised), independently from the medium to long-term effect of its actions on the company's competitive position.[32] This is the theme of 'short termism', which is examined later. The other problem such schemes face in practice is far more concrete and basically related to fraudulent behaviour, which management might be tempted to engage in if tempted by greed. False accounting and manipulation of financial statements are tragically concrete examples by which management attempts to produce an artificial rise in stock prices.[33] The recent discovery of many cases of backdating options – a procedure by which the boards of many companies, un-

members at a single AGM, but has to resort to at least two such meetings. This governance practice, which is widespread among many listed companies, reduces vulnerability to outside attacks and also, consequently, a company's overall contestability. Research carried out on this issue highlights a negative correlation between company value and the presence of 'staggered boards'. See Bebchuk, Cohen (2005).

[32] In this way, our intention is to refer to the theme of the orientation of short-term management, which has been widely dealt with in the literature and an indicator of the negative effects of financial markets on company behaviour. See Cotta Ramusino (1995). Among the works quoted, see particularly Stein's contribution (1989).

[33] From this viewpoint, stock option schemes are accused of maximising the benefit obtained through fraudulent behaviour.

der pressure from respective tops managers, accepted to backdate stock options for those managers so that they would be more valuable[34] – represents another example of fraudulent behaviour.

These issues have increased the debate on the legitimacy of top manager compensation and spread awareness about the scant effectiveness of control on their actions.

c) The third mechanism able to resolve conflicts is to be found in so-called 'market discipline', a central factor in regulating the functionality of a capitalist system based on the public company model. In practice this has two parts: investor activism in monitoring management's actions and results on an ongoing basis and the threat of hostile takeovers.

On the first aspect, there is clearly a gap between what is theoretically possible and what actually happens in practice. As empirical analysis shows, big institutional investors are structurally[35] the main shareholders in United States companies (see Cotta Ramusino 2007). Since they hold the shares to maximise profit for the investors who have placed their trust in them, one tends to suppose that these subjects would supervise the workings of management to ensure that it did its utmost to maximise value for the shareholders. In this light, activism equates to acting in the interests of the investor. The probability that such an investor would actually monitor management is tied to its relative strength and the supposed results that could be obtained from such action.

This reasoning might be founded on the solid ground of economic rationality, but empirical examination has led many researchers to conclude that activism by big investors is, practically speaking, rather scant (insufficient, according to many) compared to what would be logically expected.[36] The reasons for this lack of activism have been

[34] In practice, the issue is backdating options to periods of particularly low prices – contrary to the traditional practice of awarding options at current prices – in order to give the options themselves, from the very beginning, a positive intrinsic value. This procedure makes it far more probable – when not certain – that management will be able to exercise the options to their benefit. This practice includes a number of different points, some of which are illegal and relate to a lack of transparency on benefits granted to management and on the related costs for the company, and others which are not explicitly in breach of the laws but are in open conflict with the principle of trust that requires management to act in the interests of shareholders. At the beginning of 2007, over 200 companies were investigated for having adopted this practice. On its own website, the Institutional Shareholder Services publishes details of how this practice is developing and advises investors on how to act if they have invested in companies involved in this practice. The practice is constantly monitored by the international press and is under assessment by the Securities and Exchange Commission. Early empirical research on the subject shows how this kind of practice is more frequently seen in companies with modest governance standards. See Collins, Gong, Li (2007). This research also analyses an articulated set of corporate governance indicators and correlates these to incidences of backdating. Moreover, the theme has already been tackled by Lie (2005) – who discovered abnormal negative returns before the date for awarding an option and abnormal positive returns after this date – leading to the suspicion that many of these options were, as was in fact discovered, backdated. Also see Fried (2008).

[35] With this statement the intention is to highlight the fact that institutional investors tend to hold their equity investments for long periods. One of the reasons for this behaviour is portfolio management "style". Both when the management style seeks to replicate an index and when a more "active" approach is used, these investors cannot generally avoid investments in major companies in each market in which they invest as this would disconnect their investment performance from that of comparable investors. This is a risk the majority of large investors do not want to take.

[36] "I survey corporate governance activity by institutional investors in the United States, and the empirical evidence on whether this activity affects firm performance. A small number of American institutional investors, mostly public pension plans, spend a trivial amount of money on overt activism efforts. They

widely investigated in a number of papers, although the specific references provided here are to strongly convergent opinions (see Holton 2006; Gillan, Starks 2003). In the first place, one must remember that among pension funds and insurance companies – holders in 2005 of 26% of the shares in American companies[37] – only public funds (holders of 10.3%) showed significant signs of being active.[38] The caution and scant activism of investment funds – 25% of American shareholders – are often explained with the fact that these investors do not want to prejudice, through their behaviour, relations with companies representing potential clients for the asset management or investment banking services offered by the financial group to which these funds themselves belong.[39] From this viewpoint, the lack of activism is not surprising as an investor that decides to act prejudices its own potential relations with clients to obtain advantages which are then split among all the shareholders. On the other hand, inactive investors benefit from the outcome of the action of an active investor without sustaining the relative costs. Thus, the motivation to take that first step seems to be objectively weak.

Recently, there have been concrete signs of activism by other categories of investors, private equity funds and hedge funds. Owing to their special features, these categories of investors seem to be able to become lead actors[40] adopting more active behaviour than traditional institutional investors. These developments are generating different reactions. The growing influence of these subjects on company behaviour has certainly been noticed, but there is concern among companies about the extremely aggressive behaviour and the short-term direction they are taking (see Dallas, Scott 2005). It will be necessary to undertake more careful assessment before the outcomes of this development are known and, indeed, as this sector grows globally, it will become possible to see whether these active attitudes to corporate governance endure over time.[41] However,

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don't conduct proxy fights, and rarely try to elect their own candidates to the board of directors. Legal rules, agency costs within the institutions, information costs, collective action problems, and limited institutional competence are all plausible partial explanations for this relative lack of activity. The currently available evidence, taken as a whole, is consistent with the proposition that the institutions achieve the effects on firm performance that one might expect from this level of effort – namely, not much" (Black 1998, p. 459). See also Black (1990).

[37] Board of Governors of the Federal Reserve System.

[38] Holton (2006). The author signals how public pension funds must be careful in conducting their actions. Excessively aggressive behaviour might be interpreted as "antibusiness" and bring political pressure on these subject. As regards private pension funds, Holton observes that their managers are simply reluctant to take initiatives against other managers (the managers of the companies in which they invest). Similar evidence may be found in Black (1990). See also Smith (1996).

[39] This circumstance has been registered and confirmed, at different moments, by the works of Black (1998), Gillan, Starks (2003) and Holton (2006).

[40] Hedge funds and private equity funds, usually smaller entities than mutual funds, are not obliged to diversify their portfolios, and may predominantly use derivatives, leverage and securities lending. These features, combined with the fact that fund managers are the primary beneficiaries of the fund's performance (through performance fees), may induce more aggressive activism.

[41] Notably, the European hedge fund industry has enriched itself with types of funds professing, in terms of investment policy, their specialisation in 'active' corporate governance. There have recently been impressive cases of active intervention by private equity funds and hedge funds, not only in the United States, but also in Europe. Deutsche Börse, Sainsbury, Abn Amro, Carrefour and other provide good examples of this.

the overall number of assets managed by these subjects means they cannot, as yet, have more widespread influence on corporate behaviour.[42]

Takeovers also seem to be more effective instruments in theory than in practice. Researchers have analysed these transactions in the medium to long-term and have clearly highlighted the fundamental transformation which took place between the Eighties and the next period, which endured to the present.

Whereas the Eighties featured a wave of (often) hostile takeovers, mainly financed by debt (see Kaplan, Holmström 2001; Burkart, Panunzi 2006), as of the Nineties hostile operations became more difficult and now rather rare.[43]

The legal barriers to hostile takeovers are one of the accepted reasons for this change. The rash of anti-takeover laws adopted in many countries at the end of the Eighties enabled companies to adopt mechanisms to protect themselves.[44]

The arguments set forth thus far have highlighted the underlying reasons why corporate democracy at public companies degenerated over the long term, causing an imbalance between shareholder and managerial powers, in favour of the latter. There are two pieces of empirical evidence supporting this idea: first, the evolution of executive compensation, a phenomenon already highlighted by a great number of empirical papers published well before the crisis, and, second, the stability of top management.

There is clear data available on the first point, namely management compensation that highlights two issues.

First, the second half of the Eighties witnessed vertiginous growth in the compensation for the top management of public companies, together with a compensation system featuring greater share incentives (restricted shares and stock options). Without going into specific details, it is notable that the ratio between a CEO's compensation and average employee wage, equivalent to 40 in the Seventies and 69 in the Eighties,

[42] Work by Klein, Zur (2006) highlights how these funds tend to invest differently to the traditional scheme which foresees action on low performing companies in order to re-launch them. Here, the evidence reveals how hedge funds tend to invest in profit-making companies, with real cash reserves. The target would seem to be to extract excess financial resources, thereby leading these companies to pay extraordinary dividends. This manoeuvre has the effect of reducing agency conflicts connected to 'free cash flow' (financial resources in excess as compared to company investment requirements, which managers should give back to shareholders and which, in fact, are often kept to execute schemes which do not always achieve maximum shareholder interest). On this point, see Jensen (1986).

[43] See Becht, Bolton, Röell (2002). Their research holds that: a) even when these operations were in widespread use – the Eighties – the percentage of listed companies subject to hostile attack never went over 1.5%; b) the percentage of hostile operations out of the total, in that period, was never over 30%; c) between 1990 and 1998, only 4% of operations were of a hostile nature. Also see Kaplan, Holmström (2001).

[44] See Becht, Bolton, Röell (2002, page 71). Following these developments, the number of hostile takeovers greatly decreased as did the likelihood of their success. The same opinion is expressed by Bebchuk, Coates, Subramanian (2002). Anti-takeover mechanisms include, further to the above-mentioned 'staggered boards', so-called 'poison pills', variously designed instruments, used by companies to make it difficult, even impossible, to achieve control by hostile buyers. Having appeared on the scene at the beginning of the Eighties, these instruments allow the Board of Directors – frequently without the need for approval by the Shareholders' Meeting, as in Delaware State law, one of the most used by American companies – to plan action to decrease the (hostile) buyer's advantage in closing an operation: the most typical case is scheduling the issue of new shares reserved for existing shareholders, which has the effect of diluting the shares acquired by the hostile raider.

climbed up to 187 in the Nineties and 367 during the first years of this century.[45] This is telling data.

Secondly, there is the correlation between compensation and company performance, which is a central issue in the functioning of this model of capitalism, in which a skilled manager/entrepreneur can legitimately expect high levels of compensation since he or she creates wealth for all. Extensive empirical studies have shown how management gradually succeeded, thanks to powers accumulated over time, to break down this correlation. In other words, a large body of research has shown that management managed to obtain significant compensation regardless of company performance.[46] Thus far, it would seem that there is no convincing theoretical explanation for this phenomenon (see Thomas 2005).

As regards the stability of top management, recent research has accurately highlighted a world that, in truth, many people already had a fairly accurate intuitive picture about. Two works published in recent years[47] have shown numerous significant results, including two worth noting here: the tendency of management to remain in place even when faced with unsatisfactory performance and a reduction in the number of managers that are changed in times of crisis.[48] Such empirical evidence is in stark contrast to the generally accepted view of top management constantly battling strict, exacting and threatening market discipline.

1.2.2. Short termism

The ideas introduced above should help in understanding the concept of short termism, which is a crucial but hard to define element because of its somehow ambiguous nature.

The Anglo-Saxon model has been repeatedly accused of suffering excessive pressure from financial markets and of consequently producing management behaviour

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[45] The estimate is contained in Frydman, Saks (2004). Other estimates have been made by the National Bureau for Economic Research (NBER), according to which the ratio between CEO compensation and average employee wage, approximately between 15 and 20 in Europe, goes over the 400 mark in the United States; See Kaplan, Holmström (2003). Similar evidence can be found in other works, including: Bebchuk, Grinstein (2005); Dallas, Scott (2005). Other similar evidence is quoted in an essay by Buck, Shahrim, Winter (2004), which refers to analysis carried out by Tower Perrin on American companies having over 500 million dollars in turnover; in these companies, total average compensation to CEOs was, between 2000 and 2001, equivalent to 1.93 million dollars, a value equivalent to 531 times the average employee wage in the same companies. Estimates based on different methods, but which lead back to similar conclusions, were published in the January 20th, 2007 issue of *The Economist*. On the theme of differences between the United States and Europe, see Conyon *et al.* (2011).

[46] In particular, see Bebchuk, Fried (2005b); Bebchuk, Grinstein (2005); Frydman, Saks (2004). Contrasting opinions are expressed by Larker, Tayan (2011).

[47] See Karlsson, Neilson, Webster (2008); Karlsson, Neilson (2009).

[48] In the second work quoted above, based on analyses by Booz & Co., one of the biggest consultancy companies in the world, it is noted that the replacement rate of CEOs in the 2,500 biggest public companies worldwide was 14.4% (361 replacements out of 2,500 companies), a slight drop as compared to 2007, close to 2006 levels. To fully understand this information, it is important to indicate that, of these 361 replacements, 180 were 'scheduled' (retirement, replacements planned earlier, illness, etc.), 54 were the consequence of mergers/takeovers and only 127 were decided by the Board because of poor economic and financial company performance.

overly oriented to maximise short-term financial performance and, in parallel, an excessive degree of instability.[49]

This work shall make two considerations and pose a question in this regard.

The first consideration concerns the nature and importance of the phenomenon. In an environment where, historically, there has been separation of ownership and control, shareholders grant management the powers needed to manage the means of production that they own. The delegator has a reasonable interest in the ongoing control of the delegated body and this control is performed by assessing company performance over time. The majority view is that the impatient exertion of control produces the oft-quoted 'pressure' on management and, consequently, the latter tends to concentrate on short term results. This is a significant problem. It is clear that in a corporate structure where the owner/shareholder gradually becomes less present and visible, the manager's role takes on an 'entrepreneurial' element. Performing this role obviously requires the manager/entrepreneur to have the necessary skills and know-how, but it also requires sufficient time to achieve the 'entrepreneurial project' in question. If the shareholder's short-term orientation leads company management to primarily concentrate on extracting value from the corporate organisation and not on investing to build up the skills needed to create a sustainable value, the result then is that the overall economic system risks experiencing a net loss.

The second consideration concerns our ability to grasp, in terms of empirical verification, the size of this phenomenon, which is clear to discuss in abstract terms. Traditionally, scientific papers on this issue assume, as indicators (proxies) of short termism, variables which only partially grasp the real existence of the phenomenon.

Empirical research often observes quantities such as research and development investment – a type of investment suitable for producing medium to long-term effects – and, by examining the size and development of this, attempts to draw conclusions about corporate orientation. It would seem there are two reasons why this is not an exhaustive approach: first, the intensity of these investments varies from industry to industry; secondly, and more importantly, short termism can involve numerous, differing forms of conduct that are hard to detect from the outside. If a company comes under pressure from the financial market, it can react in ways more or less focused on the short term (product and price policies, investments in tangible or intangible assets, marketing, personnel, etc.). This makes it impossible for an external analyst to interpret (at least with any degree of certainty) the situation. In other words, the phenomenon tends by its very nature to escape empirical verification. Overall, the often contradictory evidence available does not lead to unequivocal conclusions about the existence and effects of this

[49] Between the late 1980s and the early 1990s, heated debate arose about the (presumed) weakness inherent in the Anglo-Saxon capitalist model (so called "market model"), held to be structurally affected by excessive orientation to the short-term. This, in the assessments from that time, was destined to establish gradual weakening and irreparable loss of competitiveness for the United States as compared to two emerging powers, Japan and Germany, who represented an alternative model, defined as being "stakeholder oriented", based on mediation between stakeholders less influenced by financial market pressure and more inclined to preserve the long-term competitiveness of companies. See Porter (1992); Stein (1989); Cable (1985); Cotta Ramusino (1995); Ellsworth (1985); Strickland, Wiles, Zenner (1996).

kind of behaviour.[50] This said, it does seems – especially on the basis of actual experiences – that many policies adopted by listed companies are decisively influenced by financial market pressure.

The new question that arises from what has been noted is quite simply: who actually focuses on the short term?

In its traditional version, short termism represents a side of shareholder behaviour which, when excessively directed towards short term profits, puts excessive pressure on management, negatively influencing the latter's actions.[51]

In such a scenario, top management would become a prisoner of the market, being 'obliged' by the latter to continuously produce the performance expected by investors, with the penalty of having to resign should this obligation not be fulfilled. Going further along this line, the economic result – actual profit and expected profit, the net present value of which represents shareholder value – would cease to be of a residual magnitude to become, in some way, a *contractual obligation*.

However, the empirical evidence indicated above tells us a rather different story. If top management is ever more powerful, not subject to any real discussion and constantly receiving greater levels of compensation, it is hardly likely that such a body would play the role of prisoner. Moreover, the shares given as part of compensation has made management a company shareholder, but what kind of shareholder? As the devil is always to be found in the details, one must leave aside generalisation and patiently delve into researching the contracts governing stock options. Generally speaking, it is possible to state that, to the extent to which such contracts offer the prospect of strong short term capital gains, the risk that management would behave as an impatient financial shareholder goes up significantly. Moreover, such a case is realistic, as, unlike what happens with an entrepreneur who is the owner, share incentive contracts only contemplate the upside and not the downside risks. The oft-used image of an impatient market which prevents a manager from executing wide-ranging policies directed towards sustainable creation of value becomes, from this perspective, less able to explain how companies actually behave. On the contrary, incentive schemes adopted by most public companies are certainly responsible for managerial short termism more than the behaviour of (market) shareholders.

For these reasons, the crisis has made it clear that rethinking these incentive mechanisms is needed. If serious reform proposals do not arise spontaneously from within the corporate world, then the public authorities should not be afraid to take action through regulations. As shall be highlighted below, the example of the financial industry provides clear evidence of how this problem has got worse and the need for reform. The argument in this work is that calling for incentive mechanisms is, arguably, a demagogic and unrealistic option, doomed to be abandoned when the crisis is over. On

[50] See Bhojrai, Libby (2005); Bushee (1998); David, Hitt, Gimeno (2001); Fuller, Jensen (2002); Graham, Harvey, Rajagopal (2005); Hansen, Hill (1991); McConnell, Wahal (1997); Wahal (1996); Hutton (2004); Marginson, McAulay (2008); Rappaport (1992); Samuel (2000; 1996); Bar-Gill, Bebchuk (2002).

[51] It has been observed that, more than the 'final' shareholders, it is the professional investor (the typical investment manager who collect investor savings) who is short term oriented; see Dallas (2011); Rodrigues (2011).

the contrary, it is necessary to patiently re-plan governance mechanisms. The directions to take are clear: the time factor involved in the application of incentives needs to be subject to rules and, at the same time, some form of joint responsibility for downside risk must be introduced ('claw back' mechanisms).

1.2.3. The 'peculiar case' of financial companies

Entrepreneurial behaviour adopted by financial companies, the leading players in the crisis, must be set in this context. The most important American banks are, in fact public companies, and this kind of structure has gradually been adopted by many other big international banks. The comments made above on the malfunctioning of the model also apply to this category of companies. The unbalanced distribution of power and value created between shareholders and managers and the difficulty for the former to control the latter have been, as in other public companies, the key developments of recent years along with some elements of exasperation which have distinguished the financial industry as compared to other sectors in the economic system.[52]

The crisis has highlighted two factors that are worth reflecting on: one which is more wide-ranging and relates to all public companies; the other is typical for this particular category of companies.

The first relates to how the relationship between company performance and top management compensation is actually implemented in financial companies. This aspect, of widespread interest, was analysed with strict and pitiless clarity in a work published in August 2009 by Andrew Cuomo, New York State's District Attorney.[53]

Focusing on the nine banks which first received State aid under the Troubled Asset Relief Program (TARP), the research looked into – over 2003-2009, but concentrating more specifically on 2008, the year State aid was issued – the trend of compensation and corporate results to see whether the principle of 'pay for performance' actually existed.

The tables below show a sufficiently clear answer not requiring further comment. Only two observations could be useful, especially in terms of the conclusions that follow. The first, regarding 2008, highlights how total bonuses issued are nearly equivalent to 20% of the funds received under the TARP framework, with some notable peaks at some individual institutions.

[52] Evidence of a positive differential in compensation between the financial and "real" economy sectors is reported in Philippon, Reshef (2007).
[53] See Cuomo (2009); on the same subject, also see Bebchuk, Cohen, Spamann (2009); Bebchuk, Fried (2005a); Bebchuk (2010).

BANKS	PROFITS/LOSSES	BONUS POOL	TARP
BANK OF AMERICA	4,0	3,3	45
BANK OF NEW YORK MELLON	1,4	0,9	3
CITIGROUP	-27,7	5,3	45
GOLDMAN SACHS	2,3	4,8	10
JP MORGAN	5,6	8,7	25
MERRILL LYNCH	-27,6	3,6	10
MORGAN STANLEY	1,7	4,5	10
STATE STREET	1,8	0,5	2
WELLS FARGO*	-42,9	1,0	25
total	-81,4	32,6	175

Table 1.6. Profits/losses, bonuses and State aid (TARP) to nine leading American banks (data ref. to 2008)
Source: Cuomo 2009
* Includes taken-over Wachovia losses

The second comment arises from looking at Table 1.7, in which a structurally inelastic compensation level is highlighted and is not, as often argued, strictly connected to company performance. The development of the ratio between company compensation and results goes up vertiginously in the year of the crisis when profit contracted. Therefore, even in the case of losses, these banks continued to pay high bonuses.

	2003	2004	2005	2006	2007	2008	2009 Q1	2009 Q2
BANK OF AMERICA	97.1	96.3	91.4	86.2	125.2	458.4	206.4	241.6
BANK OF NEW YORK	173	161.4	162.5	92.7	202.1	369.1	315.9	281.2
CITIGROUP	116.1	134.5	104.8	140.6	952	*	403.9	149.6
GOLDMAN SACHS	250.1	212	209	172.6	174.1	470.9	259.8	193.3
JP MORGAN	169.5	324.8	213	146.7	147.7	405.8	354.4	254.2
MERRILL LYNCH	255.8	238.9	240.7	224.9	**	**	**	**
MORGAN STANLEY	208.4	207.8	217.6	187.2	515.8	720.9	***	2617.4
STATE STREET	239.7	245.2	266.2	239.8	258.2	212.1	153.6	****
WELLS FARGO	143.9	120.4	136.3	142.8	165.9	487.4	212.9	212.1

Table 1.7. Compensation to staff/net profit (%)
Source: Cuomo 2009
* Against 32.4 billion dollars in compensation, the bank registered 27.7 billion in losses
** Against 1.9 and 14.8 billion dollars compensation in 2007 and 2008, the bank registered 7.8 and 27.3 billion in losses. In 2008, it was taken over by Bank of America
*** Against 2.1 billion dollars compensation in 2009 Q1, the bank registered 02 billion in losses
**** Against 0.7 billion dollars compensation in 2009 Q2, the bank registered 3.2 billion in losses

Management's ability to protect its own interests to the detriment of shareholders seems to be a common trait in the world of public companies and in this case, the problem is heightened, since there is proof of embezzlement not only of created value, but also of non-created value. In the light of this, it seems necessary to spend a moment on a specific feature of financial public companies.

The matter in hand here is moral hazard, which is something that managers at financial companies have had to face. Indeed, there is growing consensus that this actually accelerated the rate at which things occurred and played a significant role in the outbreak of the crisis.[54]

This matter has been clearly formulated in corporate finance[55] by referring to the particular case of highly indebted companies. When faced with high debt levels, company shareholders could be led to choose high risk investment schemes, being aware that a good outcome from the latter would bring them significant returns, whereas, in the case of a negative outcome, losses would be shared with creditors. Creditors, while being aware of the potential hazard set by shareholders, cannot take action against such conduct. They can only take restraining *ex ante* actions by preventing the company from accumulating excessive levels of debt. The moral hazard of shareholders is, in fact, listed in corporate finance as a deterrent towards excessive use of debt.

Financial companies structurally feature, even during 'normal' periods, high levels of leverage. In the period before the crisis, these levels of leverage spiralled for the reasons indicated earlier in this chapter. Moreover, bank capital may include, although within certain limits, debt instruments, which are subordinated to other debts, but still senior to equity. It is obvious how the manager/shareholder finds himself/herself, faced with similar starting conditions, in a situation filled with temptation. The latter becomes even stronger in the case of a manager holding, instead of shares, options on these same shares.

INVESTMENT	1000			
FINANCIAL STRUCTURE				
DEBT	900			
EQUITY	100			
DEGREE OF RISK	1	2	3	4
	RESULT	RESULT	RESULT	RESULT
FAVOURABLE SCENARIO (50%)	1200	1600	2000	1900
UNFAVOURABLE SCENARIO (50%)	1000	600	200	100
Expected value	1100	1100	1100	1000
Expected debt value	900	750	550	500
Expected equity value	200	350	550	500
EQUITY PROFIT	100%	250%	450%	400%

Table 1.8. Evaluation of an investment project in the presence of moral hazard

The above example might provide a rather specific and exaggerated representation of the concept of shareholder moral hazard, but it also provides a concrete basis for discussing the matter. Highly compensated and poorly controlled managers could be led to look at the share component of compensation as an option, the value of which falls under their direct control. If the option can be exerted in the short term, and given that it only involves an upside, undertaking high risk projects may become too attractive as they combine the possibility to maximise the option value (in the positive case) with a situation where losses are split with subjects (creditors) who do not take part in the upside.

[54] See Bebchuk, Friedman, Townsend Friedman (2009). On the same subject, see Bebchuk, Spamann (2009).
[55] See, for example, Ross, Westerfield, Jaffe (1996, Chapter XV).

From an alternative viewpoint, the moral hazard should be diluted by the fact that the manager/shareholder, having an important part of his or her wealth linked to the company's performance (not being, in other words, a diversified investor), should be extremely concerned about the company's progress and thus work for its long term prosperity.

There are two objections to this.

The first concerns the manager/shareholder's share of wealth linked to the price of company shares. Even if high, its marginal utility is still tied to the starting wealth of the subject making the decisions. In these cases, it is not possible to reason as an average rational investor. In the case in hand utility is objectively less elastic and is only triggered off by big upsides, being largely indifferent to modest losses.

The second objection concerns the timing of options. In truth, unlike the example given, taking on risk and checking results do not take place in a single time period. Let us just think about the symbolic case of subprime mortgages, where risk accumulation took places in the years before the negative effects were felt. It is clear that manager/shareholders were able to cash in on all the upside results of stock prices without suffering economically from the ensuing crash.

1.3. Conclusions

The analysis in this first chapter has identified the causes which led to the outbreak of the financial crisis, drawing out two fundamental aspects: the 'macro' dimension, pertaining to governance of the system, and the 'micro' dimension, regarding the behaviour of leading companies in the development of the financial industry on an international scale.

The conclusion in relation to the first aspect seems pretty clear: the crisis has highlighted the contradiction, which can no longer be tolerated, between financial activity becoming more and more international and the absence of international governance for this activity. The conditions in place before the crisis paint a picture of a deeply integrated industry that completely lacked a regulatory framework that was adequate for its size and importance. The removal of the criticalities which have arisen cannot be achieved through partial action, but by means of incisive political choices at supranational level. Such choices must give priority to creating forms of governance able to guarantee the system can function sustainably.

In abstract terms, the most effective governance system would involve the creation of a supranational body that would have international regulatory, supervisory and crisis management powers. However, this does not appear to be a feasible option in the short term, meaning the best real solution, in the near future, would be a significant increase in the degree of harmonization between domestic authorities. The work done by the Financial Stability Board[56] and the Basel Committee combined with the political recogni-

[56] Financial Stability Forum (2009a; 2009b; 2009d); Financial Stability Board (2009a; 2009b; 2009c). On issues dealt with by the Financial Stability Board and which are important for the purposes of reform

tion of this work during recent G-20 meetings has provided, as shall be examined later in this work, interesting options that can initiate upward cycles. The target of the reform process underway is the creation of a regulatory framework based on shared principles, oriented towards guaranteeing system stability and competitive equality between players in this sector.

The reform agenda is very full and, in the following chapters, the focus will be on some of the big issues which will dictate how things are in practice: regulatory and supervisory action on banks, regulation of the market for derivative contracts, a new discipline for rating agencies, and regulating institutions which are not regulated to date, such as hedge funds.

Some reform has also focused on what have been termed in this work as 'micro' criticalities. The distortions behind managerial incentives have been acknowledged by regulators, at an international level, as being one of the causes that contributed to the outbreak of the crisis. Consequent action was taken in all leading countries, under the coordination of the Financial Stability Board. As will be seen in Chapter Seven, the issue of executive compensation has become subject to specific regulations, in view of the awareness that self-regulation has been unable to achieve what regulatory and supervisory bodies had hoped for.

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aimed at system stabilisation, see also Financial Services Authority (2009a); European Central Bank (2009); Cecchetti, Gyntelberg, Hollanders (2009).

Chapter 2

The Reform Process: Towards New Governance of the International Financial System

2.1. Foreword: reform requirements, subjects, process, results

As was reasonably to be expected, the dimensions and consequences of the financial crisis have caused reaction at different levels, in both the political and institutional worlds, the economic and entrepreneurial worlds and in public opinion. Transfer of the crisis from the financial sector to the real economy and costs sustained by States – at first to take action for the rescue of banks and financial institutions in a critical position and, subsequently, to stimulate economic systems entering recession – have created a widespread feeling of opposition towards the financial industry, held to be responsible for the crisis, and just as strong a demand for regulation of the aforesaid industry.

Debate which started with the outbreak of the crisis was gradually reinforced by the conviction that self-regulation was unable, as proven by facts, to guarantee the international financial system's stability and that, therefore, it would be necessary to change the approach to governance, by going from a direction based on liberalisation and on trust on market 'automatic' adjustment capacity, towards an approach based on the enforcement of far more restrictive and essential regulations, shared at the international level, coherently implemented inside different countries, in particular those more important as regards relevance and concentration of financial industry.

Therefore what we are witnessing today is a process with many new aspects as compared to the past, at least as regards objectives, in terms of intensity and way of implementation. Use of the first attribute is justified, as we shall see in the following chapters, by the wide-ranging and in-depth regulatory process which is being accomplished. The innovative feature of the process underway is to be found in the effort being made today to define reforms truly having international dimensions and range.

The international financial system's evolution has been repeatedly marked by moments in which it appeared that research for adequate coordination levels, including sharing institutions and market discipline, was stronger. This has not prevented, what is more, that significant differences in domestic regulations persisted in spite of results achieved and that these differences were regularly exploited by market participants through regulatory arbitrage. This is exactly the situation in which the system found itself at the outbreak of the crisis, thereby bringing new awareness at the international level, as regards the need to increase the degree of cohesion between national authorities. Moreover, in this aim definition of a clear road map for the regulatory process is needed: in particular, subjects should be singled out and appointed to set forth regulations and define practices guaranteeing their application inside different countries. As regards the first aspect, we point out that subjects appointed for this task can only be international bodies, whether new or in existence; instead, as regards the second aspect, we have to observe how the basic issue is connected to the political consensus required in order to guarantee that regulations set by an international regulatory body, by definition lacking the coercive powers required to act within different jurisdictions, would effectively and efficiently be implemented in sovereign states. In the pages below, we shall concentrate on the reform process, by highlighting the role of those subjects who sustained it, as well as the way in which it is being implemented.

The reform process is now underway; significant measures have been adopted, others are being discussed and yet others still need terms of application to be defined. Today, the process which is being carried out appears to be sustained by wide and majority political consensus in advanced countries and it is absolutely necessary to exploit this favourable 'context factor' so as to go ahead and achieve the objectives set. The depth of the crisis, the sacrifices citizens had to bear in terms of loss of wealth and well-being, the difficulties for economic activities to recover are factors which can reasonably sustain the regulatory process underway.

This process is structured and complex, as is reasonable to expect when it becomes necessary to obtain consensus on an institutional level, such as a supranational level, implying, as a preliminary condition, coordination of domestic willingness towards reform.

G-20 meetings gradually became the international context within which problems surfacing during the crisis and guidelines for required reform to overcome said crisis were discussed. Declarations of willingness by political leaders of major countries and, consequently, shared orientations, established the big issues on which to work to give stability back to the international financial system. The agenda ensuing from the G-20 meetings was first adopted by the Financial Stability Board, which accepted the reform challenge and which even sustained other bodies operating at the international level, has operated by supplying advice for action by domestic authorities, giving a technical declension to core principles shared at G-20 meetings, periodically updating the international community on the progress of work aimed at reaching the established targets.

The measures issued at the international level in the aim of recovering and reinforcing financial system governance, were numerous while different in terms of problem tackled, range of coverage and degree of innovation, as compared to the past. As is best for any ambitious reform scheme, regulations adopted and in the process of so becoming, have raised contrasting reactions: in short, criticism came from both financial and economic world representatives, worried by the fact that reforms which are too incisive can harm the equilibrium and performance of the financial industry and from those who, being more interested in profiles of system stability and defence against the danger of future crises, would have expected much more in-depth action.

A reasoned observation of the mosaic represented by reforms and their relative contents is not simple, considering the wide-ranging nature of the issue and its non-stop growth; in the presentation of this chapter, we want to highlight the role of G-20 and FSB, who have defined the main pillars of the new regulatory framework. In the following chapters, we will analyse, one after the other, the most important pieces of new regulation.

2.2. G-20's role

Action for reform of the international financial system can be understood as a structured process starting with confrontation between the political summits of leading industrialised countries, called upon to share basic choices and to endorse technical solutions aimed at transforming the general principles agreed upon in the pillar of new regulations. G-20 has fully carried out its role, succeeding, during the meetings we shall discuss shortly, to coagulate political consensus on the inspiring principles of the reform. Leaders of the biggest industrialised countries have made important decisions, working alongside technical bodies such as the Financial Stability Board, the International Monetary Fund, the Basel Committee, all called upon to contribute towards the development of a new regulatory framework.

The process scheduled consultation on many issues between the above bodies and representatives of the financial industry while the new regulations were being drawn up; when consultation ended, the new rules were launched as a guideline on an international level and were binding for G-20 member countries. The process finds its logical conclusion in the translation, by each of the member countries, of these principles and guidelines into the binding regulations of their own jurisdiction.

The crisis was on G-20's agenda approximately a year after its outbreak, when it had become by now obvious that no single country could have autonomously found effective solutions to the structural problems the crisis had brought onto the scene.

At the Washington meeting of November 15th, 2008, G-20 leaders took due note of the growing seriousness of the financial crisis and mutually agreed on analysis of its causes,[1] making clear what support action is to be carried out in various countries through state action, acknowledged the need to take action so as to restore stability in financial systems and undertook specific commitments to coordinate and share reform principles.[2] Finance ministers of individual countries, assisted by experts, were en-

[1] G-20 (2008), Point 3: "During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions". Point 4: "Major underlying factors to the current situation were, among others, inconsistent and insufficiently coordinated macroeconomic policies, inadequate structural reforms, which led to unsustainable global macroeconomic outcomes. These developments, together, contributed to excesses and ultimately resulted in severe market disruption".

[2] G-20 (2008), Point 9: "We commit to implementing policies consistent with the following common principles for reform. Strengthening Transparency and Accountability: We will strengthen financial market transparency, including by enhancing required disclosure on complex financial products and ensuring complete and accurate disclosure by firms of their financial conditions. Incentives should be aligned to avoid excessive risk-taking. Enhancing Sound Regulation: We pledge to strengthen our regulatory re-

trusted with the task of establishing guidelines for action in major areas.[3] A plan for action had to be prepared for the next G-20 meeting, scheduled for Spring 2009 in London. The final declaration made at the end of the last summit contained a plan for providing concrete action as regards the principles mentioned above, split between measures to adopt over the short-term and action to be taken over the medium-term. Areas for action mentioned in the document and to which action itself should apply, cover all the critical areas which surfaced because of the crisis:

- the definition of accounting standards for the valutation of illiquid and complex securities;
- the disclosure of off-balance operations and non-consolidated vehicles;
- the disclosure of risk taken on by financial institutions;
- the mitigation of the *procyclical* nature of leverage, capitalization, executive compensation, provision in financial institutions;
- the definition of financial institutions' crisis management policies;

gimes, prudential oversight, and risk management, and ensure that all financial markets, products and participants are regulated or subject to oversight, as appropriate to their circumstances. We will exercise strong oversight over credit rating agencies, consistent with the agreed and strengthened international code of conduct. We will also make regulatory regimes more effective over the economic cycle, while ensuring that regulation is efficient, does not stifle innovation, and encourages expanded trade in financial products and services. We commit to transparent assessments of our national regulatory systems. Promoting Integrity in Financial Markets: We commit to protect the integrity of the world's financial markets by bolstering investor and consumer protection, avoiding conflicts of interest, preventing illegal market manipulation, fraudulent activities and abuse, and protecting against illicit finance risks arising from non-cooperative jurisdictions. We will also promote information sharing, including with respect to jurisdictions that have yet to commit to international standards with respect to bank secrecy and transparency. Reinforcing International Cooperation: We call upon our national and regional regulators to formulate their regulations and other measures in a consistent manner. Regulators should enhance their coordination and cooperation across all segments of financial markets, including with respect to cross-border capital flows. Regulators and other relevant authorities as a matter of priority should strengthen cooperation on crisis prevention, management, and resolution. Reforming International Financial Institutions: We are committed to advancing the reform of the Bretton Woods Institutions so that they can more adequately reflect changing economic weights in the world economy in order to increase their legitimacy and effectiveness. In this respect, emerging and developing economies, including the poorest countries, should have greater voice and representation. The Financial Stability Forum (FSF) must expand urgently to a broader membership of emerging economies, and other major standard setting bodies should promptly review their membership. The IMF, in collaboration with the expanded FSF and other bodies, should work to better identify vulnerabilities, anticipate potential stresses, and act swiftly to play a key role in crisis response".

[3] G-20 (2008), Point 10: "We are committed to taking rapid action to implement these principles. We instruct our Finance Ministers, as coordinated by their 2009 G-20 leadership (Brazil, UK, Republic of Korea), to initiate processes and a timeline to do so. An initial list of specific measures is set forth in the attached Action Plan, including high priority actions to be completed prior to March 31, 2009. In consultation with other economies and existing bodies, drawing upon the recommendations of such eminent independent experts as they may appoint, we request our Finance Ministers to formulate additional recommendations, including in the following specific areas: Mitigating against pro-cyclicality in regulatory policy; Reviewing and aligning global accounting standards, particularly for complex securities in times of stress; Strengthening the resilience and transparency of credit derivatives markets and reducing their systemic risks, including by improving the infrastructure of over-the-counter markets; Reviewing compensation practices as they relate to incentives for risk taking and innovation; Reviewing the mandates, governance, and resource requirements of the IFIs; and Defining the scope of systemically important institutions and determining their appropriate regulation or oversight".

- the definition of 'capital' and 'capital requirements' in financial institutions;
- the discipline of credit rating agencies;
- the regulations of 'over the counter' derivative contracts;
- liquidity requirements to impose on banks;
- the review and upgrading of the risk management practices in financial institutions;
- international cooperation between regulating and supervisory authorities.

At the subsequent summit meeting in London on April 2nd, 2009, G-20 leaders, after having taken due note of the first achievements obtained after commitments had been made at the previous summit, issued a further declaration, *Strengthening the Financial System*, containing agreements reached on a structured series of points, in particular:

- establishment of the FSB as successor to the FSF,[4] on the basis of including a greater number of countries[5] with a stronger and more incisive mandate;
- reshaping the regulatory framework in the aim of protecting systemic risks;
- extension of regulations and supervision to all systemic financial institutions and markets, including, for the first time, to subjects which are not traditionally regulated, such as hedge funds;[6]
- the commitment to undertake, when economic recovery has consolidated, the required action to improve the banking system's capital, also by stating that future regulations will prevent excessive *leverage* levels and that accumulation of adequate reserves during favourable periods of the economic cycle will be made;
- the commitment to take action against countries which refuse to cooperate as regards regulations and tax paradises; furthermore, the end of bank secrecy was declared;
- political approval and sponsorship required to enable achievement of the new and strict principles set forth by the FSF, as regards executive compensation and corporate social responsibility;
- request to the international bodies setting accounting standards to operate in close collaboration with regulatory and financial supervisory authorities in the aim of improving, as well as of adjusting, valuation standards and provision criteria;
- the commitment to extend regulations and supervision to rating agencies, in the aim of guaranteeing that they effectively follow the international code of *good practice* and particularly avoid the dangerous situation of conflict of interest.

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[4] See next paragraph.
[5] All G-20 countries, FSF members, the European Commission and Spain.
[6] The declaration particularly refers to 'systemically important' hedge funds.

Moreover, leaders gave powers to Finance ministers to give execution to decisions agreed politically and requested that the FSB and IMF monitor the implementation process of principles in the various countries.

In the final declaration at the next summit, which was held in Pittsburgh, in the chapter *Strengthening the International Financial Regulatory System*, some principles stated earlier were further developed and Finance ministers and central banks' governors were requested to define an international framework as regards the following areas, held to be particularly important:

- quantity and quality of bank capital, in line with criteria restricting its *pro-cyclical* nature, by asking the Basel Committee to define a new version of the regulations in force during 2010;[7]
- compensation practices in financial institutions, by giving full political support to FSB principles and standards;[8]
- the area of 'over the counter' derivatives, by establishing cornerstone principles for their regulation, to then adopt on an international scale;[9]

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[7] See G-20 (2009, page 8): "We commit to developing by end-2010 internationally agreed rules to improve both the quantity and quality of bank capital and to discourage excessive leverage. These rules will be phased in as financial conditions improve and economic recovery is assured, with the aim of implementation by end-2012. The national implementation of higher level and better quality capital requirements, counter-cyclical capital buffers, higher capital requirements for risky products and off-balance sheet activities, as elements of the Basel II Capital Framework, together with strengthened liquidity risk requirements and forward-looking provisioning, will reduce incentives for banks to take excessive risks and create a financial system better prepared to withstand adverse shocks. We welcome the key measures recently agreed by the oversight body of the Basel Committee to strengthen the supervision and regulation of the banking sector. We support the introduction of a leverage ratio as a supplementary measure to the Basel II risk-based framework with a view to migrating to a Pillar 1 treatment based on appropriate review and calibration. To ensure comparability, the details of the leverage ratio will be harmonized internationally, fully adjusting for differences in accounting. All major G-20 financial centers commit to have adopted the Basel II Capital Framework by 2011".

[8] See G-20 (2009, pages 8-9): "Excessive compensation in the financial sector has both reflected and encouraged excessive risk taking. Reforming compensation policies and practices is an essential part of our effort to increase financial stability. We fully endorse the implementation standards of the FSB aimed at aligning compensation with long-term value creation, not excessive risk-taking, including by (I) avoiding multi-year guaranteed bonuses; (II) requiring a significant portion of variable compensation to be deferred, tied to performance and subject to appropriate clawback and to be vested in the form of stock or stock-like instruments, as long as these create incentives aligned with long-term value creation and the time horizon of risk; (III) ensuring that compensation for senior executives and other employees having a material impact on the firm's risk exposure align with performance and risk; (IV) making firms' compensation policies and structures transparent through disclosure requirements; (V) limiting variable compensation as a percentage of total net revenues when it is inconsistent with the maintenance of a sound capital base; and (VI) ensuring that compensation committees overseeing compensation policies are able to act independently. Supervisors should have the responsibility to review firms' compensation policies and structures with institutional and systemic risk in mind and, if necessary to offset additional risks, apply corrective measures, such as higher capital requirements, to those firms that fail to implement sound compensation policies and practices. Supervisors should have the ability to modify compensation structures in the case of firms that fail or require extraordinary public intervention. We call on firms to implement these sound compensation practices immediately. We task the FSB to monitor the implementation of FSB standards and propose additional measures as required by March 2010".

[9] See G-20 (2009, page 9): "All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest. OTC derivative contracts should be reported to trade repositories. Non-centrally cleared con-

- the theme of systemically important financial institutions and crisis management by 'cross border' institutions.[10]

In conclusion, requests for standard setters at the international level to complete the convergence process of accounting principles by mid 2011 were re-confirmed as well as the commitment to contrast non-cooperative jurisdiction. The International Monetary Fund was requested to prepare a report for the next summit, by analysing measures adopted in different countries in order to guarantee that financial institutions are able to overcome crises using their own resources, without weighing on State balance-sheets.

The final declaration made at the Toronto summit, stating appreciation for progress made and the capacity shown by many countries to follow through with declarations made by their leaders,[11] made it clear which are the four pillars on which reforms, still needed by the international financial system, must be built:

- the first is represented by strengthening the regulatory framework, understood as being a benchmark for strategy definition by financial institutions. Work by the Basel Committee is essential, within this context, to achieve a new international body of regulations on the question of bank capital requirements; the declaration expressed the commitment of leaders to approve the new regulations during the next summit in Seoul, to then define a schedule for implementation by taking into account the macroeconomic scenario's evolution, including assessments on impact which will accompany these new regulations.[12] Other significant regulatory initiatives mentioned in the final declaration were those concerning hedge

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tracts should be subject to higher capital requirements. We ask the FSB and its relevant members to assess regularly implementation and whether it is sufficient to improve transparency in the derivatives markets, mitigate systemic risk, and protect against market abuse".

[10] G-20 (2009, p. 9): "Systemically important financial firms should develop internationally-consistent firm-specific contingency and resolution plans. Our authorities should establish crisis management groups for the major cross-border firms and a legal framework for crisis intervention as well as improve information sharing in times of stress. We should develop resolution tools and frameworks for the effective resolution of financial groups to help mitigate the disruption of financial institution failures and reduce moral hazard in the future. Our prudential standards for systemically important institutions should be commensurate with the costs of their failure. The FSB should propose by the end of October 2010 possible measures including more intensive supervision and specific additional capital, liquidity, and other prudential requirements".

[11] G-20 (2010a), Point 15: "We are building a more resilient financial system that serves the needs of our economies, reduces moral hazard, limits the build up of systemic risk, and supports strong and stable economic growth. We have strengthened the global financial system by fortifying prudential oversight, improving risk management, promoting transparency, and reinforcing international cooperation. A great deal has been accomplished. We welcome the full implementation of the European Stabilization Mechanism and Facility, the EU decision to publicly release the results of ongoing tests on European banks, and the recent US financial reform bill".

[12] G-20 (2010a), Point 18: "We support reaching agreement at the time of the Seoul Summit on the new capital framework. We agreed that all members will adopt the new standards and these will be phased in over a timeframe that is consistent with sustained recovery and limits market disruption, with the aim of implementation by end-2012, and a transition horizon informed by the macroeconomic impact assessment of the Financial Stability Board (FSB) and BCBS. Phase-in arrangements will reflect different national starting points and circumstances, with initial variance around the new standards narrowing over time as countries converge to the new global standard".

funds, rating agencies, 'over the counter' derivatives, accounting standards, compensation practices;
- the second pillar is supervision, for which leaders anticipated strengthening in terms of resources and powers;[13]
- the third pillar is 'crisis' management, particularly relevant in the case of 'systematically important financial institutions', the rationale of forthcoming regulation is that financial institutions must be able, in the future, to face and overcome these situations without resorting to State support;[14]
- the fourth pillar is transparency and international 'peer review'.[15]

The main result ensuing from the Seoul summit in November 2010, was approval of the new regulations as established by the Basel Committee on the theme of bank capital and liquidity requirements. The final declaration established implementation times, expanding them as compared to first hypothesis, and pointed out how commitment by member countries represents a guarantee for the overall stability of the international banking system, by setting obligations and protection against behaviour held to be responsible for the crisis.[16]

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[13] G-20 (2010a), Point 20: "The second pillar is effective supervision. We agreed that new, stronger rules must be complemented with more effective oversight and supervision. We tasked the FSB, in consultation with the IMF, to report to our Finance Ministers and Central Bank governors in October 2010 on recommendations to strengthen oversight and supervision, specifically relating to the mandate, capacity and resourcing of supervisors and specific powers which should be adopted to proactively identify and address risks, including early intervention".

[14] G-20 (2010a), Point 21: "The third pillar is resolution and addressing systemic institutions. We are committed to design and implement a system where we have the powers and tools to restructure or resolve all types of financial institutions in crisis, without taxpayers ultimately bearing the burden, and adopted principles that will guide implementation. We called upon the FSB to consider and develop concrete policy recommendations to effectively address problems associated with, and resolve, systemically important financial institutions by the Seoul Summit. To reduce moral hazard risks, there is a need to have a policy framework including effective resolution tools, strengthened prudential and supervisory requirements, and core financial market infrastructures. We agreed the financial sector should make a fair and substantial contribution towards paying for any burdens associated with government interventions, where they occur, to repair the financial system or fund resolution, and reduce risks from the financial system. We recognized that there are a range of policy approaches to this end. Some countries are pursuing a financial levy. Other countries are pursuing different approaches".

[15] G-20 (2010a), Point 22: "The fourth pillar is transparent international assessment and peer review. We have strengthened our commitment to the IMF/World Bank Financial Sector Assessment Program (FSAP) and pledge to support robust and transparent peer review through the FSB. We are addressing non-cooperative jurisdictions based on comprehensive, consistent, and transparent assessment with respect to tax havens, the fight against money laundering and terrorist financing and the adherence to prudential standards".

[16] G-20 (2010b), Point 29: "We endorsed the landmark agreement reached by the BCBS on the new bank capital and liquidity framework, which increases the resilience of the global banking system by raising the quality, quantity and international consistency of bank capital and liquidity, constrains the build-up of leverage and maturity mismatches, and introduces capital buffers above the minimum requirements that can be drawn upon in bad times. The framework includes an internationally harmonized leverage ratio to serve as a backstop to the risk-based capital measures. With this, we have achieved far-reaching reform of the global banking system. The new standards will markedly reduce banks' incentive to take excessive risks, lower the likelihood and severity of future crises, and enable banks to withstand – without extraordinary government support – stresses of a magnitude associated with the recent financial crisis. This will result in a banking system that can better support stable economic growth. We are committed to adopt and implement fully these standards within the agreed timeframe that is consistent with economic recovery and fi-

Further to this important result, leaders of major countries confirmed their full endorsement of the guidelines put forward by the FSB to tackle the problem of 'systematically important financial institutions', especially those institutions active on an international scale,[17] confirming their willingness to approve the guidelines established by the Basel Committee, as regards crisis management by 'cross border' financial institutions.

The leaders of major countries acknowledged that the reform process is still underway and that different countries start from different positions; further to confirming their commitment to transform the principles sanctioned by international bodies into laws and regulations, they declared their will to reinforce the comparative assessment process between implementation achieved in individual countries, in the aim of converging towards a condition of equal regulations[18] as quickly as possible.

Lastly, further to confirming their commitment to continue with the reform process of the main areas singled out in previous summits, leaders introduced new points on the agenda, among which we recall the one concerning macro-prudential supervision, ap-

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nancial stability. The new framework will be translated into our national laws and regulations, and will be implemented starting on January 1, 2013 and fully phased in by January 1, 2019".

[17] G-20 (2010b), Point 30: "We reaffirmed our view that no firm should be too big or too complicated to fail and that taxpayers should not bear the costs of resolution. We endorsed the policy framework, work processes, and timelines proposed by the FSB to reduce the moral hazard risks posed by systemically important financial institutions (SIFIs) and address the too-big-to-fail problem. This requires a multi-pronged framework combining: a resolution framework and other measures to ensure that all financial institutions can be resolved safely, quickly and without destabilizing the financial system and exposing the taxpayers to the risk of loss; a requirement that SIFIs and initially in particular financial institutions that are globally systemic (G-SIFIs) should have higher loss absorbency capacity to reflect the greater risk that the failure of these firms poses to the global financial system; more intensive supervisory oversight; robust core financial market infrastructure to reduce contagion risk from individual failures; and other supplementary prudential and other requirements as determined by the national authorities which may include, in some circumstances, liquidity surcharges, tighter large exposure restrictions, levies and structural measures. In the context of loss absorbency, we encourage further progress on the feasibility of contingent capital and other instruments. We encouraged the FSB, BCBS and other relevant bodies to complete their remaining work in accordance with the endorsed work processes and timelines in 2011 and 2012".

[18] G-20 (2010b), Point 34: "But our reform efforts are an ongoing process. It is essential that we fully implement the new standards and principles, in a way that ensures a level playing field, a race to the top and avoids fragmentation of markets, protectionism and regulatory arbitrage. We recognized different national starting points". Point 35: "We reaffirmed today our full commitment to action and implementation". Point 36: "At the national level, we will incorporate the new standards and principles into relevant legislation and policies. At the global level, international assessment and peer review processes should be substantially enhanced in order to ensure consistency in implementation across countries and identify areas for further improvement in standards and principles. In this regard, we recognized the value of the FSAP jointly undertaken by the IMF and the World Bank, and the FSB's peer review as means of fostering consistent cross-country implementation of international standards".

pointed to control systemic risks,[19] and regulation of the so-called 'shadow banking' system.[20]

2.3. From the Financial Stability Forum (FSF) to the Financial Stability Board (FSB)

The initiative leading to creation of the FSF started with Finance ministers and central bank governors in the G-7 countries, who, at the Washington meeting on October 3rd, 1998, appointed the President of Bundesbank at the time, Hans Tietmeyer,[21] to start consultations aimed at verifying the possibility of finding, at an international level, agreements to strengthen cooperation and coordination on the themes of financial activity regulation and supervision. Downstream from the Asian crisis and taking into account the existing structure of international financial institutions, including each one's role, the creation of a new body represented an initiative able to fill in a specific gap as regards supervision and control of market functioning.[22] Attention paid to systemic risks, spreading and monitoring implementation of best practices, verification of compliance with shared regulations, on an international level, by major international financial institutions, represented objectives able to guarantee strengthening of the international financial system's stability profile.

Coherently with analysis developed, conclusions contained in the report prepared by Tietmeyer invite the G-7 to summon a Financial Stability Forum, which should meet regularly to discuss the more important issues for the international financial system's stability and share required action to oppose major risk phenomena.[23] As of the first

[19] G-20 (2010b), Point 41: "While we have made significant progress in a number of areas, there still remain some issues that warrant more attention: Further work on macro-prudential policy frameworks: In order to deal with systemic risks in the financial sector in a comprehensive manner and on an ongoing basis, we called on the FSB, IMF and BIS to do further work on macro-prudential policy frameworks, including tools to mitigate the impact of excessive capital flows, and update our Finance Ministers and Central Bank Governors at their next meeting. These frameworks should take into account national and regional arrangements. We look forward to a joint report which should elaborate on the progress achieved in identification of best practices, which will be the basis for establishing in the future international principles or guidelines on the design and implementation of the frameworks".

[20] G-20 (2010b), Point 41: "Strengthening regulation and supervision of shadow banking: With the completion of the new standards for banks, there is a potential that regulatory gaps may emerge in the shadow banking system. Therefore, we called on the FSB to work in collaboration with other international standard setting bodies to develop recommendations to strengthen the regulation and oversight of the shadow banking system by mid-2011".

[21] See Tietmeyer (1999).

[22] Tietmeyer (1999, p. 4): "Recent events in international financial markets have highlighted three areas in which improvement is needed. Firstly, strengthened efforts are necessary to help identify incipient vulnerabilities in national and international financial systems and concerted procedures are needed for a better understanding of the sources of systemic risk and to formulate effective financial, regulatory and supervisory policies to mitigate them. Secondly, more effective procedures are required to ensure that international rules and standards of best practice are developed and implemented, and that gaps in such standards are effectively identified and filled. Thirdly, improved arrangements are necessary to ensure that consistent international rules and arrangements apply across all types of significant financial institutions, and that procedures exist for the continuous flow of information among authorities having responsibility for financial stability".

[23] Tietmeyer (1999, pp. 6-7): "The G-7 should take the initiative in convening a Financial Stability Forum. Such a Forum should meet regularly to assess issues and vulnerabilities affecting the global financial sys-

meeting held in Spring 1999, the Forum became the place where government representatives and G-7 central bank governors, top representatives of regulatory authorities, key exponents of international financial institutions and self-regulating bodies, shared their analysis on the issue of international financial stability. Obviously, at this stage the Forum's nature and work procedures were only an embryo of the instrument required for effective and efficient governance of international financial problems.

First crisis signals are entered into the FSF agenda in the summer of 2007. The FSF begins to develop its own analysis of the ongoing events and prefigure possible lines for action. The first issues on the carpet are events connected to the crisis of subprime mortgages and structured products created by securitization, the role of rating agencies, the valuation of complex financial products, risk management practices in place at financial institutions,[24] risks connected to the activity of non-regulated subjects such as hedge funds.[25]

At the beginning of 2008, with the crisis becoming more acute, the FSF enlarged the spectrum of its observation; analysis of causes brought an extensive range of topics onto the carpet pointing out the structural weakness of the international financial system. Action to meet with these problems started to be structured on a wider range of 'policy issues'.[26] The list of areas to submit to possible action included financial institu-

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tem and to identify and oversee the actions needed to address them. The Forum would report to the G-7 Ministers and Central Bank Governors. It would replace the series of ad hoc groups that have been convened by the G-7 over the past few years with a view to strengthening the international financial system. The Forum should be limited to a size that permits an effective exchange of views and the achievement of action-oriented results within a reasonable time frame. In developing objectives, priorities and programmes for action, the Forum would work through its members, taking into account their comparative advantages. The members of the Forum would be representatives of national and international authorities responsible for questions of international financial stability. It would comprise the ministries of finance, central banks and senior supervisory authorities – initially of the G-7 countries. In addition, the IFIs and key international regulatory groupings would participate. Representation should be at a high level (i.e. Deputy Ministers and Deputy Governors, Deputy Heads of the IFIs, Chairs and appointed members of international groupings). Given the need for the Forum to have a manageable size, national representation would be limited to three members; the IFIs (IMF and IBRD) would be represented by two participants each, the other international organisations (BIS and OECD) by one member each; the international regulatory groupings (BCBS, IOSCO, IAIS) would be represented by two members each, and the CGFS and CPSS by one each. Participation could over time be extended to include representatives from a small number of additional (i.e. non G-7) national authorities that could contribute substantially to the process, or to invite them to attend meetings as guests. The chairperson should be appointed in a personal capacity for a period of time which is adequate to ensure continuity in the work of the Forum. Experience would seem to indicate a term of not less than three years. I would like to suggest the appointment of Mr Andrew Crockett, General Manager of the BIS, for a term of three years. The Forum would meet as often as needed to achieve its objectives. Initially two meetings a year could be envisaged. The first meeting of the Forum could be held in spring 1999. The Forum could ask members to form working groups in order to facilitate its work or address specific ad hoc issues. A permanent 'Chairman's Group' composed of the representatives of the IFIs and the international regulatory groupings and, if necessary, of national supervisors directly involved in specific issues could meet around or between the Forum's meetings to coordinate follow-up activities to the Forum's outcome. Support for the Forum would be provided by a small secretariat located at the BIS in Basle. Members of the secretariat could be drawn from the BIS and from the participating international financial institutions. Staff from the IFIs would not be expected to move to Basle; if appropriate, they could remain based in Washington, working closely with their colleagues in Basle".

[24] See Financial Stability Forum (2007a).

[25] See Financial Stability Forum (2007b).

[26] See Financial Stability Forum 2008a; 2008b; 2008c).

tion capital and liquidity requirements, supervision by authorities of risk management practices, including off-balance sheet items, problems connected to the functioning of the 'over the counter' derivative market, risk disclosure by financial institutions, valuation of complex financial products, transparency in securitization operations, role of rating agencies, capacity of authorities to meet with surfacing risks.[27] The state of progress regarding implementation of FSF recommendations was contained in the report presented to finance ministers at the Osaka G-8 in June 2008. As of November 2008, FSF's political interlocutor becomes the G-20, a choice aimed at increasing the number of countries called upon to share the commitment of implementing regulatory and supervisory practices required to preserve international financial stability.

In parallel, during the G-20 summit in November 2008, agreement was reached to extend FSF participation to representatives of other economic systems which had, by now, become significant on the international scene. The same year, the FSF handed over a document to G-7 finance ministers containing its recommendations for the recovery of stability within the international financial system.

During the London G-20 in 2009, the leaders of advanced countries decided to transform the previous structure into the current Financial Stability Board (FSB), including representatives of G-20 economies who were not previously represented in the FSF.[28] The FSB's role is to coordinate work carried out by domestic regulatory and supervisory authorities, by establishing joint and shared regulations, to achieve a stable financial system featuring joint regulations not subjected to arbitrage by market partici-

[27] See Financial Stability Forum (2008c). Analysis carried out follows a structured list of recommendations for subjects having jurisdiction (domestic authorities, central banks, international bodies) in establishing action to take and in outlining a schedule for the definition and implementation of the required measures; Financial Stability Forum (2008c), Annex A.

[28] The following are part of the FSB today: "A. Member Jurisdictions: Argentina (Central Bank of Argentina), Australia (Department of the Treasury, Reserve Bank of Australia), Brazil (Ministry of Finance Central Bank of Brazil, Securities and Exchange Commission of Brazil), Canada (Department of Finance, Bank of Canada, Office of the Superintendent of Financial Institutions), China (Ministry of Finance, People's Bank of China, China Banking Regulatory Commission), France (Ministry of Economy, Industry and Employment, Bank of France, Autorité des Marchés Financiers), Germany (Ministry of Finance, Deutsche Bundesbank, Bundesanstalt für Finanzdienstleistungsaufsicht), Hong Kong SAR (Hong Kong Monetary Authority), India (Ministry of Finance, Reserve Bank of India, Securities and Exchange Board of India), Indonesia (Bank Indonesia), Italy (Ministry of the Economy and Finance, Bank of Italy, Commissione Nazionale per le Società e la Borsa), Japan (Ministry of Finance, Bank of Japan, Financial Services Agency), Korea (Bank of Korea, Financial Services Commission), Mexico (Ministry of Finance and Public Credit, Bank of Mexico), Netherlands (Ministry of Finance, Netherlands Bank), Russia (Ministry of Finance, Central Bank of the Russian Federation, Federal Financial Markets Service), Saudi Arabia (Saudi Arabian Monetary Agency), Singapore (Monetary Authority of Singapore), South Africa (Ministry of Finance), Spain (Ministry of Economy and Finance, Bank of Spain), Switzerland (Swiss Federal Department of Finance, Swiss National Bank), Turkey (Central Bank of the Republic of Turkey), United Kingdom (HM Treasury, Bank of England, Financial Services Authority), United States (Department of the Treasury, Board of Governors of the Federal Reserve System, Securities and Exchange Commission), European Central Bank, European Commission. B. International Financial Institutions: Bank for International Settlements, International Monetary Fund, Organisation for Economic Co-operation and Development, World Bank. C. International Standard-Setting, Regulatory, Supervisory and Central Bank Bodies: Basel Committee on Banking Supervision, Committee on Payment and Settlement Systems, Committee on the Global Financial System, International Accounting Standards Board, International Association of Insurance Supervisors, International Organization of Securities Commissions".

pants.[29] Board member countries, further to pursuing financial stability, opening up their systems and rendering them transparent, undertook to implement standards established at the international level and to submit to periodic reviews and assessments.[30]

By appealing to this extended base and having a more explicit mandate,[31] superior structural facilities, as well as endorsement by the G-20, the FSB has carried out intensive activity in producing principles and technical standards of rulemaking by domestic authorities committed to international agreement; on one hand, reports on the progress of reform implementation as prepared for the G-20 summit and, on the other, periodic analysis carried out on individual countries, gave the measure of how the reform process was taking shape, by establishing achieved results and singling out those which were still to be achieved.[32]

Gradually, the FSB agenda has included all the main items in the reform process; some of these have been tackled with coherent measures by the authorities having jurisdiction and have already been translated into regulations or proposals for regulation, whereas others are still being discussed and guidelines for action still need to be defined. From the last reports presented to G-20 finance ministers and central banks, we can obtain a fairly clear idea of the structure and progress of work to implement the reform process.

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[29] From the FSB articles of association: "Article 1. Objectives of the Financial Stability Board. The Financial Stability Board (FSB) is established to coordinate at the international level the work of national financial authorities and international standard setting Bodies (SSBs) in order to develop and promote the implementation of effective regulatory, supervisory and other financial sector policies. In collaboration with the international financial institutions, the FSB will address vulnerabilities affecting financial systems in the interest of global financial stability. Article 2. Mandate and tasks of the FSB. (1) As part of its mandate, the FSB will: (a) assess vulnerabilities affecting the global financial system and identify and review on a timely and ongoing basis the regulatory, supervisory and related actions needed to address them, and their outcomes; (b) promote coordination and information exchange among authorities responsible for financial stability; (c) monitor and advise on market developments and their implications for regulatory policy; (d) advise on and monitor best practice in meeting regulatory standards; (e) undertake joint strategic reviews of the policy development work of the international standard setting bodies to ensure their work is timely, coordinated, focused on priorities and addressing gaps; (f) set guidelines for and support the establishment of supervisory colleges; (g) support contingency planning for cross-border crisis management, particularly with respect to systemically important firms; (h) collaborate with the International Monetary Fund (IMF) to conduct Early Warning Exercises; and (i) undertake any other tasks agreed by its Members in the course of its activities and within the framework of this Charter. (2) The FSB will promote and help coordinate the alignment of the activities of the SSBs to address any overlaps or gaps and clarify demarcations in light of changes in national and regional regulatory structures relating to prudential and systemic risk, market integrity and investor and consumer protection, infrastructure, as well as accounting and auditing".

[30] "Article 5. Commitments of Members. (1) Member jurisdictions commit to: (a) pursue the maintenance of financial stability; (b) maintain the openness and transparency of the financial sector; (c) implement international financial standards; and (d) undergo periodic peer reviews, using among other evidence IMF/World Bank public Financial Sector Assessment Program reports. The FSB will report on these commitments and the evaluation process. (2) In support of the mission laid down in Article 2, (1) (e), the standard setting bodies will report to the FSB on their work without prejudice to their existing reporting arrangements or their independence. This process should not undermine the independence of the standard setting process but strengthen support for strong standard setting by providing a broader accountability framework. (3) The international financial institutions will participate as Members in the FSB in accordance with their respective legal frameworks and policies".

[31] See Draghi (2009).

[32] Financial Stability Board (2009b; 2010b; 2010f).

A first area for action concerns new requirements for bank capital and liquidity; on this point, we can consider the reform process completed by the launching of the final version of the new Agreement, published by the Basel Committee in December 2010, after approval by the G-20 summit in Seoul. The new regulations which shall be in force in 2013, to then reach full application in 2019, are described in Chapter 4.

A second area for action is regulation of the market for 'over the counter' derivative contracts; in two documents, produced between Autumn 2010 and the beginning of 2011, the FSB reported on reforms achieved, in particular the new discipline contained in the 'Dodd Frank Act' (DFA) and the reform proposal in the process of being implemented in Europe and on developments still underway;[33] we shall deal with this theme in Chapter 5.

Another big issue raised by the crisis concerns executive compensation practices in financial institutions, an issue on which the FSB took action by issuing 'core principles' and technical standards, as well as by creating regulatory action both in Europe and the United States;[34] we shall deal with this theme in Chapter 7.[35]

In the second half of 2010, the FSB tackled the issue of financial institutions, which, owing to their size, complexity of activities performed and interconnections with other financial institutions, could be defined as being of 'systemic importance'.[36] The issue clearly surfaced during the crisis with governments finding themselves faced with an evident dilemma: continue with the rescue of these institutions and bear the high costs connected to this choice, or leave them to go bankrupt, thus risking the stability of both domestic and international financial systems. The rescue theory, further to being costly, set two further and obvious problems. The first was of 'moral hazard': what can stimulate big financial institutions to curb risks if they can count on State rescue in the case of default? Obviously, guaranteed State rescue potentially creates perverse consequences: by taking on greater risks, big financial institutions can create more profit, therefore obtaining immediate benefits. On the other hand, if risks can't be controlled and the prospect is default, they are saved by State action. A similar alternative, made on the basis of private benefits and collective costs, is clearly not compatible either with the financial system's overall stability or with basic principles of fairness and responsibility.

[33] Financial Stability Board (2010d; 2011f).
[34] Initial action on this issue was carried out by the FSF. See Financial Stability Forum (2009c). The FSB subsequently drew up three documents: Financial Stability Board (2009e; 2009f; 2010). Opinions expressed by the FSB were backed by a research report commissioned to the Oliver Wyman consultancy company. See Oliver Wyman (2010).
[35] Other issues tackled by the FSB are: instruments to control the systemic risk (Financial Stability Board 2011a), which led to the following measures in the United States and Europe; harmonisation of accounting principles, in particular, overcoming differences between IAS and US GAAP (Financial Stability Board 2011c), protection for users of financial services; exchange of information between supervisory authorities; financial stability in take-off markets; 'market integrity' in the light of recent technological and financial innovations (in particular, technological developments at the basis of 'high frequency trading' and 'algorithmic trading', including development of new types of Exchange Traded Funds, which we shall discuss at the end of Chapter 8).
[36] See Financial Stability Board (2010c; 2010e).

The second problem is represented by the competitive distortion created by an implicit State guarantee in favour of big financial institutions; on making use of this advantage, big operators can supply themselves with different kinds of funds at curbed costs as compared to smaller institutions not benefiting from this guarantee.

These circumstances lead to reflecting on the need to consider big financial institutions (Systematically Important Financial Institutions - SIFIs), especially those operating on a global scale (G-SIFIs), as subjects to submit to a 'special' régime from three viewpoints: regulations, supervision and crisis management. The FSB is working in agreement with other leading international financial system governance authorities and results achieved to date will be analysed in Chapter 4.

The first step is represented by the Basel Committee's definition of a method which would enable objectively singling out institutions having the features to be called 'systemically important', also at international level. Once a reference standard is defined, the method by which these important subjects are regulated will be structured on different levels.

In the first place, the FSB will propose scheduling stricter regulations in terms of capital requirements, so as to increase the capacity of these institutions to absorb potential losses without damaging the system's stability. Therefore, additional capital requirements are anticipated, as compared to provisions in the new Basel agreement, which represent a benchmark for all other banks.

The second strong point, regarding lines of action to follow, concerns the need for tighter supervision by domestic supervisory bodies. International analysis is underway on this subject, aimed at defining standards which will be completed by 2011.[37] Downstream of regulations and supervision, we have forecasts concerning crisis management by systemic institutions. On this point, the FSB presented a report at the G-20 meeting in Seoul, in which all jurisdictions were requested to adopt the necessary reforms to ensure capacity of crisis management for any financial institution. The inspiring principles of the reforms we are discussing are to avoid resort to State resources, to keep the essential functions of institutions alive, to guarantee that losses be sustained by shareholders and creditors, according to the guarantees possessed for its own credits.[38] Lastly, management of the difficulties encountered by these institutions should be further facilitated by strengthening market infrastructures and by the new discipline of derivative trading.[39] Each jurisdiction has the authority to adopt stricter procedures so as

[37] See Financial Stability Board (2011b). In this document, reference is made to works underway by the Basel Committee, the 'Iosco' and 'Iais'.

[38] Financial Stability Board (2010c, p. 4): "All jurisdictions should undertake the necessary legal reforms to ensure that they have in place a resolution regime which would make feasible the resolution of any financial institution without taxpayer exposure to loss from solvency support while protecting vital economic functions through mechanisms which make it possible for shareholders and unsecured and uninsured creditors to absorb losses in their order of seniority".

[39] Financial Stability Board (2010c, pp. 8-9): "International standards for core financial market infrastructures, including payment systems, securities settlement systems, and central counterparties, should be updated and strengthened in light of the lessons learned from the recent financial crisis and changes in markets to ensure resilience under stressed conditions; National authorities should implement: (I) the G-20 commitments that all standardised OTC derivatives contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties (CCPs), and OTC deriva-

to ensure the stability of these institutions. Work to implement regulations of these specific institutions will take place in 2011 and will be completed by issue of principles and technical standards aimed at subsequent rulemaking by domestic authorities.

The importance of the issue debated is, moreover, very significant and has already persuaded the United States to introduce *ad hoc* measures in the 'Dodd Frank Act';[40] in parallel, preliminaries have been set to find a solution to the problem in Europe too, as we shall see in the following chapter.

Another area subject to FSB analysis is the so-called 'shadow banking system', a group of institutions which are different from banks but perform many functions similar to – and replacing – banking functions. The fact that these institutions are outside the sphere of the banking system make them less regulated and supervised, therefore, as a consequence, potentially able to hide worrying risk factors. On the other hand, the fact that they are very close and deeply interconnected with banks, makes it highly probable that risks accumulated internally spread into the traditional banking system.

During the crisis, the problem surfaced clearly, especially in the United States, as we have said in the first Chapter and as we shall see below, even if its importance is not restricted to that context, but structurally involved the entire international financial system. At the Seoul meeting, leaders of G-20 countries[41] acknowledged that stricter regulations taking shape on an international level could represent an incentive for the migration of certain activities (currently included within the sphere of institutions subject to more regulations), towards less regulated environments, precisely such as the group of institutions forming the shadow banking system. A request was therefore put forward formally to the FSB to go ahead, in agreement with other international regulatory bodies, with the issue of principles and recommendations, on the basis of which international regulatory standards on these areas would be defined, areas still today poorly or not regulated at all. The FSB set up a task force to develop analysis on three central points: definition of subjects forming the shadow banking system, possible options to follow for their supervision, singling out possible forms of regulation.[42] As regards the definition of 'shadow banking', the FSB has made two criterion clear to single out the subjects at issue. The first criteria is that we are dealing with subjects outside the banking system, participating in a so-called 'credit chain' and intermediating financial resources without being submitted to the typical controls made on traditional banks. The second criteria is to focus attention on those subjects performing systematic 'maturity transformation', a circumstance which enlarges liquidity risks to which these subjects could be exposed. As you can see in the Figure below, representation supplied by the FSB brings back to mind the problems which surfaced during the crisis, among which the poor quality of loans subject to securitization (in particular, subprime mortgages).

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tives contracts should be reported to trade repositories; and (II) the recommendations set forth in the forthcoming report of the FSB OTC Derivatives Working Group".

[40] The law for reform of the United States financial system launched in July 2010 and described in the following chapter.

[41] See G-20 (2010b, Paragraph 41).

[42] See Financial Stability Board (2011d; 2011c).

Subjects belonging to the shadow banking system, as we have said in the first Chapter, have had a significant role in the workings of this credit circuit, some grouping and securitizing loans, others buying bonds issued in consequence of the securitization process. In the second case, problems surfaced as regards 'vehicles' (subjects of the shadow banking system) which financed the purchase of long-term bonds by issue of short and very short-term securities (typically 'commercial paper'). The deterioration of assets quality created problems in meeting with the commitments contained in the liabilities of these vehicles. As you can see in the Figure, there are a great number of contact points between traditional banks and shadow banking system subjects. Banks originate loans, which are then transferred to the vehicles to be securitized; secondly, banks can grant the very same vehicles credit lines able to back them in the case of difficulties; finally, banks can themselves be investors of the securities issued by these subjects. In the second and third case, it is obvious that banks are exposed to risk factors ensuing from operations by subjects belonging to the shadow banking system (use, by the latter, of granted credit lines, or deterioration of the quality of securities bought by the banks as investors).

The FSB's orientation is to go ahead with singling out subjects performing the 'shadow banking' functions, so as to establish regulatory and supervisory action. The objective is to avoid that activity carried out by these non-regulated subjects should create risks earmarked to be transmitted to other subjects for whom a great optimisation effort, as regards regulations, is being made.

By mid 2011, after consultation with market participants, principles and recommendations shall be advanced and submitted to the G-20 in Autumn for approval and co-sharing. As of 2012, implementation of the co-shared regulations on an international level, will be entered on the agenda of domestic authorities having jurisdiction on their respective markets.

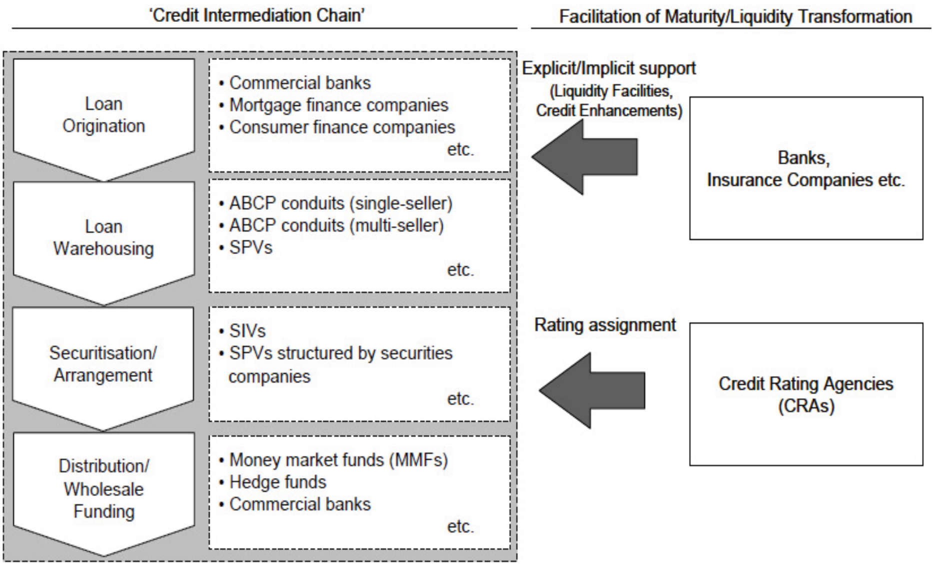

Figure 2.1. 'Shadow banking system' structure
Source: Financial Stability Board 2011d

Chapter 3

Re-Regulation of Banks in Europe and the United States

As already noted in the first chapter, the crisis has shed light on a no longer tolerable contradiction, namely the toxic mismatch between the increasingly international nature of financial activity, on the one hand, and, on the other, the persistently national level at which such activity is governed.

The concept of the governance of financial systems clearly distinguishes three levels.

The first level is that of regulation. Financial activity is overseen with rules that differ from one area of the world to another. Consequently, market participants from differing systems appear on the international scene with varying sets of constraints and attitudes towards risk. By way of example, the European Union has sought, through the provisions that led to the creation of the single banking market, to ensure substantial homogeneity within its area, an objective the EU has pursued through a process of internal market harmonization that began in the early 1990s. As we shall see, the crisis has revealed how, despite the effort expended, the homogeneity achieved was far from sufficient, to the point that the current reforms recast the very bases upon which the desired level of integration may be reached.

If internal differences persist within economic areas that strenuously seek integration, it is no surprise that analogous differences can be even greater in areas whose constituents operate in complete autonomy and have never even aspired to substantial convergence in regulatory standards. The obvious example in this case is the United States, where regulation left gaps – suffice it to think of governance for investment banks and the so-called shadow banking system – that played an important role in the generation of the crisis.

The second level of governance regards the supervision of financial institutions. Supervision is the instrument used by the authorities to ensure that the institutions under surveillance comply with current jurisdiction at any given point; it thus guarantees both the observance of the principles established by regulation, and, in turn, the overall stability of the system. The crisis has evidenced two problems, both of which are clear in theory but still unequivocally remote from any practical solution. Firstly, supervision can be exercised at varying levels of incisiveness; each system has its own *ground rules*, with the result that the relationships between supervisors and the supervised are variable. Differing degrees of rigour and severity in supervision will necessarily determine differing degrees of risk aversion in the institutions supervised. Within a highly integrated financial system, such differences prevent even the most rigorous authorities from ruling out the possibility that their own actions may be annulled by the systemic effect of externally derived crises. The second inherent problem of supervision is that the authorities responsible for its execution are 'national', while the activities of overseen parties clearly and increasingly cross the borders of the originating countries. Coordination between the various authorities was planned, and partially achieved, before the crisis broke, but it did not prove sufficient to ensure systemic stability. A clear conclusion from this insufficiency was that, insofar as it was possible, supervision should be established at a supranational level. This objective was pursued in two ways: by the creation of *ex novo* supranational watchdogs, as happened in Europe, or by increases in the degree of cohesion and harmonization of standards at an international level. The second of these two ways is what the FSB advocates, through the activities described in the previous chapter. In our opinion, the supervisory provisions recently designated by the EU take the right direction by instituting authorities that are able to cover the entire perimeter of the EU's financial markets. The problem of oversight for markets that are external to the Union remains an open one, although the advances in internal reform will simplify the problems of coordination with third party areas.

The third level of governance is that of the management of banking and financial crises – in other words, how the (national) authorities choose to deal with a potentially insolvent entity. How should one behave in circumstances of this type? Leave the bank to its own ends, or commit to rescue operations ('bail out')?

The collapse of Lehman Brothers typifies a dilemma that originates from the fact that both options – rescue and default – bear advantages and disadvantages that are clearly discernible, both from theoretical and from practical viewpoints.

As already stated, bail out creates a classical problem of 'moral hazard';[1] the management and shareholders of a bank are not sufficiently stimulated to curb the levels of risk they assume, and obtain proportionately high returns (corporate and personal), because they are aware that when in difficulty they will be able to count on 'public rescue' in the form of taxpayers' funds. The rescue mechanism, therefore, generates a profound asymmetry between private benefits, those that the bank (specifically its management and its shareholders) obtains by taking on excessive levels of risk, and collective costs (those borne by the state that steps in to prevent default). This imbalance can prove to be entirely unacceptable, both from the economical and from the ethical and political points of view, as public opinion reacts to an operation in which costs, but no benefits, are visible.

The other option, that of letting the market take its course and allowing the endangered financial institution to fall, initially appears to be fairer, in the sense that the very act of collapse implicitly penalizes the bank, its shareholders and its management. In the fore-mentioned case of Lehman Brothers, the United States exercised this option and allowed the bank to fall.

As theory yielded to practice, however, the real costs of this type of decision emerged, and very probably proved to have been substantially underestimated *ex ante*. Lehman's collapse shook confidence in financial institutions to the root. Confidence is

[1] As well that of the distortion of the competitive mechanisms of banking markets, which in turn determines an increase in risk. See Hakenes, Schnabel (2010).

a classic example of the ‘public good’, the importance of which is only suitably appreciated when it disappears. The climate of mistrust between financial institutions led to a liquidity crisis, which in turn undermined the price of financial instruments and reduced the overall value of asset held by banks; critical cases duly multiplied. The consequence was that, in order to forestall a true and proper collapse of the American, and hence of the international banking system, immense rescue operations were launched as institutions lurched progressively into danger.

The intention of this book is not to establish which of the two options is theoretically more desirable, but rather to envisage possible approaches to circumstances that resemble those of the current scenario.

If confidence in banks is perceived to be a public good that merits custody, it will be necessary to guarantee all stakeholders in the bank that said institution can be deemed a safe counterpart, one that is always capable of honouring its commitments. This principle must hold for all counterparts – institutional, corporate, retail – whether domestic or foreign, and for all transactions to which the bank commits itself, be they trading in securities or operations connected to the functioning of payment systems. In this perspective, the rights of all the bank’s creditors will be safeguarded, while responsibility and economic losses will fall upon shareholders, board members and top management. In this hypothesis, such residual debt as may remain should fall upon the State, which in turn will tap public resources coming from taxpayers.

To ensure that residual losses are nil or very limited, would require substantial strengthening of banks’ capital positions, and possibly a system of limits that would prevent banks from taking on excessive risks. Prudential supervision, through capital requirements, and structural supervision, through limitations on high risky activities, should make default unlikely, and enable the gathering of sufficient resources to face such an eventuality. Supervision would entail the task of monitoring the banks, and thus ensuring respect for both principles.

For those who hold otherwise, namely that defaults should be left to the workings of markets, the consequences, as clearly specified by the Lehman case, are well known. The current round of internationally agreed reform aims, as the present chapter will show, to create the conditions required to minimize the likelihood of default; as such, the reforms in question explicitly promise to avoid the need for future State bailouts. Unable at present to predict how the relevant authorities will behave when faced with future defaults, we can only emphasize that this eventuality confronts us with a further problem, namely that of banks that operate internationally.

The crisis has clearly shown that the choices taken by authorities forced to intervene have also affected third-party systems, whose specific regulators might have reacted differently. The resulting contradictions constitute a delicate issue, one that will require determined coordination.

Overcoming said contradictions is intuitively difficult, in that success would presuppose the achievement of a very wide-ranging political consensus at an international level, where, as can easily be imagined, traditions, institutional frameworks and economic interests dictate highly differing positions.

The developments thus far exposed, and in particular the shared political understanding within the G-20 and the technical support of the FSB, have enabled important developments on all the fore-mentioned fronts. In the United States, the Dodd-Frank Act (DFA) has introduced new rules on banking activities, a more incisive supervision of banking operations and new rules for crisis management. In Europe, a new model for the supervision of financial institutions has been defined, a model that significantly transfers the powers of member States to the EU has been devised, and a re-definition of crisis management is under way. The regulations for financial institutions of systemic importance, which will be analyzed in Chapter 4, attempt to minimize the problems arising from the bankruptcy of institutions whose activities involve multiple jurisdictions. The capital requirements demanded of such institutions, along with crisis management systems and reinforced supervision, aim to ensure the stability of organizations whose insolvency would create unmanageable problems for many of the States involved.

3.1. The new architecture of European financial supervision

The new architecture of European financial supervision has gradually taken form in a process of accretion. This process has intensified during the crisis, and emerging evidence has heightened awareness of the inadequacy of the internal market's institutions; all operating at a national level, they have proved unable to deal with the problems that confront them. President Barroso accordingly commissioned a group of experts to propose ways of reforming European financial supervision. The ensuing report, known as the *De Larosière Report*,[2] outlines the bases for the construction of the new European supervisory infrastructure. The suggestions contained in the report were incorporated in the subsequent proposal for legislation, as formulated by the European Commission in September 2009; there followed a phase of complex negotiations, the aim of which was to establish a common ground between the various positions of member states. Approval from the European Parliament was obtained in September 2010.

Of the report's various recommendations, two were essential:

- the constitution of a body with responsibility for macro-prudential oversight (the European Systemic Risk Board, henceforth ESRB);
- the creation of a new European system for micro-economic supervision through 3 separate authorities (European Supervisory Authorities, henceforth ESAs), with each specializing in a single activity segment of the institutions overseen: banks (European Banking Authority, EBA), financial markets and instruments (European Securities and Markets Authority, ESMA), insurance and pension funds (European Insurance and Occupational Pensions Authority, EIOPA).

[2] De Larosière Group (2009); European Commission (2010b).

The text that secured the European Parliament's definitive approval accommodated the findings of the *De Larosière Report*, and accordingly configured its supervisory architecture on the fore-mentioned lines; it also provided for appropriate coordination mechanisms between the macro- and microeconomic levels of prudential supervision. Said coordination between the micro and macro levels is guaranteed by the link between the ESRB and ESAs, and consists in information exchange and the participation of the respective Presidents of EBA, ESMA and EIOPA in the ESRB. Coordination between the three specialized ESAs is underwritten by a joint committee that consists in the heads of the three Authorities, each of whom, in turn, coordinates 'downstream' with the national authorities appointed to monitor the institutions in question. Collectively, these bodies form the supervisory architecture represented in Figure 3.1.

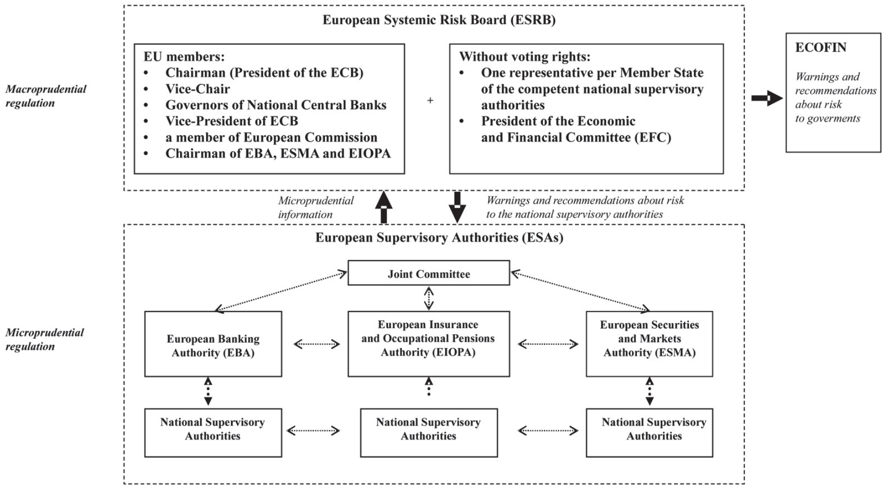

Figure 3.1. The structure of financial supervision in Europe

3.1.1. Macroeconomic supervision: the European Systemic Risk Board (ESRB)

Objectives

The mission of the body responsible for overseeing macro-prudential supervision is clearly stated by Article 3[3] of the founding regulations.

[3] See Regulation (EU) (2010a). "*Article 3*. Mission, objectives and tasks. 1. The ESRB shall be responsible for the macro-prudential oversight of the financial system within the Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union that arise from developments within the financial system and taking into account macroeconomic developments, so as to avoid periods of widespread financial distress. It shall contribute to the smooth functioning of the internal market and thereby ensure a sustainable contribution of the financial sector to economic growth. 2. For the purposes of paragraph 1, the ESRB shall carry out the following tasks: (a) determining and/or collecting and analysing all the relevant and necessary information, for the purposes of achieving the objectives described in paragraph 1; (b) identifying and prioritising systemic risks; (c) issuing warnings where such systemic risks are deemed to be significant and, where appropriate, making those warnings public; (d) issuing recommendations for remedial action

The focus of attention is on the 'systemic risks'[4] that might emerge from the internal dynamics of the Union's financial market-risks that are deemed to be capable of impacting substantially on the overall equilibrium and stability of the European financial system. The creation of a European body to fulfil functions that already exist within each member State and that specifically pertain to government authority (central banks, supervisory bodies, Treasury Ministries) is strikingly important, in that it establishes the principle of a 'European point of view' on financial issues, one that augments State level supervision.

As observed in the first chapter, and with particular reference to the American financial system, orientation towards the control expressed by national governments' economics and financial authorities can be influenced by specific positions that evaluate national interests on the bases of differing orders of priority. These priorities can diverge, as evidenced by the use of the chain drive effect of the financial system to pursue macroeconomic objectives deemed to be important, or by the safeguarding of the financial industry on account of the particular weight it assumes in the given country's economic structure. In such circumstances, a European body's supranational identity will allow it to sift and assess the consequences on the Union's financial system of nationally decided choices, and hence to identify potential risks and to intervene accordingly.

Tasks and powers

The pursuit of its institutional mission is achieved by the fulfilment of the duties that are listed in point 2 of the fore-mentioned Article 3 and described in detail by Articles 15 to 18. The actions posited by the Board can be ordered on the basis of a logical sequence, one that starts from the gathering of information and proceeds to the identification of systemic risks, which are evaluated and classified in accordance with an order of priority.

The issue of information, the basis of the Board's work and of its cooperation with the supervisory authorities, is detailed in Article 15 of the regulations.[5] On the one

in response to the risks identified and, where appropriate, making those recommendations public; (e) when the ESRB determines that an emergency situation may arise pursuant to Article 18 of Regulation (EU) No 1093/2010, of Regulation (EU) No 1094/2010 and of Regulation (EU) No 1095/2010 issuing a confidential warning addressed to the Council and providing the Council with an assessment of the situation, in order to enable the Council to assess the need to adopt a decision addressed to the ESAs determining the existence of an emergency situation; (f) monitoring the follow-up to warnings and recommendations; (g) cooperating closely with all the other parties to the ESFS; where appropriate, providing the ESAs with the information on systemic risks required for the performance of their tasks; and, in particular, in collaboration with the ESAs, developing a common set of quantitative and qualitative indicators (risk dashboard) to identify and measure systemic risk; (h) participating, where appropriate, in the Joint Committee; (i) coordinating its actions with those of international financial organisations, particularly the IMF and the FSB as well as the relevant bodies in third countries on matters related to macro-prudential oversight; (j) carrying out other related tasks as specified in Union legislation".

[4] For an analysis of the concept of systemic risk, see Mottura (2011). Regarding the opportuneness of macro-supervision, aimed at overseeing systemic risk, see White (2008).

[5] "*Article 15*. Collection and exchange of information. 1. The ESRB shall provide the ESAs with the information on risks necessary for the achievement of their tasks. 2. The ESAs, the European System of Central Banks (ESCB), the Commission, the national supervisory authorities and national statistics authorities shall cooperate closely with the ESRB and shall provide it with all the information necessary for the fulfilment of

hand, information flows from the ERSB to the European supervisory authorities, so that these latter can modulate their activities coherently with the risks emerging at any given moment. Conversely, a second information flow takes the opposite direction, from the supervisory authorities, as well as from the European system of Central Banks, from the national authorities and from the European Commission, towards the Board, in keeping with the principle of collaboration. Normally, said information is sent in aggregate form, and thus prevents the identification of individual financial institutions. The fact that the regulations nominate all these bodies demonstrates the Board's entitlement to maintain a series of relationships with multiple counterparties in order to gather the requisite information within given deadlines, and specifically to require any single body to supply any information deemed necessary. Requests for non-aggregated data, from which the specific positions of individual financial institutions may be determined, have to be assessed by the appropriate European supervisory body and justified in terms of systemic significance; if the European authority deems requests to be groundless, it returns them to the Board for further justification. In general, justification will have to be comprehensive for requests to be granted.

The process of information production and transmission in the circuit of the new European institutions, complemented by that of the existing institutions (the European system of Central Banks and the Commission) and of the respective national authorities, appears to be complex and liable to act as a brake on the Board's decision-making processes, as well as on its overall supervisory activities. It will be essential to ascertain how the rules will be implemented and how the authorities will interpret the principle of collaboration; in this regard, the support of the Union's political institutions appears to be decisive.

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its tasks in accordance with Union legislation. 3. Subject to Article 36(2) of Regulation (EU) No 1093/2010, of Regulation (EU) No 1094/2010 and of Regulation (EU) No 1095/2010, the ESRB may request information from the ESAs, as a rule in summary or aggregate form such that individual financial institutions cannot be identified. 4. Before requesting information in accordance with this Article, the ESRB shall first take account of the existing statistics produced, disseminated and developed by the European Statistical System and the ESCB. 5. If the requested information is not available or is not made available in a timely manner, the ESRB may request the information from the ESCB, the national supervisory authorities or the national statistics authorities. If the information remains unavailable, the ESRB may request it from the Member State concerned, without prejudice to the prerogatives conferred, respectively, on the Council, the Commission (Eurostat), the ECB, the Eurosystem and the ESCB in the field of statistics and data collection. 6. If the ESRB requests information that is not in summary or aggregate form, the reasoned request shall explain why data on the respective individual financial institution is deemed to be systemically relevant, and necessary, considering the prevailing market situation. 7. Before each request for information which is not in summary or aggregate form, the ESRB shall duly consult the relevant European Supervisory Authority in order to ensure that the request is justified and proportionate. If the relevant European Supervisory Authority does not consider the request to be justified and proportionate, it shall, without delay, send the request back to the ESRB and ask for additional justification. After the ESRB has provided the relevant European Supervisory Authority with such additional justification, the requested information shall be transmitted to the ESRB by the addressees of the request, provided that they have legal access to the relevant information".

The collection and Exchange of information is aimed at the identification of systemic risks; the subsequent phase of the Board's duty is that of issuing warnings and recommendations,[6] which can, if the Board deems it appropriate, be made public.[7]

A first principle established by the regulations is that the Board may, by means of its warnings and recommendations, become in effect the promoter of new legislation, thus involving the Commission.

Said warnings and recommendations, which may be both general and specific, and are subject to confidentiality constraints, are addressed to the Union in its entirety, to single member States or to European and national supervisory authorities. The ample range of the Board's expression is designed to reinforce the integration and uniformity of the Union's financial legislation, and hence to fill the gaps opened up by the crisis.

Lastly, and jointly with the European supervisory authorities, the Board devises a schema (known as the 'colour coded system') for the classification of risks, whereby the significance of the given risk is designated, along with the consequent need and timeline for intervention.

After warnings and recommendations have been issued and sent as here described, the Board has to ascertain whether appropriate follow-up takes place.[8] This activity,

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[6] "*Article 16*. Warnings and recommendations. 1. When significant risks to the achievement of the objective in Article 3(1) are identified, the ESRB shall provide warnings and, where appropriate, issue recommendations for remedial action, including, where appropriate, for legislative initiatives. 2. Warnings or recommendations issued by the ESRB in accordance with Article 3(2)(c) and (d) may be of either a general or a specific nature and shall be addressed in particular to the Union as a whole or to one or more Member States, or to one or more of the ESAs, or to one or more of the national supervisory authorities. If a warning or a recommendation is addressed to one or more of the national supervisory authorities, the Member State(s) concerned shall also be informed thereof. Recommendations shall include a specified timeline for the policy response. Recommendations may also be addressed to the Commission in respect of the relevant Union legislation. 3. At the same time as they are transmitted to the addressees in accordance with paragraph 2, the warnings or recommendations shall be transmitted, in accordance with strict rules of confidentiality, to the Council and the Commission and, where addressed to one or more national supervisory authorities, to the ESAs. 4. In order to enhance the awareness of risks in the economy of the Union and to prioritise such risks, the ESRB, in close cooperation with the other parties to the ESFS, shall elaborate a colour-coded system corresponding to situations of different risk levels. Once the criteria for such classification have been elaborated, the ESRB's warnings and recommendations shall indicate, on a case-by-case basis, and where appropriate, to which category the risk belongs".

[7] "*Article 18*. Public warnings and recommendations. 1. The General Board shall decide on a case-by-case basis, after having informed the Council sufficiently in advance so that it is able to react, whether a warning or a recommendation should be made public. Notwithstanding Article 10(3), a quorum of two-thirds shall always apply to decisions taken by the General Board under this paragraph. 2. If the General Board decides to make a warning or recommendation public, it shall inform the addressees in advance. 3. The addressees of warnings and recommendations made public by the ESRB shall also be provided with the right of making public their views and reasoning in response thereto. 4. Where the General Board decides not to make a warning or a recommendation public, the addressees and, where appropriate, the Council and the ESAs shall take all the measures necessary for the protection of their confidential nature".

[8] "*Article 17*. Follow-up of the ESRB recommendations. 1. If a recommendation referred to in Article 3(2)(d) is addressed to the Commission, to one or more Member States, to one or more ESAs, or to one or more national supervisory authorities, the addressees shall communicate to the ESRB and to the Council the actions undertaken in response to the recommendation and shall provide adequate justification for any inaction. Where relevant, the ESRB shall, subject to strict rules of confidentiality, inform the ESAs without delay of the answers received. 2. If the ESRB decides that its recommendation has not been followed or that the addressees have failed to provide adequate justification for their inaction, it shall, subject to strict rules of confidentiality, inform the addressees, the Council and, where relevant, the European Supervisory Authority concerned. 3. If the ESRB has made a decision under paragraph 2 on a recommendation that has been made public fol-

which we may define as 'enforcement', is critical to the overall effectiveness of the Board's activity, and only future experience will tell whether the dictates of regulation lead to appropriate behaviours.

The recommendations sent by the Board to the Commission, to the Member States or to the European authorities, oblige the recipients to inform the Board and the European Council of the steps taken in response to the recommendations received.

In these circumstances, the 'act or explain' principle holds, whereby the recipient of the suggestions has to justify its lack of response to the suggestions. When justification is required, the Board immediately informs the appropriate authorities, who need to be aware of the potential risks emerging in their area of operation. If the Board judges the justification for non-action to be inadequate, it informs all recipients, the European Council and the supervisory authorities.

These circumstances amount to a case of conflict which, if considered substantial by the Board, is referred to the European political authorities; when warnings and recommendations are made public, there is provision for a hearing in which the Board and the relevant recipient present their cases to the European Parliament.

This rendering public of the Board's warnings and recommendations has significant implications, specifically for its potential impact on the dynamics of financial markets. On the one hand, the need to divulge those warnings and recommendations that are deemed to be important for the stability of the European financial system may appear to be an imperative; on the other, the opposite and equally commendable need for caution is similarly intuitive, given the capacity of public information to provoke damaging side-effects in the markets.

The provisions of Article 18 of the regulations define how this delicate issue should be managed. Firstly, the Board's fundamental governing organ, the General Council, is convened to deliberate on the basis of a qualified majority. Secondly, the Board has to notify the European Council that it intends to render a warning or a recommendation public immediately upon deliberation, so that the Council has time to 're-act'; in effect, this provision brings the problem directly to the Union's organs of political government. The recipient of the warning/recommendation, which obviously has to be informed by the Board of the latter's intention to render said warning/recommendation public, has the right to express its own opinions in public and to explain its reply to the public.

lowing the procedure set out in Article 18(1), the European Parliament may invite the Chair of the ESRB to present that decision and the addressees may request to participate in an exchange of views".

Organization

The structure of the Board is defined in Article 4[9] and consists in: a General Board, which is the governing body commissioned to take the decisions inherent to the fulfilment of the previously mentioned tasks; a Steering Committee, whose function is to assist the decision-making process; a Secretariat, which is responsible for day-to-day administration; two consultancy boards, respectively defined as 'scientific' and 'technical', which assist the ESRB in situations of specific need. The ESRB's governing structure reflects the importance of this new body: for the first mandate of five years from constitution,[10] the President of the ESRB is the President of the BCE; the first Vice President is chosen from the members of the General Council of the BCE, while the second is the President of the joint committee of the three new European supervisory authorities. This latter provision favours the reinforcement of coordination between the macro and micro levels of prudential supervision.

The General Board, as defined by Article 6,[11] is composed of, and assigns voting rights to, the President and the Vice President of the BCE, the Governors of the national central banks of Member States, the Chairpersons of the three newly constituted European supervisory authorities, the Chair and the two Vice-Chairs of the Advisory Scientific Committee, and the Chair of the Advisory Technical Committee. Members of the General Board without voting rights comprise high-level representatives of the national supervisory authorities, who rotate on the basis of the item under discussion, and the President of the Economic and Financial Committee.

Members of the General Board are bound to observe both the principles of impartiality stipulated by Article 7, which specifies that no member may exercise any role in the financial industry, and the obligation of confidentiality as stipulated by Article 8.

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[9] "*Article 4*. Structure. 1. The ESRB shall have a General Board, a Steering Committee, a Secretariat, an Advisory Scientific Committee and an Advisory Technical Committee. 2. The General Board shall take the decisions necessary to ensure the performance of the tasks entrusted to the ESRB, pursuant to Article 3(2). 3. The Steering Committee shall assist in the decision-making process of the ESRB by preparing the meetings of the General Board, reviewing the documents to be discussed and monitoring the progress of the ESRB's ongoing work. 4. The Secretariat shall be responsible for the day-to-day business of the ESRB. It shall provide high-quality analytical, statistical, administrative and logistical support to the ESRB under the direction of the Chair and the Steering Committee in accordance with Council Regulation (EU) No 1096/2010. It shall also draw on technical advice from the ESAs, national central banks and national supervisors. 5. The Advisory Scientific Committee and the Advisory Technical Committee referred to in Articles 12 and 13 shall provide advice and assistance on issues relevant to the work of the ESRB".

[10] The subsequent Presidents will be elected by means of the procedure defined by Article 20.

[11] "*Article 6*. General Board. 1. Members of the General Board with voting rights shall comprise: (a) the President and the Vice-President of the ECB; (b) the Governors of the national central banks; (c) a Member of the Commission; (d) the Chairperson of the European Supervisory Authority (European Banking Authority); (e) the Chairperson of the European Supervisory Authority (European Insurance and Occupational Pensions Authority); (f) the Chairperson of the European Supervisory Authority (European Securities and Markets Authority); (g) the Chair and the two Vice-Chairs of the Advisory Scientific Committee; (h) the Chair of the Advisory Technical Committee. 2. Members of the General Board without voting rights shall comprise: (a) one high-level representative per Member State of the competent national supervisory authorities, in accordance with paragraph 3; (b) the President of the Economic and Financial Committee (EFC). 3. With regard to the representation of the national supervisory authorities under paragraph 2(a), the respective high-level representatives shall rotate depending on the item discussed, unless the national supervisory authorities of a particular Member State have agreed on a common representative. 4. The General Board shall establish rules of procedure for the ESRB".

Provision is made for at least four meetings per annum, without prejudice to the President's faculty of convocation, when deemed necessary, upon the request of at least one third of the members (Article 9).

The decisional procedure stipulated by Article 10 rests on the principle of a simple majority vote, except when instances of warning and recommendation are deemed to be of particular importance, in which case a qualified majority, consisting in two thirds of the members, is stipulated.

3.1.2. Microeconomic supervision and the network of European Supervisory Authorities[12]

The prudential supervision of the institutions and of the financial markets is entrusted to the European System of Financial Supervision (ESFS),[13] which comprises:

- the ESRB;
- the three newly constituted competent authorities for the three distinct sectors identified by European legislation: banking (European Banking Authority), insurance and pensions (European Insurance and Occupational Pensions Authority), financial markets (European Securities and Markets Authority);
- the Joint Committee, comprising members of said authorities, whose function is that of guaranteeing coordination between supervisory activities;[14]
- national authorities.

The specific activity of microeconomic supervision is jointly entrusted to the three authorities listed in the second point and the competent national authorities; overall, therefore, the structure of the European System of Financial Supervision is reticular:

- each of the three authorities is competent in a specific sector of the financial industry, so that they collectively guarantee 'vertical' specialization and competence for the sectors under supervision;
- the three authorities communicate, 'downstream', with the competent authorities in individual countries, and thus benefit from the work performed by the latter authorities on the national markets in which they have competence;
- coordination between the three authorities is achieved through the Joint Committee, whose task is one of aggregation and integration;
- the link between micro and macro supervision is guaranteed by constant interaction between the three authorities and the ESRB.

[12] Regulation (EU) (2010b; 2010c; 2010d).
[13] Described by Article 2 of the regulations establishing the three new authorities.
[14] See *infra*, at the end of the current paragraph.

Overall, the system is designed to strike a balance between specialization and integration: the former answers the needs imposed by the complexity of the issues with which the financial industry continuously has to contend; the latter responds to the problems generated by the fact that financial operators are profoundly integrated and that crises do not respect subdivision into segments.

Prior to the current reform, three committees, with exclusively consultative powers, operated in the financial services area: the Committee of European Banking Supervisors (CEBS), the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) and the Committee of European Securities Regulators (CESR). The new authorities will assume the duties of their predecessors, and will play a more incisive supervisory role.

Up to January 2011, when the new European authorities were launched, the role of the then existing committees was of a technical nature, and served to guide the activities of the regulators of the European Union. The committees formulated recommendations and defined guidelines, none of which was binding; the national authorities and, consequently, the financial industry were free, but not obliged, to conform to said recommendations and guidelines.

To summarize, while the previous supervisory system relegated real power to the national level, the current reforms have shifted a significant amount of this power to the European level.

We shall now review the principal features of the new authorities, and try to assess their impact on the stability of the European financial system.

Chapter I of the texts approved by the European Parliament (*Establishment and Legal Status*) defines:

- the distinct fields of action and the common objectives of the three authorities;[15]
- the structure of the above described ESFS;
- the principle of the authorities' responsibility towards the Parliament and the Council, and their legal status;[16]

[15] These objectives are specified in Article 1, paragraph 5 of the regulations: "The objective of the Authority shall be to protect the public interest by contributing to the short, medium and long-term stability and effectiveness of the financial system, for the Union economy, its citizens and businesses. The Authority shall contribute to: (a) improving the functioning of the internal market, including in particular a sound, effective and consistent level of regulation and supervision, (b) ensuring the integrity, transparency, efficiency and orderly functioning of financial markets, (c) strengthening international supervisory coordination, (d) preventing regulatory arbitrage and promoting equal conditions of competition, (e) ensuring the taking of investment and other risks are appropriately regulated and supervised, and (f) enhancing customer protection. For those purposes, the Authority shall contribute to ensuring the consistent, efficient and effective application of the acts referred to in paragraph 2, foster supervisory convergence, provide opinions to the European Parliament, the Council, and the Commission and undertake economic analyses of the markets to promote the achievement of the Authority's objective. In the exercise of the tasks conferred upon it by this Regulation, the Authority shall pay particular attention to any systemic risk posed by financial market participants, the failure of which may impair the operation of the financial system or the real economy. When carrying out its tasks, the Authority shall act independently and objectively and in the interest of the Union alone".

- the structure of the Authority, consisting in a Supervisory Board, a Management Board, a President, an Executive Director and a Board of Appeal.

The issue of supervisory authorities' governance is critical to the effectiveness of their actions. The central role is played by the Board of Supervisors, which is subject to the provisions of Articles 40 to 44 inclusive, and consists of: a Chairperson who has no voting right; the heads of the supervisory authorities of each member State; one representative from each of the European Commission, the European Central Bank, the ESRB and the other two European supervisory bodies, all without voting rights.

The Supervisory Board, which must commit itself to the principle of independence and to the sole and exclusive pursuit of the interests of the Union,[17] guides the work of the supervisory authorities, and formally assumes responsibility for all important decisions, particularly those upon which we comment below, where we describe the tasks and the powers of the newly constituted bodies.

One undoubtedly striking feature is that the decisional process enacted by the Supervisory Board mainly observes the principle of a simple majority, as based on a one member, one vote system.[18] This feature clearly has a merit, which is that of accelerating the decisional process by avoiding the negotiations that normally feature in systems that attribute members' veto rights. On the other hand, criticism of this set-up is not lacking, because 'one member, one vote' fails to recognize the highly differing weights of the financial industries and markets respectively presided over by the competent authorities.

The managerial tasks of the authorities are entrusted to the Management Board, which consists of a Chairperson and of six members, the latter chosen from members of the Supervisory Board. The Management Board runs the day-to-day tasks for which the authority is responsible, votes on a simple majority basis and prepares motions for the formal approval of the Supervisory Board. The Chairperson,[19] the Executive Director[20] and the Board of Appeal[21] complete the organization chart of the authorities.

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[16] "*Article 5*. Legal status 1. The Authority shall be a Union body with legal personality. 2. In each Member State, the Authority shall enjoy the most extensive legal capacity accorded to legal persons under national law. It may, in particular, acquire or dispose of movable and immovable property and be a party to legal proceedings. 3. The Authority shall be represented by its Chairperson".

[17] "*Article 42*. Independence. When carrying out the tasks conferred upon it by this Regulation, the Chairperson and the voting members of the Board of Supervisors shall act independently and objectively in the sole interest of the Union as a whole and shall neither seek nor take instructions from Union institutions or bodies, from any government of a Member State or from any other public or private body. Neither Member States, the Union institutions or bodies, nor any other public or private body shall seek to influence the members of the Board of Supervisors in the performance of their tasks".

[18] This is the general principle established by subparagraph 1 of paragraph 1 of Article 44; the second and third paragraphs state the exceptions to this principle. When technical standards (Articles 10 to 16, which we shall discuss) are issued, a qualified majority vote will pertain; in the cases provided for by Article 19 (regarding cross-border disputes between the competent authorities of two member States), voting will be by simple majority, unless opposition unites a sufficient number of members to constitute a 'minority block' (as per the definition of Article 16(4) of the European Union Treaty).

[19] See Articles 48-50.

[20] See Articles 51-53.

[21] See Articles 58-59.

Chapter II (*Tasks and Powers of the Authority*), from Article 8 to Article 39 dictate the ample and structured tasks and powers of the authorities.

The former are stipulated by paragraph 1 of Article 8[22], which ordains the maintenance of the stability of the European financial system, and starts by circumscribing each authority to its sector of competence. The powers, which are defined by paragraph 2 of Article 8, are proportionate to the tasks respectively assigned to the authorities.

Regulatory technical standards, guidelines and recommendations

Pre-eminent among the authorities' powers is the right to develop regulatory technical standards (in the circumstances prescribed by Articles 10 and 15), and to issue guidelines and recommendations. Taken together, these actions are the means by which the supervisory authorities will contribute to the creation of a 'single rule book', the single text that covers all the European Union's dispensations regarding the regulation and supervision of financial activities. The newly constituted European supervisory authorities will guide the elaboration of the 'key standards' that will prevail throughout Europe, and thus avoid regulatory arbitrage.

The elaboration of regulatory technical standards may be undertaken by the authorities when Parliament or the Council decides to empower the Commission to devise such standards as may provide the highest level of harmonization within the European market. In such cases, the authorities may act as technical bodies and develop proposals that may subsequently be adopted by the Commission (Article 10). Conversely, the authorities themselves may initiate the elaboration of regulatory technical standards, which they will subsequently have to submit to the Commission. Either way, the power of final decision rests with Parliament or the Council.

[22] "*Article 8*. Tasks and powers of the Authority. 1. The Authority shall have the following tasks: (a) to contribute to the establishment of high-quality common regulatory and supervisory standards and practices, in particular by providing opinions to the Union institutions and by developing guidelines, recommendations, and draft regulatory and implementing technical standards which shall be based on the legislative acts referred to in Article 1(2); (b) to contribute to the consistent application of legally binding Union acts, in particular by contributing to a common supervisory culture, ensuring consistent, efficient and effective application of the acts referred to in Article 1(2), preventing regulatory arbitrage, mediating and settling disagreements between competent authorities, ensuring effective and consistent supervision of financial market participants, ensuring a coherent functioning of colleges of supervisors and taking actions, inter alia, in emergency situations; (c) to stimulate and facilitate the delegation of tasks and responsibilities among competent authorities; (d) to cooperate closely with the ESRB, in particular by providing the ESRB with the necessary information for the achievement of its tasks and by ensuring a proper follow up to the warnings and recommendations of the ESRB; (e) to organise and conduct peer review analyses of competent authorities, including issuing guidelines and recommendations and identifying best practices, in order to strengthen consistency in supervisory outcomes; (f) to monitor and assess market developments in the area of its competence; (g) to undertake economic analyses of markets to inform the discharge of the Authority's functions; (h) to foster investor protection; (i) to contribute to the consistent and coherent functioning of colleges of supervisors, the monitoring, assessment and measurement of systemic risk, the development and coordination of recovery and resolution plans, providing a high level of protection to investors throughout the Union and developing methods for the resolution of failing financial market participants and an assessment of the need for appropriate financing instruments, in accordance with Articles 21 to 26; (j) to fulfil any other specific tasks set out in this Regulation or in other legislative acts; (k) to publish on its website, and to update regularly, information relating to its field of activities, in particular, within the area of its competence, on registered financial market participants, in order to ensure information is easily accessible by the public; (l) to take over, as appropriate, all existing and ongoing tasks from the Committee of…" (the reference is to the Committees that existed prior to the constitution of the new Authorities).

The guidelines and recommendations stipulated by Article 16[23] are additional instruments with which to ensure greater harmonization within the areas of interest presided over by the authorities. If the given authority deems it appropriate, the development of guidelines and recommendations can entail a preliminary phase of consultation; once the guidelines and recommendations are issued, the competent authorities of the single member States and the financial institutions must 'make every effort' to comply, and are bound to explain all non-aligned behaviour.

Breach of Union law

When Union law is breached, the authority is empowered, as per the dispositions of Article 17,[24] to intervene in order to re-establish observance of the given laws. The au-

[23] "*Article 16*. Guidelines and recommendations. 1. The Authority shall, with a view to establishing consistent, efficient and effective supervisory practices within the ESFS, and to ensuring the common, uniform and consistent application of Union law, issue guidelines and recommendations addressed to competent authorities or financial market participants. 2. The Authority shall, where appropriate, conduct open public consultations regarding the guidelines and recommendations and analyse the related potential costs and benefits. Such consultations and analyses shall be proportionate in relation to the scope, nature and impact of the guidelines or recommendations. The Authority shall, where appropriate, also request opinions or advice from the Securities and Markets Stakeholder Group referred to in Article 37. 3. The competent authorities and financial market participants shall make every effort to comply with those guidelines and recommendations. Within 2 months of the issuance of a guideline or recommendation, each competent authority shall confirm whether it complies or intends to comply with that guideline or recommendation. In the event that a competent authority does not comply or does not intend to comply, it shall inform the Authority, stating its reasons. The Authority shall publish the fact that a competent authority does not comply or does not intend to comply with that guideline or recommendation. The Authority may also decide, on a case by case basis, to publish the reasons provided by the competent authority for not complying with that guideline or recommendation. The competent authority shall receive advanced notice of such publication. If required by that guideline or recommendation, financial market participants shall report, in a clear and detailed way, whether they comply with that guideline or recommendation. 4. In the report referred to in Article 43(5) the Authority shall inform the European Parliament, the Council and the Commission of the guidelines and recommendations that have been issued, stating which competent authority has not complied with them, and outlining how the Authority intends to ensure that the competent authority concerned follow its recommendations and guidelines in the future".

[24] "*Article 17*. Breach of Union law. 1. Where a competent authority has not applied the acts referred to in Article 1(2), or has applied them in a way which appears to be a breach of Union law, including the regulatory technical standards and implementing technical standards established in accordance with Articles 10 to 15, in particular by failing to ensure that a financial institution satisfies the requirements laid down in those acts, the Authority shall act in accordance with the powers set out in paragraphs 2, 3 and 6 of this Article. 2. Upon a request from one or more competent authorities, the European Parliament, the Council, the Commission or the Banking Stakeholder Group, or on its own initiative, and after having informed the competent authority concerned, the Authority may investigate the alleged breach or non-application of Union law. Without prejudice to the powers laid down in Article 35, the competent authority shall, without delay, provide the Authority with all information which the Authority considers necessary for its investigation. 3. The Authority may, not later than 2 months from initiating its investigation, address a recommendation to the competent authority concerned setting out the action necessary to comply with Union law. The competent authority shall, within 10 working days of receipt of the recommendation, inform the Authority of the steps it has taken or intends to take to ensure compliance with Union law. 4. Where the competent authority has not complied with Union law within 1 month from receipt of the Authority's recommendation, the Commission may, after having been informed by the Authority, or on its own initiative, issue a formal opinion requiring the competent authority to take the action necessary to comply with Union law. The Commission's formal opinion shall take into account the Authority's recommendation. The Commission shall issue such a formal opinion no later than 3 months after the adoption of the recommendation. The Commission may extend this period by 1 month. The Authority and the competent authorities shall provide the Commission with all necessary information. 5. The competent authority shall, within 10 working days of receipt of the formal opinion referred to in paragraph 4, inform the Commission and the Authority of the steps it has taken or intends to take to

thority may investigate with a view to ascertaining the breach, whether of its own initiative or upon request by the Union's institutions, and it is entitled to receive all information deemed necessary from the competent authorities of any member State. The investigatory phase is followed by the issuing of recommendations aimed at restoring observance of the Union's laws, and the authorities of the given member State are required to provide a prompt response that indicates the actions whereby the desired aim is achieved. Should the authorities of the member State comply less than fully, the European authority is entitled to refer directly to the financial institutions in question to demand respect for Union law. As we shall see in the conclusions, this entitlement is one of the most conspicuous attributes granted to the new supervisory authorities.

Actions in emergencies

The role of the newly constituted European authorities assumes particular importance when the market is affected by 'adverse developments'. In such circumstances, the authorities have the power both to coordinate single national authorities and to exact sufficient and appropriate information from the same.

'Situations of emergency'[25] are recognized and ratified by the European Council as evincing a higher order of problems than do the 'adverse developments' of the market.

comply with that formal opinion. 6. Without prejudice to the powers of the Commission pursuant to Article 258 TFEU, where a competent authority does not comply with the formal opinion referred to in paragraph 4 within the period of time specified therein, and where it is necessary to remedy in a timely manner such non-compliance in order to maintain or restore neutral conditions of competition in the market or ensure the orderly functioning and integrity of the financial system, the Authority may, where the relevant requirements of the acts referred to in Article 1(2) are directly applicable to financial institutions, adopt an individual decision addressed to a financial institution requiring the necessary action to comply with its obligations under Union law including the cessation of any practice. The decision of the Authority shall be in conformity with the formal opinion issued by the Commission pursuant to paragraph 4. 7. Decisions adopted under paragraph 6 shall prevail over any previous decision adopted by the competent authorities on the same matter. When taking action in relation to issues which are subject to a formal opinion pursuant to paragraph 4 or a decision pursuant to paragraph 6, competent authorities shall comply with the formal opinion or the decision, as the case may be. 8. In the report referred to in Article 43(5), the Authority shall set out which competent authorities and financial institutions have not complied with the formal opinions or decisions referred to in paragraphs 4 and 6 of this Article".

[25] "*Article 18*. Action in emergency situations. 1. In the case of adverse developments which may seriously jeopardise the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union, the Authority shall actively facilitate and, where deemed necessary, coordinate any actions undertaken by the relevant national competent supervisory authorities. In order to be able to perform that facilitating and coordinating role, the Authority shall be fully informed of any relevant developments, and shall be invited to participate as an observer in any relevant gathering by the relevant national competent supervisory authorities. 2. The Council, in consultation with the Commission and the ESRB and, where appropriate, the ESAs, may adopt a decision addressed to the Authority, determining the existence of an emergency situation for the purposes of this Regulation, following a request by the Authority, the Commission or the ESRB. The Council shall review that decision at appropriate intervals and at least once a month. If the decision is not renewed at the end of a 1-month period, it shall automatically expire. The Council may declare the discontinuation of the emergency situation at any time. Where the ESRB or the Authority considers that an emergency situation may arise, it shall issue a confidential recommendation addressed to the Council and provide it with an assessment of the situation. The Council shall then assess the need for a meeting. In that process, due care of confidentiality shall be guaranteed. If the Council determines the existence of an emergency situation, it shall duly inform the European Parliament and the Commission without delay. 3. Where the Council has adopted a decision pursuant to paragraph 2, and in exceptional circumstances where coordinated action by national authorities is necessary to respond to adverse developments which may seriously jeopardise the orderly functioning and integrity of financial markets or the stability of the whole or

Upon the identification of this graver market condition, the powers of the new European authorities increase in intensity. Said bodies can refer to the competent national authorities and demand such intervention as will overcome the perceived difficulties; alternatively, they can refer directly to the financial institutions, as in the previous case.

Settlement of disagreements between national authorities in cross-border situations
On the basis of the provisions of Article 19,[26] the European authorities are entitled to intervene in order to settle emerging conflicts between national authorities as and when such conflicts involve differing jurisdictions – an entirely normal scenario in a market populated, as Europe's is, by numerous institutions of substantial dimensions operating

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part of the financial system in the Union, the Authority may adopt individual decisions requiring competent authorities to take the necessary action in accordance with the legislation referred to in Article 1(2) to address any such developments by ensuring that financial institutions and competent authorities satisfy the requirements laid down in that legislation. 4. Without prejudice to the powers of the Commission pursuant to Article 258 TFEU, where a competent authority does not comply with the decision of the Authority referred to in paragraph 3 within the period laid down in that decision, the Authority may, where the relevant requirements laid down in the legislative acts referred to in Article 1(2) including in regulatory technical standards and implementing technical standards adopted in accordance with those acts are directly applicable to financial institutions, adopt an individual decision addressed to a financial institution requiring the necessary action to comply with its obligations under that legislation, including the cessation of any practice. This shall apply only in situations in which a competent authority does not apply the legislative acts referred to in Article 1(2), including regulatory technical standards and implementing technical standards adopted in accordance with those acts, or applies them in a way which appears to be a manifest breach of those acts, and where urgent remedying is necessary to restore the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union. 5. Decisions adopted under paragraph 4 shall prevail over any previous decision adopted by the competent authorities on the same matter. Any action by the competent authorities in relation to issues which are subject to a decision pursuant to paragraph 3 or 4 shall be compatible with those decisions".

[26] "*Article 19*. Settlement of disagreements between competent authorities in cross-border situations. 1. Without prejudice to the powers laid down in Article 17, where a competent authority disagrees about the procedure or content of an action or inaction of a competent authority of another Member State in cases specified in the acts referred to in Article 1(2), the Authority, at the request of one or more of the competent authorities concerned, may assist the authorities in reaching an agreement in accordance with the procedure set out in paragraphs 2 to 4 of this Article. In cases specified in the legislation referred to in Article 1(2), and where on the basis of objective criteria, disagreement between competent authorities from different Member States can be determined, the Authority may, on its own initiative, assist the authorities in reaching an agreement in accordance with the procedure set out in paragraphs 2 to 4. 2. The Authority shall set a time limit for conciliation between the competent authorities taking into account any relevant time periods specified in the acts referred to in Article 1(2) and the complexity and urgency of the matter. At that stage the Authority shall act as a mediator. 15.12.2010 EN Official Journal of the European Union L 331/29. 3. If the competent authorities concerned fail to reach an agreement within the conciliation phase referred to in paragraph 2, the Authority may, in accordance with the procedure set out in the third and fourth subparagraph of Article 44(1) take a decision requiring them to take specific action or to refrain from action in order to settle the matter, with binding effects for the competent authorities concerned, in order to ensure compliance with Union law. 4. Without prejudice to the powers of the Commission pursuant to Article 258 TFEU, where a competent authority does not comply with the decision of the Authority, and thereby fails to ensure that a financial institution complies with requirements directly applicable to it by virtue of the acts referred to in Article 1(2), the Authority may adopt an individual decision addressed to a financial institution requiring the necessary action to comply with its obligations under Union law, including the cessation of any practice. 5. Decisions adopted under paragraph 4 shall prevail over any previous decision adopted by the competent authorities on the same matter. Any action by the competent authorities in relation to facts which are subject to a decision pursuant to paragraph 3 or 4 shall be compatible with those decisions. 6. In the report referred to in Article 50(2), the Chairperson of the Authority shall set out the nature and type of disagreements between competent authorities, the agreements reached and the decisions taken to settle such disagreements".

within more than one jurisdiction. The path of the European authorities' intervention is clearly defined: firstly, a time limit for conciliation is set, upon the expiry of which the European authority can take decisions that constrain the conflicting authorities either to assume, or to abstain from, specified behaviours. Such decisions are binding in character; the refusal of the competent national authorities to comply with the decisions of the European authority confers to the latter the power to intervene directly with the financial institutions. This is one of the most substantial innovations in the reform of European supervision, in so far as it establishes the principle that, under certain conditions, a European supervisory authority may intervene on the operations of a financial institution in the place of the national supervisory body; in other words, the rules and objectives of European exceed those of national supervision.

Tasks related to consumer protection

Article 9[27] elucidates another important task attributed to the new Authorities, namely, a central role in consumer protection, and defines the powers necessary for the task's enactment. The basis of said protection is constant monitoring of the market, and the powers that inhere to the task are graded in accordance with level of intensity. At one end of the spectrum, the European Authority may issue alarm signals that attract attention to market practices which contradict the principle of consumer protection; at the other, it may banish activities that threaten the integrity of the European financial system. The same power is attributed to the management of emergency situations as defined by the previously quoted Article 18.

[27] "*Article 9*. Tasks related to consumer protection and financial activities. 1. The Authority shall take a leading role in promoting transparency, simplicity and fairness in the market for consumer financial products or services across the internal market, including by: (a) collecting, analysing and reporting on consumer trends; (b) reviewing and coordinating financial literacy and education initiatives by the competent authorities; (c) developing training standards for the industry; and (d) contributing to the development of common disclosure rules. 2. The Authority shall monitor new and existing financial activities and may adopt guidelines and recommendations with a view to promoting the safety and soundness of markets and convergence of regulatory practice. 3. The Authority may also issue warnings in the event that a financial activity poses a serious threat to the objectives laid down in Article 1(5). 4. The Authority shall establish, as an integral part of the Authority, a Committee on financial innovation, which brings together all relevant competent national supervisory authorities with a view to achieving a coordinated approach to the regulatory and supervisory treatment of new or innovative financial activities and providing advice for the Authority to present to the European Parliament, the Council and the Commission. 5. The Authority may temporarily prohibit or restrict certain financial activities that threaten the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union in the cases specified and under the conditions laid down in the legislative acts referred to in Article 1(2) or, if so required, in the case of an emergency situation in accordance with and under the conditions laid down in Article 18. The Authority shall review the decision referred to in the first subparagraph at appropriate intervals and at least every 3 months. If the decision is not renewed after a 3-month period, it shall automatically expire. A Member State may request the Authority to reconsider its decision. In that case, the Authority shall decide, in accordance with the procedure set out in the second subparagraph of Article 44(1), whether it maintains its decision. The Authority may also assess the need to prohibit or restrict certain types of financial activity and, where there is such a need, inform the Commission in order to facilitate the adoption of any such prohibition or restriction".

Tasks and powers with regard to systemic risk

Articles 22 to 24 define the tasks and modes of intervention for the new Authorities with regard to systemic risk. As explained at the beginning of this chapter, the ESFS is based upon a clear separation of responsibilities in the face of risk: the systemic variant is entrusted to the ESRB; the microeconomic to the Authorities here under analysis. That said, it is evident that the two forms are deeply inter-related, in that one will obviously tend to aggravate the other; for these reasons, the ESFS prescribes deep interchanges between the Authorities that preside over the respective types of risk. This is the perspective that frames Articles 22 to 24 of the new Authorities' founding regulations.

Article 22[28] establishes that the Authorities must consider systemic risk, assess the related monitoring activities undertaken by the ESRB and, jointly with the ESRB, develop quantitative and qualitative indicators for the identification and measurement of risk itself. In the founding statute of the EBA, paragraph 2 of the same Article (and the subsequent Article 24) introduce the stress test instrument, one that is now consolidated practice in prudential supervision, and not only in Europe; more will be said of this practice below. The relationships between the supervisory Authorities and the ESRB are specified in Article 36.[29]

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[28] "*Article 22*. General provisions. 1. The Authority shall duly consider systemic risk as defined by Regulation (EU) No 1092/2010. It shall address any risk of disruption in financial services that: (a) is caused by an impairment of all or parts of the financial system; and (b) has the potential to have serious negative consequences for internal market and the real economy. The Authority shall consider, where appropriate, the monitoring and assessment of systemic risk as developed by the ESRB and the Authority and respond to warnings and recommendations by the ESRB in accordance with Article 17 of Regulation (EU) No 1092/2010. 2. The Authority shall, in collaboration with the ESRB, develop a common set of quantitative and qualitative indicators (risk dashboard) to identify and measure systemic risk. The Authority shall also develop an adequate stress-testing regime to help identifying those institutions that may pose systemic risk. These institutions shall be subject to strengthened supervision, and where necessary, to the recovery and resolution procedures referred to in Article 25. 3. Without prejudice to the acts referred to in Article 1(2), the Authority shall draw up, as necessary, additional guidelines and recommendations for financial institutions, to take account of the systemic risk posed by them. The Authority shall ensure that the systemic risk posed by financial institutions is taken into account when developing draft regulatory and implementing technical standards in the areas laid down in the legislative acts referred to in Article 1(2). 4. Upon a request from one or more competent authorities, the European Parliament, the Council or the Commission, or on its own initiative, the Authority may conduct an inquiry into a particular type of financial institution or type of product or type of conduct in order to assess potential threats to the stability of the financial system and make appropriate recommendations for action to the competent authorities concerned. For those purposes, the Authority may use the powers conferred on it under this Regulation, including Article 35. 5. The Joint Committee shall ensure overall and cross-sectoral coordination of the activities carried out in accordance with this Article".

[29] "*Article 36*. Relationship with the ESRB. 1. The Authority shall cooperate closely and on a regular basis with the ESRB. 2. The Authority shall provide the ESRB with regular and timely information necessary for the achievement of its tasks. Any data necessary for the achievement of its tasks that are not in summary or aggregate form shall be provided, without delay, to the ESRB upon a reasoned request, as specified in Article 15 of Regulation (EU) No 1092/2010. The Authority, in cooperation with the ESRB, shall have in place adequate internal procedures for the transmission of confidential information, in particular information regarding individual financial institutions. 3. The Authority shall, in accordance with paragraphs 4 and 5, ensure a proper follow-up to ESRB warnings and recommendations referred to in Article 16 of Regulation (EU) No 1092/2010. 4. On receipt of a warning or recommendation from the ESRB addressed to the Authority, the Authority shall convene a meeting of the Board of Supervisors without delay and assess the implications of such a warning or recommendation for the fulfilment of its tasks. It shall decide, by the relevant decision-making procedure, on any actions to be taken in accordance with the powers conferred upon it by this Regulation for addressing the issues identified in the warnings and recommendations. If the Authority does not act on a recommendation, it shall explain to the ESRB and the Council its reasons for not doing so. 5. On receipt

Intervention in crisis situations

For all the reasons stated at the beginning of the current section, and as we shall in section 3.1.4, the European Commission is working to define the European framework for the management of crises in financial institutions. The founding regulations of the three European Authorities, in Articles 25 to 27, define the tasks and the powers of said Authorities in this delicate circumstance. Article 25[30] establishes that the Authorities in question can contribute to the definition and implementation of 'recovery and resolution' plans,[31] of the procedures to follow in emergencies and of appropriate measures to prevent or minimize systemic risk connected to crisis in financial institutions. The objective is to avoid risks of contagion and to safeguard the overall stability of the European financial system. In this regard too, the Authorities may express their own orientation and thus define technical standards of regulation.

Co-related to these are two further provisions. The first is that of Article 26,[32] whereby the Authorities monitor the European system deposit guarantee schemes in order to ascertain the scheme's robustness and its adequacy to risks. Upon completion of its ascertainment, the Authority may, if it so wishes, express recommendations and guidelines, as stipulated in Article 16, and proceed to the drafting of regulatory technical standards.

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of a warning or recommendation from the ESRB addressed to a competent national supervisory authority, the Authority shall, where relevant, use the powers conferred upon it by this Regulation to ensure a timely follow-up. Where the addressee intends not to follow the recommendation of the ESRB, it shall inform and discuss with the Board of Supervisors its reasons for not acting. The competent authority shall take due account of the views of the Board of Supervisors when informing the Council and the ESRB in accordance with Article 17 of Regulation (EU) No 1092/2010. 6. In discharging the tasks set out in this Regulation, the Authority shall take the utmost account of the warnings and recommendations of the ESRB".

[30] "*Article 2*. Recovery and resolution procedures. 1. The Authority shall contribute to and participate actively in the development and coordination of effective and consistent recovery and resolution plans, procedures in emergency situations and preventive measures to minimise the systemic impact of any failure. 2. The Authority may identify best practices aimed at facilitating the resolution of failing institutions and, in particular, cross-border groups, in ways which avoid contagion, ensuring that appropriate tools, including sufficient resources, are available and allow the institution or the group to be resolved in an orderly, cost-efficient and timely manner. 3. The Authority may develop regulatory and implementing technical standards as specified in the legislative acts referred to in Article 1(2) in accordance with the procedure laid down in Articles 10 to 15".

[31] In this context, the term 'recovery' means the actions whereby a stricken financial institution is returned to normal operative health; when recovery appears no longer to be possible, the next step is 'resolution', which means the liquidation of the institution itself

[32] "*Article 26*. European system of deposit guarantee schemes. 1. The Authority shall contribute to strengthening the European system of national deposit guarantee schemes by acting under the powers conferred to it in this Regulation to ensure the correct application of Directive 94/19/EC with the aim of ensuring that national deposit guarantee schemes are adequately funded by contributions from financial institutions including from those financial institutions established and taking deposits within the Union but headquartered outside the Union as provided for in Directive 94/19/EC and provide a high level of protection to all depositors in a harmonised framework throughout the Union, which leaves the stabilising safeguard role of mutual guarantee schemes intact, provided they comply with Union legislation. 2. Article 16 concerning the Authority's powers to adopt guidelines and recommendations shall apply to deposit guarantee schemes. 3. The Authority may develop regulatory and implementing technical standards as specified in the legislative acts referred to in Article 1(2) in accordance with the procedure laid down in Articles 10 to 15. 4. The review of this Regulation provided for in Article 81 shall, in particular, examine the convergence of the European system of national deposit guarantee schemes".

The second provision is that contained in Article 27,[33] which poses the problem of finance for the crisis management schemes. Beyond the cautionary measures, the coordinated interventions, and the resolution techniques that attempt to minimize the risks of contagion, it is also normal to intervene with financial resources, sometimes on a considerable scale, in order to overcome the moments of greatest difficulty. The European Authorities are asked to contribute to the definition of a robust and credible financing mechanism for the crisis management schemes, and specifically to evaluate the sourcing of this intervention tool in a 'fair burden sharing' perspective.

The promotion of a common supervisory culture

We have already observed how one of the weaknesses of the European financial system is its habit of 're-fragmenting' supervision to a national scale. On the one hand, the competent Authorities in the various States vary in the rules and orientations they devise with regard to similar phenomena; on the other hand, the sheer number of institutions working on a pan-European scale poses objective obstacles to the achievement of effective, 360 degree control. The new Authorities are commissioned to play a fundamental role in the implementation of a common supervisory culture and of likewise common supervisory practices.[34] In this perspective, a fundamental instrument is that of 'peer review';[35] by comparing current practice in the various States, this process identifies the best practices and promotes their implementation at a European level.

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[33] "*Article 27*. European system of bank resolution and funding arrangements. 1. The Authority shall contribute to developing methods for the resolution of failing financial institutions, in particular those that may pose a systemic risk, in ways which avoid contagion and allow them to be wound down in an orderly and timely manner, including, where applicable, coherent and robust funding mechanisms as appropriate. 2. The Authority shall contribute to the assessment of the need for a system of coherent, robust and credible funding mechanisms, with appropriate financing instruments linked to a set of coordinated national crisis management arrangements. The Authority shall contribute to the work on the level playing field issues and cumulative impacts of any systems of levies and contributions on financial institutions that may be introduced to ensure fair burden sharing and incentives to contain systemic risk as a part of a coherent and credible resolution framework. The review of this Regulation provided for in Article 81 shall, in particular, examine the possible enhancement of the role of the Authority in a framework of crisis prevention, management and resolution, and, if necessary, the creation of a European resolution fund".

[34] "*Article 29*. Common supervisory culture. 1. The Authority shall play an active role in building a common Union supervisory culture and consistent supervisory practices, as well as in ensuring uniform procedures and consistent approaches throughout the Union. The Authority shall carry out, at a minimum, the following activities: (a) providing opinions to competent authorities; (b) promoting an effective bilateral and multilateral exchange of information between competent authorities, with full respect for the applicable confidentiality and data protection provisions provided for in the relevant Union legislation; (c) contributing to developing high-quality and uniform supervisory standards, including reporting standards, and international accounting standards in accordance with Article 1(3); (d) reviewing the application of the relevant regulatory and implementing technical standards adopted by the Commission, and of the guidelines and recommendations issued by the Authority and proposing amendments where appropriate; and (e) establishing sectoral and cross-sectoral training programmes, facilitating personnel exchanges and encouraging competent authorities to intensify the use of secondment schemes and other tools. 2. The Authority may, as appropriate, develop new practical instruments and convergence tools to promote common supervisory approaches and practices".

[35] "*Article 30*. Peer reviews of competent authorities. 1. The Authority shall periodically organise and conduct peer reviews of some or all of the activities of competent authorities, to further strengthen consistency in supervisory outcomes. To that end, the Authority shall develop methods to allow for objective assessment and comparison between the authorities reviewed. When conducting peer reviews, existing information and evaluations already made with regard to the competent authority concerned shall be taken into account. 2. The peer review shall include an assessment of, but shall not be limited to: (a) the adequacy of resources and go-

Other functions

Other than those already mentioned, we will briefly recall the other functions attributed to the new European Authorities:

- the role of coordination of the national supervisory authorities (Article 31);
- the monitoring of an evaluation of market developments (Article 32);
- international relations (Article 33);
- the expression of opinions in support of Parliament, the Council or the Commission, whether upon request by the same or upon the Authorities' own initiative (Article 34);
- the collection of information from the competent national authorities and the enforcement of said authorities' obligation to supply the information requested (Article 35);
- consultation with stakeholders in the work of the new Authorities (Article 37).

The Joint Committee and cross-sectoral coordination between the supervisory Authorities

The Committee in question plays an important role in the integration of the single supervisory Authorities' specialized competences. The architecture of these Authorities uses the criterion of subdivision on the basis of the industry segment under supervision (banks, markets, insurance and pension funds). The reality of financial systems, however, is that the various areas of activity are markedly interconnected. The Committee, which is governed by Articles 54 to 57, aims to reflect and to evidence this feature by promoting strong interaction between the three Authorities.[36]

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vernance arrangements of the competent authority, with particular regard to the effective application of the regulatory technical standards and implementing technical standards referred to in Articles 10 to 15 and of the acts referred to in Article 1(2) and the capacity to respond to market developments; (b) the degree of convergence reached in the application of Union law and in supervisory practice, including regulatory technical standards and implementing technical standards, guidelines and recommendations adopted pursuant to Articles 10 to 16, and the extent to which the supervisory practice achieves the objectives set out in Union law; (c) best practices developed by some competent authorities which might be of benefit for other competent authorities to adopt; (d) the effectiveness and the degree of convergence reached with regard to the enforcement of the provisions adopted in the implementation of Union law, including the administrative measures and sanctions imposed against persons responsible where those provisions have not been complied with. 3. On the basis of a peer review, the Authority may issue guidelines and recommendations pursuant to Article 16. In accordance with Article 16(3), the competent authorities shall endeavour to follow those guidelines and recommendations. The Authority shall take into account the outcome of the peer review when developing draft regulatory technical or implementing technical standards in accordance with Articles 10 to 15. 4. The Authority shall make the best practices that can be identified from those peer reviews publicly available. In addition, all other results of peer reviews may be disclosed publicly, subject to the agreement of the competent authority that is the subject of the peer review".

[36] "*Article 54*. Establishment. 1. The Joint Committee of the European Supervisory Authorities is hereby established. 2. The Joint Committee shall serve as a forum in which the Authority shall cooperate regularly and closely and ensure cross-sectoral consistency with the European Supervisory Authority (European Insurance and Occupational Pensions Authority) and the European Supervisory Authority (European Securities and Markets Authority), in particular regarding: financial conglomerates, – accounting and auditing, – microprudential analyses of cross-sectoral developments, risks and vulnerabilities for financial stability, – retail investment products, – measures combating money laundering, and – information exchange with the ESRB

In the organization specified by Article 55, the Committee serves as a forum in which the three Authorities are expected to reach common positions with regard to the actions that are specified by their regulations and that affect issues of common interest. Additionally, and as provided for by Article 57, the Committee is free to organize itself into subcommittees. The founding regulations themselves establish a subcommittee with supervisory responsibility for financial conglomerates, a typical example of institutions that pursue strongly cross-sectoral activities and that accordingly require more nuanced and multifunctional supervision.

Conclusions

The new architecture of European financial supervision is, from many points of view, a significant innovation and a response to concrete needs that the crisis clearly highlighted.

The creation of the ESRB is an institutional innovation that will elevate the inherent issues of overall financial stability to a European level; the 'European point of view' on risk and the correlated need for intervention constitutes an instance of plausible synthesis, one that will enable the collective interests of the European financial system to prevail over those of single member States. It will be essential to evaluate the Committee's effective ability to leverage the Union's political institutions whenever regulations explicitly provide for relationships and interaction. This is a recurrent theme in the European reform project. The Committee for systemic risks, but also the European supervisory institutions, have ample power to involve the Union's political institutions and to call upon them to intervene on important issues for the stability of the European financial system; for the new supervisory architecture to be effective, political response will have to be proportionate to the expectations expressed in the reform project.

On the basis of regulation already confirmed, the new European supervisory authorities will likewise avail of substantial powers and will decidedly constitute an improvement on the advisory Committees that preceded them. In this respect, certain considerations merit particular attention.

The first regards the task assigned to the authorities, namely that of writing the new 'single rule book' for European regulation and supervision over financial institutions. This is a notable development, one that innovates the logic of the integration process in the European financial services market. The construction of the European single market, which started in the 1990s, proceeded by leveraging two, pivotal principles, namely 'minimal harmonization' and 'mutual recognition'. On the basis of the former, the Union's governing bodies proceeded by issuing directives that founded integration on a selection of essential, sector-specific principles of regulation; shared and accepted by all member States, these regulations acknowledged the fact that the industries under regulation in the various States would maintain differences in terms of structure and legal framework. In turn, the second principle, mutual recognition, ruled that if market participants from member States worked within a determined economic sector, and if

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and developing the relationship between the ESRB and the ESAs. 3. The Joint Committee shall have a dedicated staff provided by the ESAs that shall act as a secretariat. The Authority shall contribute adequate resources to administrative, infrastructure and operational expenses. 4. In the event that a financial institution reaches across different sectors, the Joint Committee shall resolve disagreements in accordance with Article 56".

local regulation for said sector conformed to the European precept of minimal harmonization, the participants would be free to extend throughout the Union, and would be recognized by the legislation of the other States. This combination of principles proved to be an effective instrument of integration, and clearly exceeded what would have been achieved by the alternative principle of complete harmonization; on the latter basis, the regulation of any given sector of economic activity would have required exhaustive provision for all expected activity profiles. Beyond being difficult to achieve in the short term, complete harmonization would undoubtedly have met concerted opposition from the various member States, who were little, or simply not, inclined to give up their idiosyncrasies, which derived from historical stratification and shared values.

For these reasons, the elected logic of accelerating the integration process implied a tolerance for certain levels of differentiation in the regulations in place in the various States, a tolerance that went beyond the principle of minimal harmonization. Indeed, today's national legislations reflect differing levels of transposition from European directives, differences in which exceptions, opt-outs and ambiguities, both textual and interpretative, have played their part. The current crisis has revealed the need, especially in a highly regulated sector such as finance, to move towards greater harmonization, and the task of so doing has been entrusted to the newly constituted Authorities.

Another important provision is that which authorizes European supervisory Authorities to refer directly to single financial institutions in cases of emergency, of dispute between national regulatory authorities, and of violation, by single institutions, of rules established by Union jurisdiction. This provision too is cogently innovative, partly because it transfers powers from the national to the European level, partly because it connects to another salient feature of the recent reforms, namely the relationship between the newly constituted Authorities and their national counterparts. As we have seen, in their dealings with national supervisory authorities, the European Authorities are endowed with two important faculties: on the one hand, the establishment of guidelines that the Authorities themselves (and financial institutions) are required to apply with all possible force; on the other hand, the convening of meetings between national authorities (peer reviews) to compare supervisory practices and to promote those deemed to excel as the standard. These provisions notably shift the framework of reference for financial supervision to the Union's system. National authorities must now interact with a new, hierarchically superior body, one that is equipped to overcome the inertia that typically enfeebles attempts at supranational coordination. The activity of national authorities, and the evolution of this activity over time, will no longer be determined by endogenous factors within the single member States but, increasingly, by European level authorities.

Lastly, two further provisions add to the definition of the newly constituted Authorities' powers. The first regards the power of intervention for the ban of 'toxic financial assets and activities'. This is a considerable power, one whose aim is to safeguard the integrity of the system as and when the Authorities perceive said toxic assets and activities as endangering the system's existence. Clearly, the exercising of this power will interfere with the free working of the markets and with the free initiative of its participants, but these sacrifices are deemed to be congruous and justifiable within the perspective of systemic stability.

The second provision appoints ESMA, the competent Authority for financial markets, as the body responsible for supervising the credit rating agencies. As Chapter 6 specifies, this appointment fills a supervisory gap whose considerable amplitude was clearly evidenced by the crisis. Collectively, the measures here described have been criticized by certain commentators as concentrating power excessively[37] in the European supervisory structure.

We believe that the reform launched by Europe, which blends what emerged as necessary during the crisis with what was reasonably and politically feasible, creates the premises for dominion over some of the major problems revealed; it now falls to the leaders of the new bodies and to the Union's political institutions to actuate the guiding principles of the new European governance.

3.1.3. The stress tests

As the previous pages have revealed, the founding regulations of the European supervisory Authorities stipulates that these latter develop monitoring methodologies such as may assess the stability of financial institutions in situations of stress. Thus framed, it is clear that microeconomic prudential supervision will overlap with its macroeconomic equivalent. On the one hand, the European Authorities that supervise institutions and markets must prevent crises in single institutions (and markets) from creating systemic instability; on the other, a deterioration in macroeconomic conditions may destabilize single institutions and the Union's financial system as a whole. It is therefore crucial to understand how financial institutions can absorb negative macroeconomic developments and maintain stability. This is the aim of the stress tests.

Stress tests were launched in Europe in 2009 by the Committee of European Banking Supervisors (CEBS), the precursor of the current EBA, at the instigation of Ecofin and in collaboration with the ECB and the European Commission; the cohort under examination consisted in twenty two large banks involved in cross-border operations within Europe.[38]

The test aimed to evaluate the capital resilience of the largest European banks under two scenarios, one defined as benchmark, the other characterized by more adverse conditions. The results published by the CEBS in October 2009 appeared to be reasonably comforting: in the baseline scenario, all the banks examined showed Tier 1 capital ratios above 9%; in the adverse scenario, estimates suggested aggregate losses of about 400 billion Euro, despite which aggregate Tier 1 remained above 8% and none of the banks examined saw this ratio fall below 6%.[39] The generally comforting nature

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[37] See Open Europe (2010).

[38] See Committee of European Banking Supervisors (2009b).

[39] The test started from the December 31st, 2008 financial statements of the 22 banking groups examined. Said groups accounted for 60% of total European banking assets, and their economic results throughout 2009-2010 were assessed on the bases of two differing scenarios: one benchmark, the other more adverse. The

of the results derived both from the profitability outlook, which was markedly better for 2009-2010 than it had been at the peak of the crisis, and from the recapitalizations provided by the public sector.

CEBS repeated the stress test process in the Spring of 2010, this time with explicitly greater ambitions of assessing 'systemic coverage'. To this end, the process enrolled 91 large European banks from twenty countries of the Union; using financial data issued as of December 31st, 2009, the tests sought to assess banks' capital resilience throughout 2010-2011 in risk conditions inhering to credit and bond portfolios, including government bonds issued by Union States.[40] The risk conditions were jointly defined with the ECB and the European Commission.[41] For the tests effected in 2010, it was decided to publish the results in great detail, both in aggregate and in individual terms.

The methodology and the hypotheses underlying the tests were developed by the CEBS in collaboration with the ECB and the European Commission. Specifically, the ECB devised the scenarios and the hypotheses regarding the risk of loss associated with sovereign bonds issued within the European Union, as well as the other measures of loss used in the unfavourable scenario. The CEBS was responsible for coordinating the national authorities, who in turn were responsible for the implementation of the test in the institutions under their jurisdiction.

On this occasion, the threshold for the recapitalization of tested banks was tied to a Tier 1 ratio of 6%, in line with the value established by the SCAP run in the previous year by the United States.[42] This ratio was higher than the 4% requirement stipulated at that time by European directive, and the increase was an attempt to characterize the test as prudential. If any of the banks examined revealed insufficient capitalization, or Tier 1 ratios approached the 6% threshold, the national supervisory authorities would be responsible for suggesting corrective measures, should they be considered necessary.

In aggregate terms, the capitalization of the 91 European banks tested proved to be sufficient, with the Tier 1 ratio diminishing from 10.3% (at 31/12/2009) to 9.2% (at 31/12/2010) in the unfavourable scenario. Though diminishing, these values were much

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variables used to distinguish the two, differing scenarios consisted, *inter alia*, in the GDP growth rate (of EU-27 and of the United States), the unemployment rate and real estate prices. National supervisory authorities conducted the estimates for banks falling within their jurisdiction and forwarded the data to the CEBS, which in turn aggregated the figures and published them in aggregate form.

[40] The market risk respectively determined by a short and a mid-to-long term increase in interest rates, with consequent impact on bond prices and in particular on bank-held public bonds, was estimated with exclusive reference to the so-called 'trading book', namely that part of the bond portfolio which financial institutions retain for the purposes of trading and for which current accounting standards prescribe mark-to-market valuation. In contrast, in its estimation of potential losses, the stress test did not take into account those held in the so-called 'banking book', i.e. that segment of the portfolio to which banks assign bonds that will be held to maturity. Such bonds may continue to be evaluated on a historical cost basis, even if market prices have decreased. This anomaly effectively produces an underestimation of losses potentially deriving from market risk, and the underlying mechanism has accordingly been criticized as incongruous and inappropriate. It is indeed true that a bank in need of liquidity may be forced to sell banking book bonds and thus face losses not foreseen by the stress test.

[41] The base (benchmark) scenario was defined on the basis of the forecasts published by the European Commission between the end of 2009 and the beginning of 2010, while the stress test conditions were devised on the basis of estimates provided by the ECB. See Committee of European Banking Supervisors (2010c).

[42] See *infra*, Paragraph 3.2.2.

higher than the stress test threshold (6%) and even more so than the then current regulatory requirement (4%).[43] Only seven of the banks examined revealed a Tier 1 ratio of less than 6%, and on this basis the European Authorities pronounced the result to be comforting.

In the months following the conclusion of the stress tests, the results of which were published on July 23rd, 2010, the Irish banking crisis exploded. Two of the afflicted Irish banks had been tested as part of the stress test and had emerged as financially resilient. This finding obviously contributed to the undermining of the markets' confidence in the validity of Europe's stress test system.

In January 2011, the newly constituted EBA announced that it would launch a new round of tests within the first half of the year, and that it would publish the results by mid-July.[44]

This new round, which amounted to an important trial of the new European Authorities' credibility,[45] brought together the EBA, the ESRB, the ECB, the European Commission and the national supervisory authorities. The principal characteristics of the 2011 tests are as follows:[46]

- the sample examined is similar to the 2010 sample and, in terms of total assets, covers 65% of the European market and at least 50% of the internal market of each member State;
- the tests focus on credit and market risks as evaluated under differing hypotheses, including adverse macroeconomic scenarios; particular attention is given to risks deriving from sovereign bond exposure carried in the trading book of the examined banks, while liquidity risk is not directly tested;[47]
- the benchmark and adverse scenarios were respectively devised by the European Commission on the one hand, and jointly by the ECB and the ERSB on the other. The banks have to estimate the effects of the differing scenarios on their economic performance. To do so, they use solid methodologies that translate macroeconomic data into variations in income statement and balance sheet items;

[43] It should be noted that 37 of the 91 banks assessed at the date of the test were still the beneficiaries of public funding to the tune of €197 billion, the equivalent of 1.2% of the aggregate Tier 1 capital of the given 91 banks.
[44] Specific provision for the faculty of running trials such as the stress tests is given in Articles 21, 22 and 32 of the EBA's founding regulations.
[45] In addition to the banking stress tests, EIOPA is entrusted with analogous tests on insurance companies; the results of the stress test carried out by EIOPA (the second test, as the first was conducted by CEIOPS, the Committee existing before the reform) were published at the beginning of July 2011.
[46] For a detailed analysis of test methodology, see European Banking Authority (2011a).
[47] "Liquidity risk is not specifically assessed as part of this stress testing exercise. As publicly announced by the EBA in January 2011, the liquidity profile of relevant institutions is being assessed by a specific thematic review which is for supervisory purposes. Nevertheless the 2011 EU-wide stress test does assess the evolution of the cost of funding connected to the specific financial structure of the banks in question, and in particular to assesses the impact of increases in interest rates on assets and liabilities including the impact of the sovereign stress on funding costs of the institutions participating in the exercise". See European Banking Authority (2011b, p. 2).

- the period under examination is 2011-2012, and thus takes into consideration the banks' capacity to comply with legislation introduced during the period in question;
- in the name of prudence, the test assumes the 'zero growth' hypothesis in which only maturing assets are replaced and the overall amount of total assets is reduced by expected devaluations and provisions; it is also assumed that banks do not change their business mix. These hypotheses, which the EBA recognizes can be considered excessively severe with regard to the final results of the test, aim to assess the effective resilience of banks in the current situation, and exclude the effect of managerial actions that the banks themselves intend to perform;
- the risk of holding sovereign debt issued by Union States is evaluated in two ways: a simulation based on the baseline scenario submits the given bonds to an interest rate shock; a simulation based on the adverse scenario applies differentiated haircuts to sovereign exposures, using coefficients defined by the test methodology;[48]
- to pass the test, the banks in question must achieve a Tier 1 Capital ratio of at least 5%.

In describing the objectives and methodology of the new round of stress tests, the EBA clearly specified its desire to address the weaknesses exposed in the 2010 exercise.[49] However, the circumstances surrounding the new exercise were without doubt hindering both its realization and the value of its assessment.

Starting from the results published by the EBA on July 15th, 2011,[50] we find that only nine[51] of the banks examined revealed a Core Tier 1 Capital Ratio (CT1R) below the threshold (5%), while another twelve recorded values in the 5% to 6% range. The capital injection required to fill the aggregate gap evinced by the stress tests amounted to 2.5 billion euro. On the basis of the test results, the EBA requested the relevant national supervisory authorities to ensure that banks with CT1R below 5% rapidly correct their capital impairment. Likewise, and in the same spirit of prudence, the same authorities were asked to require improvements in capital adequacy from banks with CT1R above, but near to, 5%. The corrective measures suggested by the EBA included divi-

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[48] See Table 3 of Appendix 4, "Guidance for Calculation of Losses Due to Application of Market Risk Parameters and Sovereign Haircuts", which reports the loss coefficients applied, on the basis of maturities, to sovereign bonds.

[49] "In the design and conduct of the 2011 exercise, the EBA took into account areas where improvements compared to the 2010 exercise were deemed necessary as a result of a 'lessons learnt' analysis conducted by the EBA and all the involved authorities in the aftermath of the 2010 exercise". European Banking Authority (2011b, p. 2).

[50] European Banking Authority (2011c).

[51] Among these is a German bank, Helaba, the Hessen Land bank, which refused to undergo the tests on the grounds of its contestation of the methodology used by the EBA. Specifically, the EBA's list of admissible capital instruments excludes one that is particularly important to Helaba's capital ratios. In the event, the bank's refusal to undergo the test is considered the equivalent of failing it.

dend payment restrictions, reductions in risk-weighted assets, and the replacement of low quality debt instruments with ones that fulfil Tier 1 Capital requirements.[52]

Although the test's starting point is December 31st, 2010, the EBA's measurement of aggregate capital includes capital increases implemented by the banks in the January-April 2011 period. Without these interventions, which amounted to c. €50 billion, the results of the tests would have differed: there would have been 20 banks with CT1R below 5%, and the aggregate capital deficit would have amounted to €26.8 billion. The difference between the banks' own capital-raising activities (€50billion in new capital) and the capital gap that would have emerged without these activities (€28.5 billion) merits attention; it indicates that many banks saw fit to undertake onerous recapitalization, even though their capital levels could be considered sufficient to pass the stress test. The reason is that the banks themselves considered it necessary to reassure the market as to the adequacy of their capital base, which they accordingly raised to substantially higher levels than were required by the stress tests. We defined said recapitalization as 'onerous' because at the time (and as at present), it was certainly not easy to collect money from shareholders given the uncertainties about future profitability and the resulting divergence between book and market values of banks' capital.

As already stated, market reactions to the aforementioned stress test results need to be considered in the context of the economic and financial context of the European Union at the time the results were made public. The Greek debt crisis and the consequent contagion to other Union member States clearly worsened the environment in which European banks operate. Uncertainties regarding public finance had clear repercussions on bank assets, within which sovereign debt are held as long-term investments. The deterioration in the quality of these investments directly and proportionately affected bank capital levels. In the interval between the beginning of the stress tests and the publication of the results, prevailing market conditions proved in many respects to be worse than those foreseen by the 'unfavourable' scenario; we should remember that sovereign default was not included among the hypotheses of the tests, whereas it had become a distinct possibility during enactment of the tests.[53]

The fact that, from various viewpoints, market conditions had deteriorated to a greater extent than had been forecast spurred severe criticism of the tests and scepticism as to Europe's ability to measure the solidity of its banking system. These criticisms, which were indeed shared by a high proportion of observers, merit debate, which we shall orientate to a medium-to-long term perspective.

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[52] This latter measure, as shall emerge from the following explanation of the reasoning behind the new conditions for bank capitalization, aims to raise the quality profile of capital structure. To date, the supervisory authorities had allowed capital calculations to include subordinated debt – debt whose holders' right to reimbursement was subordinated to that of other creditors. The effect of subordinated debt was that it appeared to be very close, in effect, to capital. For the reasons explained below, the supervisory authorities now believe that these hybrid instruments must be replaced by capital of high and unambiguous quality, like that of authentic share capital ('pure equity').

[53] Other features have been criticized by financial market operators, and in particular the fact that predictions for interest rate increases underestimated reality with regard to the sovereign debt of certain countries. This fact compromised the ability of the tests to estimate the losses in banking books.

We believe, firstly, that the stress tests comprise, in general terms, an effective tool for the Authorities to monitor the capital resilience of banking systems. We likewise believe that the fact that the tests are conducted by a European Authority lends credibility to the initiative, for the reasons already presented in this chapter. We also note the significant extent to which the tests have raised the 'information set' of the market with regard to the banks under analysis.

Despite these positive features, we also understand the perplexity caused by the clear evidence that thresholds and parameters established by the stress tests have already been surpassed by market realities. Moreover, we cannot omit to comment on the discrepancy between the nature of the test, a supervisory tool which may perform well in 'ordinary times', and the decidedly extraordinary nature of current events. The prospect of EU sovereign default(s), the total absence of which in recent history would make such an event truly exceptional, will of course annul the relevance of the test. It is likewise evident that said default(s) would cause such profound market disruption as to render all instruments of financial supervision ineffective; the only relevant issue in this hypothetical context would be that of managing the crisis of the European financial system.The key error was probably that of excessive expectations, as the market demanded definitive reassurance as to the solidity of the European banking system. Such hopes overlook the fact that systemic solidity in financial systems does not depend exclusively on bank management nor exclusively on supervisory activities. The resilience of the banking system is profoundly correlated to the stability of the economic systems with which it interacts. European banks clearly emerged from the crisis in a weakened state, but they would be able to accept many challenges; what they could not face would be a widespread crisis in the public finances of a substantial number of EU States.

3.1.4. The new framework for crisis management

As clarified at the outset, the management of financial institutions' crises provides the third instance in which the governance of financial systems manifests itself. Prior to the eruption of the crisis, nobody had seriously questioned the principle that the management of such phases should be handled at a national level, not least because the interventions rendered necessary by crisis impacted directly on the public finances of the States involved. Within this logic, the burdensome business of bailing out banks was deemed to be the exclusive task of the State of origin of the insolvent bank.

The crisis cast new light on the phenomenon, not least because it exploded at the end of two decades in which, as described in Chapter 1, the phenomenon of financial globalization came to the fore and substantially changed the previous equilibrium between the major, international players. One instance of change is that the internationalization of the major banks has fragmented revenues, costs and risks across diverse States, with the result that the major international players often generate a significant percentage of activities outside the country of origin; this latter remains the domicile for the Head Office, but frequently no longer represents the epicentre of operations.

Another instance of change is that several financial institutions are now bigger (in terms of assets) than their countries of origin, especially in the case of small-to-medium national economies. The size of the crisis and of the bail-out exercises, currently amounting to 13% of the Gross Domestic Product of European countries, has heightened the perception that crisis management is a phenomenon that must be dealt with at the supranational level, above all at the European level.

Having accepted the task, the European Commission's first step, in October 2010, was to issue a notice[54] of recognition and of need: recognition of the current situation (profound differences between States' legislations and hence in their reactions to, and management of, the crisis); and the need to define a common European framework on the basis of pertinent, specified heads of terms.

This first step was followed by a consultative document[55] that was sent to market participants in January 2011 and that defined the details of the project. The objective of this document was to enable the formulation, scheduled for the end of summer 2011, of a legislative proposal for 'crisis prevention, recovery and resolution'. The Commission's project will include a further two, sequential phases. One will consist in examination of the need for greater harmonization, between countries, of bank insolvency procedures; this phase will lead, by the end of 2012, to the publication of a white paper for pertinent legislation. The other phase, which should be completed by the end of 2014, consists in the creation of an integrated system for crisis management, which will possibly be attributed to a European Authority (European Resolution Authority).

The Commission's consultative framework is therefore the basis for the construction of a system of European governance for bank and financial institution crises. We believe that, in order to understand the framework's structure and capacity to solve current problems, an appropriate appreciation of certain key features of the proposal is needed. The framework's logic may be summarized as follows:

Phase	**Actions**
Prevention	Stress tests Enhanced supervision Resolution and recovery plans Preventative powers
Early intervention	Use of Article 136 powers Special management Specific recovery plans and schemes

Resolution	First option: bankruptcy code – original bank liquidated as gone concern
	If not sure option 1 could meet the resolution objectives THEN
	Second option: Orderly wind down:
	Bridge Bank (original bank liquidated as gone concern)
	sale of business (original bank maintained as going concern)
	If not sure option 1 and 2 could meet the resolution objectives THEN
	Third option: restructuring as a going concern:
	debt write down (sale of assets)
	Sale of business

Table 3.1. Framework for the management of bank crises
Source: European Commission 2010e

[54] European Commission (2010e).
[55] European Commission (2011). Market participants are required to reply by subsequent March 3rd.

The management of the crisis distinguishes three phases, each of which requires differentiated intervention: prevention and early intervention and, should the bank resist remedy, resolution.

The prevention phase is profoundly bound to the supervisory activities, and entails the crucial and continuing role of the pertinent authorities, both national and European, as outlined in the Table above. The diverse actions assigned to the prevention phase can be ordered in a logical sequence. The stress tests are the monitoring instruments that supervisors are required to apply in order to measure resilience to adverse market developments. Reinforced supervision, which intensifies the relationship between supervisors and the supervised,[56] places those institutions deemed to be at greatest risk under closer monitoring.[57] The recovery plans are *ex ante* provisions for what banks are expected to do in response to deteriorating conditions, while the resolution plans, again in an *ex ante* perspective, specify the actions, namely asset transfers and bank's wind down, that follow default. Throughout the first phase, the authorities examine the financial institution's *ex ante* solutions to the perceived deterioration and, if necessary, demand additions to, and modifications in, the prescribed corrective measures.

After prevention, 'early intervention measures' are activated with the aim of preventing default.

A primary provision of the consultative document is that of granting the supervisory Authorities an extension in their powers, an extension that is anticipated by the directive on capital requirements and bank's incapacity to respect the same.[58] A second provision empowers the Authorities to nominate a 'special manager' who, for a limited time, can replace or augment existing management within a bank. According to the third provision ('recovery plans and schemes'), which brings the early intervention phase to a logical conclusion, distressed banks are asked to present the competent Authorities with a set of recovery scenarios including the actions to be taken towards regained health.

If prevention and recovery do not deflect the path from default, intervention enters the resolution phase. It is a delicate phase, in that it has to balance the need to safeguard systemic stability with the equally valid need to protect the rights of distressed banks' shareholders. On one side, the Authorities should preferably intervene before a bank is technically insolvent; on the other, the power of liquidating a still functioning company must be exercised with care, in order not to harm the rights of the various stakeholders in that company.

[56] To this end, the frequency of key events, such as inspections, reports and strategic reviews, etc. is intensified.
[57] Greater risk can be evidenced by the results of the stress tests, or indeed by ordinary supervision conducted by the pertinent Authorities; in any case, and as specified by the Consultative Document, these latter enjoy ample discretion in the determination of which institutions should be submitted to reinforced supervision.
[58] Reference is to Article 136 of the Capital Requirements Directive (CRD), which provides for the intervention of the supervisory Authorities whenever a financial institution fails to respect capital requirements. The Consultative Document establishes that the supervisory authority's powers of intervention may be extended: as well as requiring the bank to raise more capital, the Authority can forbid the payment of dividends or of interest on hybrid instruments that are included in capital calculations, remove board members and managers, request rescheduling of debt repayments, intensify reporting to supervisory bodies, etc.

The consultative document provides for the setting of triggers for resolution, i.e. indicators (quantitative and qualitative) that determine the timing of intervention on objective grounds.

In this case, the quantitative indicators are those that assess capital, liquidity and solvency. The more qualitative indicators regard the Authority's assessment of the bank's capacity to continue in business and of the resources that can assist pursuit of that end. The Commission has additionally proposed that resolution may be invoked in the name of the public interest, particularly when the Authorities believe that the ordinary procedures of liquidation are unable to protect the stability of the financial system from the failure of a major institution.

Once the conditions for opening resolution procedures are ascertained, the objective is to limit the problem of the single distressed institution and thus to limit negative impacts on the financial system as a whole.[59] The principles that govern the process of resolution stipulate, *inter alia*, that initial losses are absorbed by shareholders and unsecured creditors, and that senior management, as and when removed on account of proven responsibility, can be deemed answerable for a part of losses.

There are four differing instruments for the enactment of resolution. The first consists in the sale of the distressed bank, or at least a part of it, to a going concern that is capable of continuing activities; this is a 'market solution' which the appointed Authority can undertake without shareholders' consent.

The second instrument is the constitution of a 'bridge bank', a partially or fully state-owned legal entity, to which the rights, assets and liabilities of the distressed bank can be transferred. Said transfer is a temporary solution[60] that precedes the sale of the bank's assets to other market participants.

The third instrument, defined as 'asset separation', transfers part of the assets of the distressed bank to a public, custodial entity and thus facilitates resolution. The assets transferred are typically 'risky, illiquid and of undetermined value'.

The final resolution instrument is the so-called 'debt write down', i.e. the decision to reduce the value of the rights of unsecured creditors, or the decision to convert a part of these credits into capital for the institution in difficulty. This procedure raises delicate legal issues, in that the damaged creditors could oppose the Authorities' decision and contest it in court. The Commission has expressed its desire to establish international coordination through the supranational bodies[61] that are considering recourse to this option.

As should now be evident, the framework for crisis management confers ample power to the pertinent authorities; these latter are designated by member States and will optionally (but not necessarily) consist in national supervisory authorities. The EBA will be notified by member States as to which authorities have been commissioned and what

[59] The objectives mentioned consist in the assurance of continuity in essential financial services, avoidance of contagion, protection of public finance (and hence the avoidance of costly bail-outs) and the protection of secured deposits.
[60] The consultative document stipulates that the bridge bank's operations aim to maintain, rather than to develop, the business in question, and that said operations may last no longer than a year.
[61] The consultative document refers to studies conducted by the Basel Committee and the Financial Stability Board.

powers and responsibilities have been assigned. The role of the European Banking Authority will be one of supervision, coordination and resolution of conflicts between national authorities regarding the organization and management of recovery and resolution.

3.2. Reforms in the United States banking system

As stated in the first chapter, the United States' financial system was the epicentre of a crisis that subsequently extended itself to global finance, and this harbinger role made the need for financial reform in the United States particularly acute. The crisis has proved to be singularly dramatic, not only because of the immense costs deriving from the collapse of financial institutions and from the consequent recession in the real economy, but also because the upheaval has challenged some of the *ground rules* that govern this economic system. The 'United States model of capitalism',[62] rests on a logic whose foremost priority is that of economic efficiency, and this objective is pursued through regulation that explicitly favours the freedom of market players. Competition, as pursued through policies that, subject to certain constraints, foster liberalisation, is the way to reach superior efficiency levels and a higher degree of collective well-being.

The liberalisation undertaken by the financial industry during the 1990s, and its formalisation in the Financial Modernization Act in 1999, are the culmination of the financial sector's enactment of the principles of economic efficiency and freedom.

The crisis objectively demonstrated the failure of these principles. The financial bailouts effected by the State, primarily with taxpayers' funds, violate the principle of responsibility, an essential corollary to a governing philosophy that rests on liberalisation and self-regulation. If said philosophy has failed to reach its declared aims, a change in the orientation of the system's governance is clearly called for; it is not coincidental that one of the cardinal principles of the newly released regulations is that contained in the dictum 'no more bailouts', which signals that the new regulation's primary aim is to prevent further crises and the consequent need to commit resources to cope with their consequences.

The following pages will explain, with specific reference to the banking system,[63] the essential points of the new regulatory framework that emerges from the reform act known as the 'Dodd-Frank Act'[64] (DFA), which was promulgated by the President of the United States on July 21st, 2010.

An immediate and necessary premise is that reform is far from being defined, and that, as will be evident, whilst the principles of reform are clear, deferment of their drafting into implementation is substantial. Said drafting, which falls upon numerous agencies, often finds itself treading a delicate path between intentions and effectiveness.[65]

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[62] For the concept of 'model of capitalism', see Cotta Ramusino, Onetti (2009, Chapter 2).
[63] The other grand themes of the DFA, namely the regulation of the derivatives market, oversight of the ratings agencies and provisions for corporate governance, will each be covered by specific, dedicated chapters.
[64] Dodd-Frank Wall Street Reform and Consumer Protection Act, Washington, July 21st, 2010.
[65] This circumstance snares the process of implementation in various ways. The financial industry is lobbying the drafting agencies with the aim of minimising the potential cost of regulatory compliance. Conflict materialises when the agencies publish 'proposed rules' so as to stimulate comments by the industry. The ensuing

DFA announces its reform project as ambitious in its objectives, wide-ranging, highly structured and, in its approach, innovative.

The first major objective of the reform is that of structurally reducing the risk level collectively bearing upon the financial industry; the achievement of this objective is considered necessary to restore trust in financial institutions, to ensure that the system's physiology is geared to financing the real economy, and to institute effective protection for investors and, more generally, for the users of financial services.

As such, the reform proceeds on a logic that in numerous ways appears to be analogous to that of the European regulatory reforms, and it defines a two-level, macro and microeconomic, model of supervision. At the first (macroeconomic) level, the actions aim both to monitor the current dynamics of the financial system and to identify and quantify potential risks as they emerge. These tasks are attributed to a newly created body, the Financial Stability Oversight Council (henceforth FSOC or Council), which will be described shortly. Micro-monitoring primarily targets the major financial institutions, which are now overseen more incisively by the central bank, the Federal Reserve, that is endowed with new and wider powers than it previously enjoyed. Overall, these two provisions aim to guarantee higher systemic stability, and they interact with other legislative measures contained in the reform and analysed in other chapters of the present book, namely regulation of the derivatives market, of the credit rating agencies and, for the first time, of executive compensation and hedge funds.

The second major objective is that of limiting the threat posed to the financial system as a whole by a single financial institution. At issue here are the measures that will transform the Obama administration's promise to American citizens, namely that of warding off future bailouts for stricken financial institutions, and thus avoiding recourse to taxpayers' money. As we shall see, crisis exit plans, specifically aimed at avoiding contagion and systemic crisis, are afoot.

The other central objective of the reform is that of protecting the consumers of financial services, as explicitly stated in the approved law's title. The crisis has clearly signalled the need to move in this direction: suffice it to think, on the one hand, of predatory lending and damage to mortgage holders; or, on the other hand, of the economic damage suffered by investors convinced that their now worthless investments had been risk-free. The law provides for the creation of a new entity explicitly dedicated to this delicate task, the Bureau of Consumer Protection, within the Federal Reserve; said Bureau is endowed with self-governance and the power to promote and originate new regulation within its specific domain. Innovations in the regulation of the credit rating agencies point in the same direction; additionally, while these innovations serve to protect investors, they simultaneously reinforce systemic stability.

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dialogue between regulators and the regulated is an institutional 'given', but when a shared solution does not emerge, the process can lead to a challenge at the court level.

3.2.1. A new body for the monitoring of systemic risk: the Financial Stability Oversight Council (FSOC)

Overall supervision of the dynamics of the financial system is entrusted to a newly-created body, the Financial Stability Oversight Council (the Council), which brings together the governmental authorities' major exponents of the American financial system.[66] The Council's specific task is to protect the financial system from systemic risks,[67] and as such it is analogous to the task of the ESRB. The Council monitors the evolution of the financial system, evaluates potential risk phenomena and responds to them, primarily by promoting actions and lines of intervention that are essentially undertaken by means of the Federal Reserve. It is appropriate to underline how the Council is explicitly assigned[68] the task of promoting a market discipline that eliminates all expectation of future Government bailouts.

[66] It is composed of the Treasury Secretary, who acts as the Council's President, the President of the Board of Governors of the Federal Reserve, the Comptroller of the Currency, the Director of the Bureau of Consumer Protection (a newly-constituted body operating from within the central bank), the President of the Securities and Exchange Commission, the President of the Federal Deposit Insurance Corporation, the President of the Commodity Futures Trading Commission, the President of the National Credit Union Administration, the Director of the Federal Housing Agency, and of a member, nominated by the President of the Council, with expertise in the field of insurance.

[67] In particular, those determined by the operations of the major and interconnected financial institutions.

[68] See Section 112(a). It is explicitly stated that creditors, shareholders and, in general, the counterparts of a financial institution must be aware that they bear the primary risks of said institution's bankruptcy; a perimeter is thus drawn for subjects at risk who are duly invited to evaluate their position with the financial institution on an informed basis. "Section 112. Council Authority. (A) Purposes And Duties Of The Council. – (1) In General. – The purposes of the Council are – (A) to identify risks to the financial stability of the United States that could arise from the material financial distress or failure, or ongoing activities, of large, interconnected bank holding companies or nonbank financial companies, or that could arise outside the financial services marketplace; (B) to promote market discipline, by eliminating expectations on the part of shareholders, creditors, and counterparties of such companies that the Government will shield them from losses in the event of failure; and (C) to respond to emerging threats to the stability of the United States financial system. (2) Duties. – The Council shall, in accordance with this title – (A) collect information from member agencies, other Federal and State financial regulatory agencies, the Federal Insurance Office and, if necessary to assess risks to the United States financial system, direct the Office of Financial Research to collect information from bank holding companies and nonbank financial companies; (B) provide direction to, and request data and analyses from, the Office of Financial Research to support the work of the Council; (C) monitor the financial services marketplace in order to identify potential threats to the financial stability of the United States; (D) to monitor domestic and international financial regulatory proposals and developments, including insurance and accounting issues, and to advise Congress and make recommendations in such areas that will enhance the integrity, efficiency, competitiveness, and stability of the U.S. financial markets; (E) facilitate information sharing and coordination among the member agencies and other Federal and State agencies regarding domestic financial services policy development, rulemaking, examinations, reporting requirements, and enforcement actions; (F) recommend to the member agencies general supervisory priorities and principles reflecting the outcome of discussions among the member agencies; (G) identify gaps in regulation that could pose risks to the financial stability of the United States; (H) require supervision by the Board of Governors for nonbank financial companies that may pose risks to the financial stability of the United States in the event of their material financial distress or failure, or because of their activities pursuant to section 113; (I) make recommendations to the Board of Governors concerning the establishment of heightened prudential standards for risk-based capital, leverage, liquidity, contingent capital, resolution plans and credit exposure reports, concentration limits, enhanced public disclosures, and overall risk management for nonbank financial companies and large, interconnected bank holding companies supervised by the Board of Governors; (J) identify systemically important financial market utilities and payment, clearing, and settlement activities (as that term is defined in title VIII); (K) make recommendations to primary financial regulatory agencies to apply new or heightened standards and safeguards for financial activities or practices that could create or increase risks of

In the pursuit of its institutional objectives, the Council, which is not endowed with regulatory power, but spearheads agencies that are thus endowed,[69] must fulfil a number of functions, including:

- the collection of information and the analysis of the dynamics of the US financial market, availing of the newly-created, Council-directed Office of Financial Research. The Council monitors regulatory developments, both domestic and international, and evaluates their impacts on the American financial system; in this sense, the Council executes information sharing between the agencies that regulate said system, defines supervisory priorities and identifies regulation gaps that the agencies themselves are responsible for filling;
- the recommendation to the Federal Reserve of specific intervention (e.g., more stringent regulation) in institutions whose size, complexity and business mix may constitute or generate systemic risk. Intervention can assume various forms, such as capital resilience tests,[70] the assessment of liquidity positions, and examination of the risk management practices used by institutions in the management of risk exposure;
- referral to the Federal Reserve (with the effect of extending the latter's powers) of non-banking intermediaries who the Council considers to be capable of determining substantial risk;[71] this specific provision derives from the priority of filling – at least in part – the regulatory gaps with regard to the so-called 'shadow banking system', which played a large part in the crisis, and which will be dealt with later;

significant liquidity, credit, or other problems spreading among bank holding companies, nonbank financial companies, and United States financial market; (L) review and, as appropriate, may submit comments to the Commission and any standard-setting body with respect to an existing or proposed accounting principle, standard, or procedure; (M) provide a forum for – (I) discussion and analysis of emerging market developments and financial regulatory issues; and (II) resolution of jurisdictional disputes among the members of the Council; and (N) annually report to and testify before Congress on – (I) the activities of the Council; (II) significant financial market and regulatory developments, including insurance and accounting regulations and standards, along with an assessment of those developments on the stability of the financial system; (III) potential emerging threats to the financial stability of the United States; (IV) all determinations made under section 113 or title VIII, and the basis for such determinations; (V) all recommendations made under section 119 and the result of such recommendations; and (VI) recommendations – (I) to enhance the integrity, efficiency, competitiveness, and stability of United States financial markets; (II) to promote market discipline; and (III) to maintain investor confidence".

[69] The Dodd-Frank Act attributes the rulemaking power that will determine the final architecture of reform to numerous agencies, including the Board of Governors of the Federal Reserve System, the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Federal Bureau of Consumer Financial Protection and the Office of Financial Research.

[70] Through the establishment of minimum capital thresholds and of an overall leverage ratio, the latter aiming to reinforce capital requirements calculated by weighting assets on the basis of risk.

[71] The assignment of non banking intermediaries to the supervision of the central bank is made on the basis of explicit parameters that define the importance and the systemic relevance of such institutions.

- advice to the Federal Reserve to ordain the breakup of institutions of excessive size and complexity and, as such, likely to trigger systemic risk.[72] The intervention of the Federal Reserve, which is to be seen as a provision of last resort, can even impose disinvestment from specific lines of business and withdrawal from correlated activities;
- the development of technical competences for the analysis of the financial system and for the achievement of the institution's own objectives. Within the Treasury Department, an Office of Financial Research has been created. Endowed with resources and competences of the highest level, this Office will support the Council in its activities;
- the publication, by means of periodic reports, of the results of analyses so as to confer maximum transparency to the inherent risk issues of the financial system;
- monitoring of the critical infrastructures in the financial system, such as the payments and clearing systems.

[72] "Section 121. Mitigation of Risks to Financial Stability. (A) Mitigatory Actions. – If the Board of Governors determines that a bank holding company with total consolidated assets of $ 50 billion or more, or a nonbank financial company supervised by the Board of Governors, poses a grave threat to the financial stability of the United States, the Board of Governors, upon an affirmative vote of not fewer than 2⁄3 of the voting members of the Council then serving, shall – (1) limit the ability of the company to merge with, acquire, consolidate with, or otherwise become affiliated with another company; (2) restrict the ability of the company to offer a financial product or products; (3) require the company to terminate one or more activities; (4) impose conditions on the manner in which the company conducts 1 or more activities; or (5) if the Board of Governors determines that the actions described in paragraphs (1) through (4) are inadequate to mitigate a threat to the financial stability of the United States in its recommendation, require the company to sell or otherwise transfer assets or off-balance-sheet items to unaffiliated entities. (B) Notice and Hearing. – (1) In General. – The Board of Governors, in consultation with the Council, shall provide to a company described in subsection (a) written notice that such company is being considered for mitigatory action pursuant to this section, including an explanation of the basis for, and description of, the proposed mitigatory action. (2) Hearing. – Not later than 30 days after the date of receipt of notice under paragraph (1), the company may request, in writing, an opportunity for a written or oral hearing before the Board of Governors to contest the proposed mitigatory action. Upon receipt of a timely request, the Board of Governors shall fix a time (not later than 30 days after the date of receipt of the request) and place at which such company may appear, personally or through counsel, to submit written materials (or, at the discretion of the Board of Governors, in consultation with the Council, oral testimony and oral argument). (3) Decision. – Not later than 60 days after the date of a hearing under paragraph (2), or not later than 60 days after the provision of a notice under paragraph (1) if no hearing was held, the Board of Governors shall notify the company of the final decision of the Board of Governors, including the results of the vote of the Council, as described in subsection (a). (C) Factors for Consideration. – The Board of Governors and the Council shall take into consideration the factors set forth in subsection (a) or (b) of section 113, as applicable, in making any determination under subsection (a). (d) Application To Foreign Financial Companies. – The Board of Governors may prescribe regulations regarding the application of this section to foreign nonbank financial companies supervised by the Board of Governors and foreign-based bank holding companies – (1) giving due regard to the principle of national treatment and equality of competitive opportunity; and (2) taking into account the extent to which the foreign nonbank financial company or foreign-based bank holding company is subject on a consolidated basis to home country standards that are comparable to those applied to financial companies in the United States".

3.2.2. The role of the Federal Reserve in the supervision of systemically important financial institutions

The Federal Reserve emerges as a reference point in post-reform supervision,[73] entrusted as it is with oversight of all banks with total consolidated assets in excess of $50 billion and of non-bank financial institutions identified by the Council as important to the containment of systemic risk.[74]

The Federal Reserve's supervisory powers can be subdivided into three areas and can be fully understood through examination of the reform framework.

The supervision of ordinary banking activities

The first area is that of the supervision of activities that may be defined as 'current', or 'ordinary' within large financial institutions. The reform grants the Federal Reserve wide-ranging powers, and thus reverses the effects of the Financial Services Modernization Act, which introduced some limitations in power.[75]

The Federal Reserve is authorised to conduct in-depth analysis of banks, of non-banking institutions placed under its direct control on account of their systemic impor-

[73] With the aim of underlining the Federal Reserve's central role in oversight for the banking and finance system, one of the seven members of the Board of Governors is appointed 'Vice Chairman for Supervision'. The appointee is responsible for producing recommendations and for establishing principles for the regulation and supervision of financial institutions.

[74] The reform clarifies the subdivision of responsibility between supervisory bodies: a) the Federal Reserve is responsible for supervising the so-called 'megabanks' (36 such entities were identifiable, on the basis of the given size requisites, on March 31st, 2010, and others will be added upon identification by the Financial Stability Oversight Council); b) the Federal Deposit Insurance Corporation is responsible for the supervision of the state banks and state thrifts (institutions that mainly take deposits in local markets, principally in the form of savings deposits) of all dimensions and of the Bank Holding Companies of state banks with assets of less than $50 billion; c) the Office for the Comptroller of the Currency is responsible for the National Banks and Federal Thrifts of all dimensions and for the Holding Companies of the National Banks' and the 'Federal Thrifts' with assets of less than $50 billion. Given the structure of the American banking system and the fact that the dimension limits for the assignment of competence is calculated on a consolidated basis, the framework here described shows that the 'dimensional' élite is subject to Federal Reserve supervision, while the other two authorities are responsible for the medium-size and small institutions. The underlying idea of this distribution is that the systemic risk that could destabilise the system would derive mainly, though not exclusively, from the largest institutions and that, appropriately, the competences and the resources of the Federal Reserve are best suited for the management of this industry sector.

[75] On the basis of the Gramm Leach Bliley Act (better known as the Financial Services Modernization Act), the Federal Reserve had limited supervisory powers for the functionally regulated subsidiaries of the Bank Holding Companies, in particular of entities who were members of banking groups but whose operations were in adjacent sectors, such as securities trading and insurance. The competent authorities for such institutes were the SEC or, in the case of insurance, the state insurance commissions. Under the previous regulations, the intervention of the central bank in the non-banking subsidiaries of banking groups was only possible when the central bank itself had reasonable and evidence-based grounds for believing that the subsidiary could expose the holding bank to excessive risk. Again, under the previous regulations, the Federal Reserve had no rulemaking and enforcement authority over the functionally regulated subsidiaries of the Bank Holding Companies, other than in exceptional cases of clear evidence that subsidiaries' behaviour endangered stability. These limitations to supervisory powers fragmented oversight initiatives, which in turn made it difficult to assess the real risk bearing on any given banking group. The constraints placed on the Federal Reserve and the poor control exerted by the SEC were among the major weaknesses of US banking supervision, and were recognised as such after the outbreak of the crisis.

tance,[76] and of such institutions' subsidiaries operating in the various areas of financial activities; it has to evidence risk factors, to issue immediate corrective intervention and to monitor compliance with current legislation.

Section 165 of the DFA authorizes the Federal Reserve to establish the standards to which banks must comply in order to safeguard the stability of the US banking system.[77] In addition to general prudential standards, the bank has discretionary powers to

[76] "Section 161. Reports by and Examinations of Nonbank Financial Companies by the Board of Governors. (A) Reports. – (1) In General. – The Board of Governors may require each nonbank financial company supervised by the Board of Governors, and any subsidiary thereof, to submit reports under oath, to keep the Board of Governors informed as to – (A) the financial condition of the company or subsidiary, systems of the company or subsidiary for monitoring and controlling financial, operating, and other risks, and the extent to which the activities and operations of the company or subsidiary pose a threat to the financial stability of the United States; and (B) compliance by the company or subsidiary with the requirements of this title. (2) Use of Existing Reports and Information. – In carrying out subsection (a), the Board of Governors shall, to the fullest extent possible, use – (A) reports and supervisory information that a nonbank financial company or subsidiary thereof has been required to provide to other Federal or State regulatory agencies; (B) information otherwise obtainable from Federal or State regulatory agencies; (C) information that is otherwise required to be reported publicly; and (D) externally audited financial statements of such company or subsidiary. (3) Availability. – Upon the request of the Board of Governors, a nonbank financial company supervised by the Board of Governors, or a subsidiary thereof, shall promptly provide to the Board of Governors any information described in paragraph (2). (b) Examinations. – (1) In General. – Subject to paragraph (2), the Board of Governors may examine any nonbank financial company supervised by the Board of governors and any subsidiary of such company, to inform the Board of Governors of – (A) the nature of the operations and financial condition of the company and such subsidiary; (B) the financial, operational, and other risks of the company or such subsidiary that may pose a threat to the safety and soundness of such company or subsidiary or to the financial stability of the United States; (C) the systems for monitoring and controlling such risks; and (D) compliance by the company or such subsidiary with the requirements of this title. (2) Use of Examination Reports and Information. – For purposes of this subsection, the Board of Governors shall, to the fullest extent possible, rely on reports of examination of any subsidiary depository institution or functionally regulated subsidiary made by the primary financial regulatory agency for that subsidiary, and on information described in subsection (a)(2). (c) Coordination with Primary Financial Regulatory Agency. – The Board of Governors shall – (1) provide reasonable notice to, and consult with, the primary financial regulatory agency for any subsidiary before requiring a report or commencing an examination of such subsidiary under this section; and (2) avoid duplication of examination activities, reporting requirements, and requests for information, to the fullest extent possible".

[77] "Section 165. Enhanced Supervision and Prudential Standards for Nonbank Financial Companies Supervised by the Board of Governors and Certain Bank Holding Companies. (A) In General. – (1) Purpose. – In order to prevent or mitigate risks to the financial stability of the United States that could arise from the material financial distress or failure, or ongoing activities, of large, interconnected financial institutions, the Board of Governors shall, on its own or pursuant to recommendations by the Council under section 115, establish prudential standards for nonbank financial companies supervised by the Board of Governors and bank holding companies with total consolidated assets equal to or greater than \$50 billion that – (A) are more stringent than the standards and requirements applicable to nonbank financial companies and bank holding companies that do not present similar risks to the financial stability of the United States; and (B) increase in stringency, based on the considerations identified in subsection (b)(3). (2) Tailored Application. – (A) In General. – In prescribing more stringent prudential standards under this section, the Board of Governors may, on its own or pursuant to a recommendation by the Council in accordance with section 115, differentiate among companies on an individual basis or by category, taking into consideration their capital structure, riskiness, complexity, financial activities (including the financial activities of their subsidiaries), size, and any other risk related factors that the Board of Governors deems appropriate. (B) Adjustment of Threshold for Application of Certain Standards. – The Board of Governors may, pursuant to a recommendation by the Council in accordance with section 115, establish an asset threshold above \$ 50 billion for the application of any standard established under subsections (c) through (g)".

impose additional requirements.[78] The former include the traditional instruments of prudential oversight, such as capital and liquidity requirements, specific risk management practices,[79] the so-called resolution plans (of which, more later), reporting on risk exposure and concentration limits. The additional requirements that the Federal Reserve can impose are the logical consequences of the evidence collected by the central bank in its supervisory activity.

The more stringent prudential standards, which can be applied to large banks and to systemically important intermediaries, vary on the basis of the Federal Reserve's specific assessments of single institutions;[80] these standards are the subject of consultation with members of the Council and of an annual report from the Federal Reserve to Congress.

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[78] "Section 165 (b) Development of Prudential Standards. – (1) In General. – (A) Required Standards. – The Board of Governors shall establish prudential standards for nonbank financial companies supervised by the Board of Governors and bank holding companies described in subsection (a), that shall include – (I) risk-based capital requirements and leverage limits, unless the Board of Governors, in consultation with the Council, determines that such requirements are not appropriate for a company subject to more stringent prudential standards because of the activities of such company (such as investment company activities or assets under management) or structure, in which case, the Board of Governors shall apply other standards that result in similarly stringent risk controls; (II) liquidity requirements; (III) overall risk management requirements; (IV) resolution plan and credit exposure report requirements; and (V) concentration limits. (B) Additional Standards Authorized. – The Board of Governors may establish additional prudential standards for nonbank financial companies supervised by the Board of Governors and bank holding companies described in subsection (a), that include – (I) a contingent capital requirement; (II) enhanced public disclosures; (III) short-term debt limits; and (IV) such other prudential standards as the Board or Governors, on its own or pursuant to a recommendation made by the Council in accordance with section 115, determines are appropriate".

[79] "Section 165 (h) Risk Committee. – (1) Nonbank Financial Companies Supervised by the Board of Governors. – The Board of Governors shall require each nonbank financial company supervised by the Board of Governors that is a publicly traded company to establish a risk committee, as set forth in paragraph (3), not later than 1 year after the date of receipt of a notice of final determination under section 113(e)(3) with respect to such nonbank financial company supervised by the Board of Governors. (2) Certain Bank Holding Companies. – (A) Mandatory Regulations. – The Board of Governors shall issue regulations requiring each bank holding company that is a publicly traded company and that has total consolidated assets of not less than $ 10,000,000,000 to establish a risk committee, as set forth in paragraph (3). (B) Permissive Regulations. – The Board of Governors may require each bank holding company that is a publicly traded company and that has total consolidated assets of less than $10 billion to establish a risk committee, as set forth in paragraph (3), as determined necessary or appropriate by the Board of Governors to promote sound risk management practices. (3) Risk Committee. – A risk committee required by this subsection shall – (A) be responsible for the oversight of the enterprise wide risk management practices of the nonbank financial company supervised by the Board of Governors or bank holding company described in subsection (a), as applicable; (B) include such number of independent directors as the Board of Governors may determine appropriate, based on the nature of operations, size of assets, and other appropriate criteria related to the nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a), as applicable; and (C) include at least 1 risk management expert having experience in identifying, assessing, and managing risk exposures of large, complex firms. (4) Rulemaking. – The Board of Governors shall issue final rules to carry out this subsection, not later than 1 year after the transfer date, to take effect not later than 15 months after the transfer date".

[80] "Section 165 (b)(3) Considerations. – In prescribing prudential standards under paragraph (1), the Board of Governors shall – (A) take into account differences among nonbank financial companies supervised by the Board of Governors and bank holding companies described in subsection (a), based on – (I) the factors described in subsections (a) and (b) of section 113; (II) whether the company owns an insured depository institution; (III) nonfinancial activities and affiliations of the company; and (IV) any other risk-related factors that the Board of Governors determines appropriate; (B) to the extent possible, ensure that small changes in the factors listed in subsections (a) and (b) of section 113 would not result in sharp, discontinuous changes in the prudential standards established under paragraph (1) of this subsection; (C) take into account any recommendations of the Council under section 115; and (D) adapt the required standards as appropriate in light of any

Additional standards include:

- contingent capital requirements, whereby debt is converted to equity in times of financial stress (Coffee 2010a);
- greater disclosure requirements, which enable the market to evaluate the supervised institution's risk profile with greater precision;
- short-term debt ceilings;
- other requirements or constraints that the Federal Reserve, whether on its account or prompted by the Council, believes to be appropriate to the specific circumstances of any given institution.

Section 165 includes three other important provisions. The first empowers the Federal Reserve to impose leverage limits on financial institutions; said limits are applied when an institution is deemed to threaten the US financial system, and the Federal Reserve's intervention is necessarily based on a determination by the Council.[81] The second stipulates that, for the purposes of capital adequacy determination, financial institutions' off-balance-sheet activities (a grave threat to capital resilience during the crisis) must be computed too.[82] The third is the introduction of the so-called stress tests, an instrument

predominant line of business of such company, including assets under management or other activities for which particular standards may not be appropriate. (4) Consultation. – Before imposing prudential standards or any other requirements pursuant to this section, including notices of deficiencies in resolution plans and more stringent requirements or divestiture orders resulting from such notices, that are likely to have a significant impact on a functionally regulated subsidiary or depository institution subsidiary of a nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a), the Board of Governors shall consult with each Council member that primarily supervises any such subsidiary with respect to any such standard or requirement. (5) Report. – The Board of Governors shall submit an annual report to Congress regarding the implementation of the prudential standards required pursuant to paragraph (1), including the use of such standards to mitigate risks to the financial stability of the United States".

[81] "Section 165 (j) Leverage Limitation. – (1) Requirement. – The Board of Governors shall require a bank holding company with total consolidated assets equal to or greater than $ 50 billion or a nonbank financial company supervised by the Board of Governors to maintain a debt to equity ratio of no more than 15 to 1, upon a determination by the Council that such company poses a grave threat to the financial stability of the United States and that the imposition of such requirement is necessary to mitigate the risk that such company poses to the financial stability of the United States. Nothing in this paragraph shall apply to a Federal home loan bank. (2) Considerations. – In making a determination under this subsection, the Council shall consider the factors described in subsections (a) and (b) of section 113 and any other riskrelated factors that the Council deems appropriate. (3) Regulations. – The Board of Governors shall promulgate regulations to establish procedures and timelines for complying with the requirements of this subsection".

[82] "Section 165 (k) Inclusion of Off-Balance-Sheet Activities in Computing Capital Requirements. – (1) In General. – In the case of any bank holding company described in subsection (a) or nonbank financial company supervised by the Board of Governors, the computation of capital for purposes of meeting capital requirements shall take into account any off-balance-sheet activities of the company. (2) Exemptions. – If the Board of Governors determines that an exemption from the requirement under paragraph (1) is appropriate, the Board of Governors may exempt a company, or any transaction or transactions engaged in by such company, from the requirements of paragraph (1). (3) Off-Balance-Sheet Activities Defined. – For purposes of this subsection, the term 'off-balance-sheet activities' means an existing liability of a company that is not currently a balance sheet liability, but may become one upon the happening of some future event, including the following transactions, to the extent that they may create a liability: (A) Direct credit substitutes in which a bank substitutes its own credit for a third party, including standby letters of credit. (B) Irrevocable letters of credit that guarantee repayment of commercial paper or tax-exempt securities. (C) Risk participations in bankers' acceptances. (D) Sale and repurchase agreements. (E) Asset sales with recourse against the seller. (F)

that is becoming a *sine qua non* of financial oversight, both in the US and in Europe.[83] These tests aim to ascertain capital resilience under adverse environmental conditions, such as a recession, and increase in losses on the loan portfolio, etc.

The Federal Reserve conducted the first exercise of this type – defined as the Supervisory Capital Assessment Program (SCAP) – between the end of February and the end of April 2009, in the middle of the financial crisis.[84] The examinees of this test were nineteen large financial institutions[85] who collectively held about two thirds of the American banking system's assets and more than half the loans extended to clients. The first of its kind, this test aimed to ascertain[86] the capacity of banks' capital to withstand losses sustained through lending activities, investment portfolios, trading activities and all the then current activities undertaken by the bank. Loss assessment was conducted under two differing scenarios: a baseline scenario, in which macroeconomic and financial conditions are in line with consensus forecasts on the date of the test itself, and an adverse scenario, in which conditions are less favourable than those forecast. Banks

Interest rate swaps. (G) Credit swaps. (H) Commodities contracts. (I) Forward contracts. (J) Securities contracts. (K) Such other activities or transactions as the Board of Governors may, by rule, define".

[83] "Section 165 (i) Stress Tests. – (1) By the Board of Governors. – (A) Annual Tests Required. – The Board of Governors, in coordination with the appropriate primary financial regulatory agencies and the Federal Insurance Office, shall conduct annual analyses in which nonbank financial companies supervised by the Board of Governors and bank holding companies described in subsection (a) are subject to evaluation of whether such companies have the capital, on a total consolidated basis, necessary to absorb losses as a result of adverse economic conditions. (B) Test Parameters And Consequences. – The Board of Governors – (I) shall provide for at least 3 different sets of conditions under which the evaluation required by this subsection shall be conducted, including baseline, adverse, and severely adverse; (II) may require the tests described in subparagraph (A) at bank holding companies and nonbank financial companies, in addition to those for which annual tests are required under subparagraph (A); (III) may develop and apply such other analytic techniques as are necessary to identify, measure, and monitor risks to the financial stability of the United States; (IV) shall require the companies described in subparagraph (A) to update their resolution plans required under subsection (d)(1), as the Board of Governors determines appropriate, based on the results of the analyses; and (V) shall publish a summary of the results of the tests required under subparagraph (A) or clause (II) of this subparagraph. (2) By the Company. – (A) Requirement. – A nonbank financial company supervised by the Board of Governors and a bank holding company described in subsection (a) shall conduct semi-annual stress tests. All other financial companies that have total consolidated assets of more than $ 10billion and are regulated by a primary Federal financial regulatory agency shall conduct annual stress tests. The tests required under this subparagraph shall be conducted in accordance with the regulations prescribed under subparagraph (C). (B) Report. – A company required to conduct stress tests under subparagraph (A) shall submit a report to the Board of Governors and to its primary financial regulatory agency at such time, in such form, and containing such information as the primary financial regulatory agency shall require. (C) Regulations. – Each Federal primary financial regulatory agency, in coordination with the Board of Governors and the Federal Insurance Office, shall issue consistent and comparable regulations to implement this paragraph that shall – (I) define the term 'stress test' for purposes of this paragraph; (II) establish methodologies for the conduct of stress tests required by this paragraph that shall provide for at least 3 different sets of conditions, including baseline, adverse, and severely adverse; (III) establish the form and content of the report required by subparagraph (B); and (IV) require companies subject to this paragraph to publish a summary of the results of the required stress tests".

[84] See Board of Governors of the Federal reserve System (2009a; 2009b).

[85] All financial institutions that held assets superior to $100 billion as at December 31st, 2008 were included, in particular American Express Company, Bank of America Corporation, BB&T Corporation, The Bank of New York Mellon Corporation, Capital One Financial Corporation, Citigroup Inc., Fifth Third Bancorp, GMAC LLC, The Goldman Sachs Group, JP Morgan Chase & Co., KeyCorp, Metlife Inc., Morgan Stanley, PNC Financial Service Group Inc., Regions Financial Corporation, State Street Corporation, SunTrust Banks Inc., US Bancorp, Wells Fargo & Company Bank Holding Company.

[86] The estimation of losses and consequent capital absorption regarded the situation at the end of 2008 and its presumed evolution in the 2009-2010 period.

revealed by the test as needing additional capital were given one month in which to prepare a detailed plan for recapitalisation; the deadline for delivery of the plan was the beginning of November 2009. The novelty of the exercise was that it obliged banks to standardise assumptions and hypotheses. Such tests were already a feature of banks' risk management practices, but with non-standardised conditions they had been unable to generate a credible aggregate picture.

When published in May 2009, the results helped to clarify the dimension both of potential risks and of the resources available to combat said risks.[87] Nine of the examined institutions were found to require no capital reinforcement; the resources available at the end of 2008 and those forecast for the subsequent two fiscal years appeared to be sufficient to absorb the losses implied by the least favourable scenario and to respect the target capitalisation level set by the Federal Reserve.[88] In contrast, the other ten institutions appeared to need capitalisation in order to comply with SCAP's safety standards.[89]

The stress tests envisaged by DFA present themselves as being substantially in line with the methodology prescribed by SCAP; rulemaking for the post-DFA tests is still under discussion, but once it is defined this supervisory instrument will be fully 'tried and tested'.

In the hiatus prior to regulatory implementation of the DFA, the Federal Reserve devised an additional instrument with which to assess the capitalisation of the institutions under its supervision. By way of premise, it should be noted that SCAP's requirement for major US financial institutions to enhance their capital base had, in aggregate terms, sharply reduced payments to shareholders in the form, typically, of dividends and share repurchases. With the improved economic situation and the resumption of the higher margin activities, many financial companies were enjoying improved earnings, and were consequently meditating a return to more 'normal' remuneration for their shareholders. 'Normality' included dividends and share repurchases.

The Federal Reserve's previously mentioned additional instrument is a pre-emptive assessment of the likely impact of resumed 'normality' on the collective capital levels of the major financial institutions. Undertaken in the first months of 2011, this instrument was named the "Comprehensive Capital Analysis and Review" (CCAR).[90] Aiming to capture the widest possible spectrum of 'capital policies', CCAR specifically examined, *inter alia*, banks' current and future capital levels, pay out policies, repayment schedules for government financing, capacity to absorb losses in varying scenarios, and plans for compliance both with national (DFA) and international (Basel III) capital re-

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[87] In the adverse scenario, aggregate losses registered by the nineteen institutions amounted to c. $600 billion, most of which derived from the loan portfolio, where the adverse scenario's hypothesis produced higher percentages of losses than those deriving from the application of the historical rate of default. The capacity of banks to cover these losses was determined taking into account, the capital base for y/e 2008 and capital increases as projected from earnings estimates in fiscal years 2009 and 2010, calculated on the basis of the adverse scenario.

[88] 6% of Tier 1 capital and, within this item, 4% of common equity. Irrespectively of this provision, most of these institutions had already defined actions aimed at reinforcing their capital bases.

[89] Overall, the capital need identified by SCAP for the entire sample amounted to €185 billion; net of the recapitalisation actions already planned and of the 2009 first quarter results, the need receded to $74.6 billion. See Board of Governors of the Federal Reserve System (2009b).

[90] See Board of Governors of the Federal Reserve System (2011).

quirement regulations. CCAR uses the stress test, but merely as one of an array of instruments, in an attempt to characterise financial stability on broader bases and over a longer timescale. Whereas SCAP, and indeed the stress tests stipulated by the DFA, are conducted by the Federal Reserve, stress tests orchestrated under the auspices of CCAR are run by the banks themselves and are subsequently evaluated by the central bank on the basis of its models and methodologies. In effect, the Federal Reserve evaluates and validates the methods used by the banks, and in the process gains knowledge of their capital management practices. It is for these reasons that the stress tests conducted by the banks under CCAR auspices are not published.[91] The web of interactions between all the CCAR's component elements enables the Federal Reserve to assess the coherence of distribution policies relative to current and projected capital solidity. In the absence of specific objections from the Federal Reserve within a given deadline, the banks themselves can activate the distribution policies outlined in the CCAR.[92]

The supervision of external growth strategies

As has already been stated, the Federal Reserve's powers of intervention extend beyond supervision of current operations, and it is now appropriate to introduce the second area for which intervention is foreseen.

This area regards external growth strategies, events which occur discontinuously and which collectively determine the long term development of financial companies. Since the onset of the crisis, such operations have enjoyed particular prominence in political and institutional debate in the United States. At issue is the problem of institutions that are too big to fail (and hence will necessarily be rescued?).[93]

The explosion of the financial crisis placed the U.S. government in a considerable dilemma: on the one hand, the bankruptcy of financial institutions should on no account lead to the total destabilisation of the US financial system; on the other hand, the consequences of irresponsible behaviour by the top management of leading banks should not fall upon the taxpayer's purse.

The choice of bailing out near-default institutions, influenced by the consequences of Lehman's bankruptcy, did indeed preserve the system's stability, but the resulting impact on budget deficit generated violent popular reactions.

Memories of this dramatic experience, and specifically of the capacity of institutions of a given entity to threaten the entire financial system, and hence to enforce State intervention, ensured aversion to future repetitions. The interconnectedness of major banks at a national and international level is such that bankruptcy is potentially catas-

[91] Under SCAP, the publication of the results of tests conducted by the Federal Reserve was coherent with the objective of offering a robust and independent evaluation of the capital solidity of banks under stress conditions.

[92] In the document dated March 18th, 2011, the Federal Reserve states that the distribution policies specified by the banks can be considered approved if notice to the contrary is not received by March 21st, 2011. Upon receipt of notice of objections, the bank in question can submit a new, revised plan to the Federal Reserve in the second quarter of 2011.

[93] This quotation states the self-evident aspect of the problem: banks of a certain dimension have to be saved in the interests of systemic stability. An equally self-evident aspect of the same problem is that growth in size and in complexity can also make financial institutions too big to save, especially if they originate from small-to-medium size countries.

trophic. As a result of these realisations, reform treats bank growth as something to be closely monitored. Accordingly, growth is only permissible if it coincides with stability, or if it is accompanied by mechanisms that can control possible emerging instability. Various provisions in the reform package address this aspect of systemic stability.

Merger and acquisition activities, such as those whereby banks expand into non-bank financial activities, are therefore assessed by the Federal Reserve for their potential consequences to the overall financial stability of the United States.[94] The Federal Reserve's powers are very wide-ranging in this sector; it can deny authorisation to operations it deems to be excessively risky and, further, it can constrain banks that are deemed to be too big and complex to abandon activities that entail excessive putative risk. The result of these two provisions is that the Federal Reserve now filters corporate growth processes and the economic sustainability of the business plans of banks under its control. For the US banking system, the introduction of this principle marks a substantial break with the past: it recognises that the business development path of a (financial) company is not an issue that must be left to the exclusive discretion of the given company's Board; on the contrary, it must be subjected to the examination of a technically qualified third party (in this case, the Federal Reserve), whose exogenous assessment will reflect the principles of the general interest and systemic stability.

Crisis Management

The objectives of the reform as regards this particular and delicate issue are two-sided: one is to forestall pathological phenomena; the other, upon explosion of the given pathology, is to manage the single stricken institution without compromising systemic stability.

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[94] "Section 163. Acquisitions. (A) Acquisitions of Banks; Treatment as a Bank Holding Company. – For purposes of section 3 of the Bank Holding Company Act of 1956 (12 U.S.C. 1842), a nonbank financial company supervised by the Board of Governors shall be deemed to be, and shall be treated as, a bank holding company. (b) Acquisition of Nonbank Companies. – (1) Prior Notice for Large Acquisitions. – Notwithstanding section 4(k)(6)(B) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(k)(6)(B)), a bank holding company with total consolidated assets equal to or greater than $ 50 billion or a nonbank financial company supervised by the Board of Governors shall not acquire direct or indirect ownership or control of any voting shares of any company (other than an insured depository institution) that is engaged in activities described in section 4(k) of the Bank Holding Company Act of 1956 having total consolidated assets of $ 10 billion or more, without providing written notice to the Board of Governors in advance of the transaction. (2) Exemptions. – The prior notice requirement in paragraph (1) shall not apply with regard to the acquisition of shares that would qualify for the exemptions in section 4(c) or section 4(k)(4)(E) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(c) and (k)(4)(E)). (3) Notice Procedures. – The notice procedures set forth in section 4(j)(1) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(j)(1)), without regard to section 4(j)(3) of that Act, shall apply to an acquisition of any company (other than an insured depository institution) by a bank holding company with total consolidated assets equal to or greater than $ 50 billion or a nonbank financial company supervised by the Board of Governors, as described in paragraph (1), including any such company engaged in activities described in section 4(k) of that Act. (4) Standards for Review. – In addition to the standards provided in section 4(j)(2) of the Bank Holding Company Act of 1956 (12 U.S.C. 1843(j)(2)), the Board of Governors shall consider the extent to which the proposed acquisition would result in greater or more concentrated risks to global or United States financial stability or the United States economy. (5) Hart-Scott-Rodino Filing Requirement. – Solely for purposes of section 7A(c)(8) of the Clayton Act (15 U.S.C. 18a(c)(8)), the transactions subject to the requirements of paragraph (1) shall be treated as if Board of Governors approval is not required".

Of primary pertinence to the former are the so-called ‘resolution plans’ quoted in Section 165(d) of the DFA.[95] The new law stipulates that the Federal Reserve Board of Governors must require large and complex financial institutions to periodically provide the Board itself, the FSOC and the Federal Deposit Insurance Corporation (FDIC) with plans that illustrate how to ensure a rapid and orderly closure of their operations when in difficulty. The true thrust of the plan is to help the authorities understand how, *ex*

[95] Also defined, occasionally, as ‘funeral plans’ or ‘living wills’, terms intended to demonstrate the value of preordained solutions to the issue of how to behave in crisis. “Section 165 (d) Resolution Plan and Credit Exposure Reports. – (1) Resolution Plan. – The Board of Governors shall require each nonbank financial company supervised by the Board of Governors and bank holding companies described in subsection (a) to report periodically to the Board of Governors, the Council, and the Corporation the plan of such company for rapid and orderly resolution in the event of material financial distress or failure, which shall include – (A) information regarding the manner and extent to which any insured depository institution affiliated with the company is adequately protected from risks arising from the activities of any nonbank subsidiaries of the company; (B) full descriptions of the ownership structure, assets, liabilities, and contractual obligations of the company; (C) identification of the cross-guarantees tied to different securities, identification of major counterparties, and a process for determining to whom the collateral of the company is pledged; and (D) any other information that the Board of Governors and the Corporation jointly require by rule or order. (2) Credit Exposure Report. – The Board of Governors shall require each nonbank financial company supervised by the Board of Governors and bank holding companies described in subsection (a) to report periodically to the Board of Governors, the Council, and the Corporation on – (A) the nature and extent to which the company has credit exposure to other significant nonbank financial companies and significant bank holding companies; and (B) the nature and extent to which other significant nonbank financial companies and significant bank holding companies have credit exposure to that company. (3) Review. – The Board of Governors and the Corporation shall review the information provided in accordance with this subsection by each nonbank financial company supervised by the Board of Governors and bank holding company described in subsection (a). (4) Notice of Deficiencies. – If the Board of Governors and the Corporation jointly determine, based on their review under paragraph (3), that the resolution plan of a nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a) is not credible or would not facilitate an orderly resolution of the company under title 11, United States Code – (A) the Board of Governors and the Corporation shall notify the company of the deficiencies in the resolution plan; and (B) the company shall resubmit the resolution plan within a timeframe determined by the Board of Governors and the Corporation, with revisions demonstrating that the plan is credible and would result in an orderly resolution under title 11, United States Code, including any proposed changes in business operations and corporate structure to facilitate implementation of the plan. (5) Failure to Resubmit Credible Plan. – (A) In General. – If a nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a) fails to timely resubmit the resolution plan as required under paragraph (4), with such revisions as are required under subparagraph (B), the Board of Governors and the Corporation may jointly impose more stringent capital, leverage, or liquidity requirements, or restrictions on the growth, activities, or operations of the company, or any subsidiary thereof, until such time as the company resubmits a plan that remedies the deficiencies. (B) Divestiture. – The Board of Governors and the Corporation, in consultation with the Council, may jointly direct a nonbank financial company supervised by the Board of Governors or a bank holding company described in subsection (a), by order, to divest certain assets or operations identified by the Board of Governors and the Corporation, to facilitate an orderly resolution of such company under title 11, United States Code, in the event of the failure of such company, in any case in which – (I) the Board of Governors and the Corporation have jointly imposed more stringent requirements on the company pursuant to subparagraph (A); and (II) the company has failed, within the 2-year period beginning on the date of the imposition of such requirements under subparagraph (A), to resubmit the resolution plan with such revisions as were required under paragraph (4)(B). (6) No Limiting Effect. – A resolution plan submitted in accordance with this subsection shall not be binding on a bankruptcy court, a receiver appointed under title II, or any other authority that is authorized or required to resolve the nonbank financial company supervised by the Board, any bank holding company, or any subsidiary or affiliate of the foregoing. (7) No Private Right of Action. – No private right of action may be based on any resolution plan submitted in accordance with this subsection. (8) Rules. – Not later than 18 months after the date of enactment of this Act, the Board of Governors and the Corporation shall jointly issue final rules implementing this subsection”.

ante, to isolate the distressed institution from the system and thus avoid the dramatic effects of contagion. The presentation of the plan to the authorities is an important event in the dialectic between supervisors and the supervised. In evaluating the reasonableness of any given plan, the authorities acquire a full awareness of the structure, the functioning and the complexity of the supervised institution. Should the plan be deemed to be scarcely credible, the authorities can stipulate restorative actions: among such actions are increased capital requirements and constraints on growth and/or other specific activities. From the point of view of the subjects of supervision, the costs connected to the inability to present a credible plan are an incentive to take control of internal processes and activities that could be difficult to manage during crises. In line with the provisions of the DFA, the Federal Reserve and the FDIC, in April 2011,[96] published a regulatory proposal that details the contents of the documents in question; once the comments of the financial industry have been gathered, the two regulatory agencies will produce a final proposal for legislation in January 2012.

Another provision intended as a pre-pathology intervention is that outlined in Section 166 of the DFA, namely early remediation requirements.[97] The Federal Reserve, along with the Council and the FDIC, is asked to issue specific regulation to facilitate interventions that will stabilise distressed institutions and thus avoid the stage where crisis is irreversible. The Federal Reserve is assigned with the task of defining the criteria for the recognition of financial institutions that should be submitted to this procedure. Once the onset of financial decline has been identified, various measures can be applied, such as limits (on dividend distribution, acquisitions and asset growth) and obligations (regarding capital increases, asset sales, management changes).

After these preventive measures come the procedures for liquidation, structured so as to minimise the effects of the single institution on the system as a whole. Here, the DFA has added innovations, in the form of quicker and more effective procedures than those provided for by the existing legislative framework,[98] and specifically by the Ban-

[96] Federal Reserve System – Federal Deposit Insurance Corporation (2011).
[97] "Section 166. Early Remediation Requirements. (A) In General. – The Board of Governors, in consultation with the Council and the Corporation, shall prescribe regulations establishing requirements to provide for the early remediation of financial distress of a nonbank financial company supervised by the Board of Governors or a bank holding company described in section 165(a), except that nothing in this subsection authorizes the provision of financial assistance from the Federal Government. (b) Purpose of the Early Remediation Requirements. – The purpose of the early remediation requirements under subsection (a) shall be to establish a series of specific remedial actions to be taken by a nonbank financial company supervised by the Board of Governors or a bank holding company described in section 165(a) that is experiencing increasing financial distress, in order to minimize the probability that the company will become insolvent and the potential harm of such insolvency to the financial stability of the United States. (c) Remediation Requirements. – The regulations prescribed by the Board of Governors under subsection (a) shall – (1) define measures of the financial condition of the company, including regulatory capital, liquidity measures, and other forward-looking indicators; and (2) establish requirements that increase in stringency as the financial condition of the company declines, including – (A) requirements in the initial stages of financial decline, including limits on capital distributions, acquisitions, and asset growth; and (B) requirements at later stages of financial decline, including a capital restoration plan and capital-raising requirements, limits on transactions with affiliates, management changes, and asset sales".
[98] See Federal Deposit Insurance Corporation (2011, p. 4208): "Prior to the enactment of the Dodd-Frank Act, Public Law 111-203, 12 U.S.C. 5301 et seq. on July 21st, 2010, there was no common or adequate statutory scheme for the orderly liquidation of a financial company whose failure could adversely affect the financial

kruptcy Code, such as would preserve overall systemic stability even in the event of the insolvency of a major U.S. financial institution.

The principal actor in the crisis management process is the FDIC, whose purpose is inspired, in the spirit of the DFA, by a simple criterion and stated with great clarity: the losses incurred by liquidation will in the first instance be borne by shareholders and by unsecured creditors (i.e. those who in an efficient and competitive market perceive returns as proportionate to risk), while responsibility for the crisis will be entirely attributed to management and to the Board, who will accordingly be dismissed.

The crisis management procedures introduced by the DFA refer to financial institutions deemed to be significant in terms of systemic risk, and are added to existing procedures for the management of bank crises.[99] The procedure is initiated by the Treasury Secretary, who issues a Systemic Risk Determination (SRD),[100] on the basis of recommendations supplied by the Fed in its supervisory role, along with the FDIC, the SEC (if the institution's primary activity is in securities trading) or with the Federal Insurance Office (if the institution's primary activity is in insurance).

The formal statement made by the Treasury Secretary has to contain certain elements that are essential for the application of the Orderly Liquidation Authority (OLA). On the one hand, it must be recognised that the procedures stipulated by bankruptcy law appear inadequate to avoid systemically negative effects; on the other hand, the Treasury Secretary must specify that no 'private' solutions to the problem are available, in the sense that it is not possible to sell the distressed institution to a going financial concern without compromising the latter's sustainability.

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stability of the United States. Instead, insured depository institutions were subject to an FDIC-administered receivership under applicable provisions of the Federal Deposit Insurance Act ('FDI Act'), insurance companies were subject to insolvency proceedings under individual State's laws, registered brokers and dealers were subject to the U.S. Bankruptcy Code and proceedings under the Securities Investor Protection Act, and other companies (including the parent holding company of one or more insured depository institutions or other financial companies) were eligible to be a debtor under the U.S. Bankruptcy Code. These disparate insolvency regimes were found to be inadequate to effectively address the actual or potential failure of a financial company that could adversely affect economic conditions or financial stability in the United States. In such a case, financial support for the company sometimes was the only viable option available for the Federal government to avoid or mitigate serious adverse effects on economic conditions and financial stability that could result from the company's failure. With the enactment of the Dodd-Frank Act, Federal regulators have the tools to resolve a failing financial company that poses a significant risk to the financial stability of the United States. The receivership process established under Title II of the Dodd-Frank Act provides for an orderly liquidation of such a 'covered financial company' in a way that addresses the concerns and interests of legitimate creditors while also protecting broader economic and taxpayer interests".

[99] The management of banking crises is traditionally entrusted to the Federal Deposit Insurance Corporation (FDIC), the federal agency responsible for the deposit insurance programme. The fundamental instrument for crisis management is that of receivership, on the basis of which the FDIC 'receives' the set of assets and liabilities of the bank in crisis with a mandate to manage it so as to minimise the impact of the crisis on the financial system and on public interests. When a banking institution that is part of the federal insurance programme is near to collapse, the FDIC is designated as the receiver and ordered to manage the bank's assets so as to recover the greatest value possible in rapid and orderly fashion. The resources realised by the sale of the bank's assets are disbursed to creditors on the basis of a legally established order of priority.

[100] Federal Deposit Insurance Corporation (2011, p. 4208): "The Dodd-Frank Act requires that recommendations to the Secretary include an evaluation of whether the covered financial company is in default or in danger of default, a description of the effect that the company's default would have on the financial stability of the United States, and an evaluation of why a case under the Bankruptcy Code would not be appropriate".

Once launched, the liquidation procedure respects two fundamental principles.[101] The first is that any obligations deriving from liquidation – which would originate from the incapacity of assets to cover the bank's liabilities – must never be met with public funds. On the contrary, such obligations must fall upon two specifically identified subjects, namely shareholders and creditors without privilege and/or guarantee.

The second principle is that responsibility for distress is attributed to senior management, whose members are accordingly dismissed.

The FDIC serves as a receiver to the financial institution in crisis; this function was already and traditionally fulfilled by the FDIC, but its competence has now widened with regard to systemically dangerous institutions. The FDIC is now directly responsible for administering the assets of distressed banks and for protecting said assets even by moving them to a bridge financial company (BFC), another receivership entity specifically established to facilitate the procedure of liquidation.

In both cases, the FDIC has to ensure that shareholders receive no payment, analogously with provision for subordinated and unsecured creditors whose credits have a maturity period greater than 360 days. Compensation for these subjects is only granted if the rights of all other creditors have been satisfied.

Whether it manages receivership directly or through the bridge financial company, the FDIC enjoys reasonable discretion in its decision-making. When it is deemed necessary or useful, the FDIC can take on debt to satisfy certain categories of creditors and to support the operations of the bridge financial company.[102] This option was created with two purposes: that of minimising the impact of the crisis on the functioning of the financial system; and that of maximising recoverable values. In the pursuit of these purposes, it can be useful to prolong the procedure, while guaranteeing essential services and operational continuity, until assets recover acceptable value. In the author's opinion, this provision has a logical and economic foundation, and may be considered as an investment whose purpose is to minimise the burdens of liquidation.[103] The reali-

[101] "Section 204. Orderly Liquidation of Covered Financial Companies. (A) Purpose of Orderly Liquidation Authority. – It is the purpose of this title to provide the necessary authority to liquidate failing financial companies that pose a significant risk to the financial stability of the United States in a manner that mitigates such risk and minimizes moral hazard. The authority provided in this title shall be exercised in the manner that best fulfills such purpose, so that – (1) creditors and shareholders will bear the losses of the financial company; (2) management responsible for the condition of the financial company will not be retained; and (3) the Corporation and other appropriate agencies will take all steps necessary and appropriate to assure that all parties, including management, directors, and third parties, having responsibility for the condition of the financial company bear losses consistent with their responsibility, including actions for damages, restitution, and recoupment of compensation and other gains not compatible with such responsibility".

[102] There is express provision for the FDIC to take Treasury funds by way of a loan, within an agreed limit as to amount, to finance the operations of a receivership or of a bridge financial company. Should the liquidation of assets not suffice for repayment to the Treasury, the FDIC is bound to enact a 'clawback', whereby it asks those creditors who have received the greatest reimbursements to return a part of the same; when this provision fails to realise funds sufficient to repay the Treasury, residual obligations are redistributed to a group of institutions defined as 'eligible'. Said institutions largely consist in the major, complex financial institutions that fall within the perimeter of the Federal Reserve's supervision.

[103] The liquidation procedure, as agreed by the Treasury, the Federal Reserve and the FDIC, makes provision for this latter to borrow, in order to finance the execution of liquidation, such amounts as may reasonably be expected from the sale of the distressed institution's assets. The reimbursement of creditors places the State in the first row, in keeping with the principle that no burdens should be imposed on public funds, with subse-

sation of assets, analogously with the management of the bridge financial company, is subject to the general market conditions, which could in the immediate term be unfavourable to a satisfactory disbandment. Continued management, supported by specific financing, may be posited as a deferment of liquidation until favourable conditions return. Herein lies a lesson for the handling of the Lehman case, in which bankruptcy provoked an exceptional tightening in market conditions and a generalised liquidity crisis, which in turn made it more or less impossible, for most institutions, to liquidate assets on reasonable conditions. With time, the same assets might have conserved their value.

This loan provision, it must be said, has attracted criticism from commentators who see the mechanism as a surreptitious way for the FDIC to guarantee the continuation of operations for the big financial institutions. Indeed, say the critics, it tends to perpetuate the ‘too big to fail’ concept (Wilmarth 2011).

3.2.3. The Volcker Rule

Reform aims to guarantee financial stability by means both of internationally accepted rules[104] and of more specific provisions, defined by U.S. legislation, that differentiate its experience from that of other countries.

These latter are exemplified by the so-called Volcker Rule, one that was inspired by longstanding criteria in US regulation and that defined a separation between commercial banking and the putatively riskier business of investment banking,[105] in particular the activity of proprietary trading. The rationale for regulation of this sort is easy to understand; proprietary trading can commit banks to immense trading positions and analogously immense risks, in the form of bets on the future performance of securities traded in the market. Wrongly placed investments can incur losses that compromise the stability of the banks involved. Since the fundamental objective of reform is to guarantee the stability of the financial system’s institutions, the need to limit/prohibit proprie-

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quent creditors in an order that proportions reimbursement to the risks *ex ante* assumed by creditors. Similarly in the name of minimising burdens on public funds, the ‘emergency lending’ traditionally offered by the Federal Reserve to distressed institutions comes with significant covenants: Treasury authorisation is needed, and the guarantee conditions for the loan are subject to close scrutiny, on the basis that said guarantees must be sufficient to prevent the lender from suffering losses.

[104] This is the case, for example, of the capital and liquidity requirements established by the Basel Committee and accepted by the Seoul G-20 Summit, which the US has declared it will implement.

[105] The separation of these two activities was the fundamental basis of banking reform in the U.S. in the wake of the 1930s crisis. The so-called ‘Glass-Steagall Act’ forbad commercial banks to engage in securities activities, thus ensuring that the ‘ordinary’ financing of economic activity, the most traditional form of banking activity, was not invalidated by the risks connected to trading in financial markets. The rigid separation between commercial and investment banking was gradually eroded from the early 1990s onwards, and definitively eliminated by the Financial Modernization Act in 1999. Prior to the launching of the DFA, the rigid separation of the Glass-Steagall Act was invoked by numerous political and institutional figures as an appropriate model for the containment of excessive risk in the activities of banks. As shall subsequently be seen, the recently launched provisions, which are illustrated in Section 619, are sufficiently ambiguous to prevent their comparison with the reforms of the 1930s. See Kregel (2010); Fein (2010a).

tary trading was on the agenda from the outset of the parliamentary debate that led to the launching of the DFA.

The possibility that reform would forbid or limit said trading was the source of great anxiety for the financial industry, whose pre-eminent exponents forcefully opposed regulation of this type, at least in its most rigid form. The DFA text accordingly strikes a compromise between two clearly distinct positions.

In subsection (a) at the beginning of Section 619, the reform establishes,[106] by way of general principle, that banks may not engage in proprietary trading; this prohibition is complemented with another that forbids banks to own shares in investment bodies considered to be excessively risky, namely hedge funds and private equity funds.[107]

However, within this general order provision, subsection (d) of the same Section 619 establishes certain dispensations that could generate problems of interpretation and hence a softening of the rule.[108]

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[106] The position of the prohibition, in the first subsection of Section 619, appears to testify to its status as the defining feature of the new regulatory set-up. Described in general terms, the prohibition is applied to banks and to non-banking financial institutions; its limitations extend to the purchase of shares in financial entities deemed to be risky, such as hedge funds and private equity funds. "Section 619 (a) In General. – (1) Prohibition. – Unless otherwise provided in this section, a banking entity shall not – (A) engage in proprietary trading; or (B) acquire or retain any equity, partnership, or other ownership interest in or sponsor a hedge fund or a private equity fund. (2) Nonbank Financial Companies Supervised by the Board. – Any nonbank financial company supervised by the Board that engages in proprietary trading or takes or retains any equity, partnership, or other ownership interest in or sponsors a hedge fund or a private equity fund shall be subject, by rule, as provided in subsection (b)(2), to additional capital requirements for and additional quantitative limits with regards to such proprietary trading and taking or retaining any equity, partnership, or other ownership interest in or sponsorship of a hedge fund or a private equity fund, except that permitted activities as described in subsection (d) shall not be subject to the additional capital and additional quantitative limits except as provided in subsection (d)(3), as if the nonbank financial company supervised by the Board were a banking entity".

[107] The actual implementation (i.e. the phasing and timing of realisation) of the general principle is entitled to the rulemaking process of the agencies which are jointly responsible for formulating the new regulations (a preliminary study by the FSOC and subsequent rulemaking by the Federal Banking Agencies, the SEC and the Commodity Futures Trading Commission).

[108] "(d) Permitted Activities. – (1) In General. – Notwithstanding the restrictions under subsection (a), to the extent permitted by any other provision of Federal or State law, and subject to the limitations under paragraph (2) and any restrictions or limitations that the appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission, may determine, the following activities (in this section referred to as 'permitted activities') are permitted: (A) The purchase, sale, acquisition, or disposition of obligations of the United States or any agency thereof, obligations, participations, or other instruments of or issued by the Government National Mortgage Association, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, a Federal Home Loan Bank, the Federal Agricultural Mortgage Corporation, or a Farm Credit System institution chartered under and subject to the provisions of the Farm Credit Act of 1971 (12 U.S.C. 2001 et seq.), and obligations of any State or of any political subdivision thereof. (B) The purchase, sale, acquisition, or disposition of securities and other instruments described in subsection (h)(4) in connection with underwriting or market-making related activities, to the extent that any such activities permitted by this subparagraph are designed not to exceed the reasonably expected near term demands of clients, customers, or counterparties. (C) Risk-mitigating hedging activities in connection with and related to individual or aggregated positions, contracts, or other holdings of a banking entity that are designed to reduce the specific risks to the banking entity in connection with and related to such positions, contracts, or other holdings. (D) The purchase, sale, acquisition, or disposition of securities and other instruments described in subsection (h)(4) on behalf of customers. (E) Investments in one or more small business investment companies, as defined in section 102 of the Small Business Investment Act of 1958 (15 U.S.C. 662), investments designed primarily to promote the public welfare, of the type permitted under paragraph (11) of section 5136 of the Revised Statutes of the United States (12 U.S.C. 24), or investments that are qualified rehabilitation expenditures with respect to a qualified rehabilitated building or certified hi-

storic structure, as such terms are defined in section 47 of the Internal Revenue Code of 1986 or a similar State historic tax credit program. (F) The purchase, sale, acquisition, or disposition of securities and other instruments described in subsection (h)(4) by a regulated insurance company directly engaged in the business of insurance for the general account of the company and by any affiliate of such regulated insurance company, provided that such activities by any affiliate are solely for the general account of the regulated insurance company, if – (I) the purchase, sale, acquisition, or disposition is conducted in compliance with, and subject to, the insurance company investment laws, regulations, and written guidance of the State or jurisdiction in which each such insurance company is domiciled; and (II) the appropriate Federal banking agencies, after consultation with the Financial Stability Oversight Council and the relevant insurance commissioners of the States and territories of the United States, have not jointly determined, after notice and comment, that a particular law, regulation, or written guidance described in clause (I) is insufficient to protect the safety and soundness of the banking entity, or of the financial stability of the United States. (G) Organizing and offering a private equity or hedge fund, including serving as a general partner, managing member, or trustee of the fund and in any manner selecting or controlling (or having employees, officers, directors, or agents who constitute) a majority of the directors, trustees, expenses for the foregoing, only if – (I) the banking entity provides bona fide trust, fiduciary, or investment advisory services; (II) the fund is organized and offered only in connection with the provision of bona fide trust, fiduciary, or investment advisory services and only to persons that are customers of such services of the banking entity; (III) the banking entity does not acquire or retain an equity interest, partnership interest, or other ownership interest in the funds except for a de minimis investment subject to and in compliance with paragraph (4); (IV) the banking entity complies with the restrictions under paragraphs (1) and (2) of subparagraph (f); (V) the banking entity does not, directly or indirectly, guarantee, assume, or otherwise insure the obligations or performance of the hedge fund or private equity fund or of any hedge fund or private equity fund in which such hedge fund or private equity fund invests; (VI) the banking entity does not share with the hedge fund or private equity fund, for corporate, marketing, promotional, or other purposes, the same name or a variation of the same name; (VII) no director or employee of the banking entity takes or retains an equity interest, partnership interest, or other ownership interest in the hedge fund or private equity fund, except for any director or employee of the banking entity who is directly engaged in providing investment advisory or other services to the hedge fund or private equity fund; and (VIII) the banking entity discloses to prospective and actual investors in the fund, in writing, that any losses in such hedge fund or private equity fund are borne solely by investors in the fund and not by the banking entity, and otherwise complies with any additional rules of the appropriate Federal banking agencies, the Securities and Exchange Commission, or the Commodity Futures Trading Commission, as provided in subsection (b)(2), designed to ensure that losses in such hedge fund or private equity fund are borne solely by investors in the fund and not by the banking entity. (H) Proprietary trading conducted by a banking entity pursuant to paragraph (9) or (13) of section 4(c), provided that the trading occurs solely outside of the United States and that the banking entity is not directly or indirectly controlled by a banking entity that is organized under the laws of the United States or of one or more States. (I) The acquisition or retention of any equity, partnership, or other ownership interest in, or the sponsorship of, a hedge fund or a private equity fund by a banking entity pursuant to paragraph (9) or (13) of section 4(c) solely outside of the United States, provided that no ownership interest in such hedge fund or private equity fund is offered for sale or sold to a resident of the United States and that the banking entity is not directly or indirectly controlled by a banking entity that is organized under the laws of the United States or of one or more States. (J) Such other activity as the appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission determine, by rule, as provided in subsection (b)(2), would promote and protect the safety and soundness of the banking entity and the financial stability of the United States. (2) Limitation on Permitted Activities. – (A) In General. – No transaction, class of transactions, or activity may be deemed a permitted activity under paragraph (1) if the transaction, class of transactions, or activity – (I) would involve or result in a material conflict of interest (as such term shall be defined by rule as provided in subsection (b)(2)) between the banking entity and its clients, customers, or counterparties; (II) would result, directly or indirectly, in a material exposure by the banking entity to high-risk assets or high-risk trading strategies (as such terms shall be defined by rule as provided in subsection (b)(2)); (III) would pose a threat to the safety and soundness of such banking entity; or (IV) would pose a threat to the financial stability of the United States. (B) Rulemaking. – The appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission shall issue regulations to implement subparagraph (A), as part of the regulations issued under subsection (b)(2). (3) Capital and Quantitative Limitations. – The appropriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission shall, as provided in subsection (b)(2), adopt rules imposing additional capital requirements and quantitative limitations, including diversification requirements, regarding the activities permitted under this section if the ap-

An initial waiver, of defined extent, regards proprietary trading in financial instruments that national legislation traditionally favours, namely government securities and those issued by public agencies.

Of the other waivers, attention may be usefully directed towards those provided for by points B), C) and D) of Section 619(d);[109] inspired by fairly clear criteria from a logical viewpoint, they pose problems for regulatory implementation:

- the first (point B) permits activities conducted "in connection with underwriting or market-making related activities, to the extent that any such activities permitted by this subparagraph are designed not to exceed the reasonably expected near-term demands of clients, customers, or counterparties";
- the second (point C) permits risk-mitigating hedging activities;
- the third (point D) expressly permits trading on behalf of clients.

These three waivers to the prohibitions established at the beginning of Section 619 require consideration. Firstly, as regards point D), it appears fairly intuitive to endorse the principle that bank security trading on behalf of clients should be preserved.

Assessment of the other two waivers appears to be more complicated. By undertaking market-making activities, in keeping with point B), banks typically assume positions on their own accounts; it is indeed true that such positions will necessarily be commensurate with the short-term demands of the client, but it must be noted that this

propriate Federal banking agencies, the Securities and Exchange Commission, and the Commodity Futures Trading Commission determine that additional capital and quantitative limitations are appropriate to protect the safety and soundness of banking entities engaged in such activities. (4) De Minimis Investment. – (A) In General. – A banking entity may make and retain an investment in a hedge fund or private equity fund that the banking entity organizes and offers, subject to the limitations and restrictions in subparagraph (B) for the purposes of – (I) establishing the fund and providing the fund with sufficient initial equity for investment to permit the fund to attract unaffiliated investors; or (II) making a de minimis investment. (B) Limitations And Restrictions on Investments. – (I) Requirement To Seek Other Investors. – A banking entity shall actively seek unaffiliated investors to reduce or dilute the investment of the banking entity to the amount permitted under clause (II). (II) Limitations on Size of Investments. – Notwithstanding any other provision of law, investments by a banking entity in a hedge fund or private equity fund shall – (I) not later than 1 year after the date of establishment of the fund, be reduced through redemption, sale, or dilution to an amount that is not more than 3 percent of the total ownership interests of the fund; (II) be immaterial to the banking entity, as defined, by rule, pursuant to subsection (b)(2), but in no case may the aggregate of all of the interests of the banking entity in all such funds exceed 3 percent of the Tier 1 capital of the banking entity. (III) Capital. – For purposes of determining compliance with applicable capital standards under paragraph (3), the aggregate amount of the outstanding investments by a banking entity under this paragraph, including retained earnings, shall be deducted from the assets and tangible equity of the banking entity, and the amount of the deduction shall increase commensurate with the leverage of the hedge fund or private equity fund. (C) Extension. – Upon an application by a banking entity, the Board may extend the period of time to meet the requirements under subparagraph (B)(II)(I) for 2 additional years, if the Board finds that an extension would be consistent with safety and soundness and in the public interest".

[109] Suffice it to say that the prohibition of investment in assets deemed to bear risk, i.e. hedge funds and private equity funds, has also been waived, on condition that such investments observe certain quantitative limits. Banks cannot allocate more than 3% of their Tier 1 capital to this form of investment, and the investment in any given fund cannot exceed 3% of the total capital of the fund in question. The first limitation aims to ensure that these investments constitute a small proportion of the bank's 'core capital, and hence to limit its impact on stability; the second aims to prevent the bank from assuming excessive positions within a single fund, since these would create high specific risks and introduce conflicts of interest with clients. Of all the waivers to the general prohibition, those described in the text appear to be the most important.

principle introduces elements of discretion. As such, it also makes it difficult, both *ex ante* for the banks, and *ex post* for the regulators, to assess whether behaviour complied with regulations.

A real distinction between proprietary trading and market-making conducted on behalf of clients is not simple, in that both activities can lead, with immediate effect, to the bank taking a securities position. In market-making activities, this position should be dictated by the current and projected activities of the client, whereas in proprietary trading proper, the assumption of a position in securities is an act of autonomy by the bank. Drawing post-event distinctions is far from easy.

Much the same can be said for the third waiver, as specified in point C) and for trading by banks on their own account by way of risk-mitigation hedging activities. For this rule too, *ex post* assessment of the legitimacy of any given operation will pose difficulties.

In summary, having undergone heated negotiations between supervisors and the supervised, the final text of the reform law contains ambiguities that significantly diminish its regulatory rigour, a feature which has not escaped critical attention (Wilmarth 2011).

The law provides for the subsequent detailed rulemaking required by the principle established in regulation; this process will consist in an analysis by the FSOC of the appropriate modes of implementation, in a consequent statement of principles and recommendations,[110] and by the subsequent publication of regulations by the competent controlling agencies.[111]

The new regulation is currently planned to become effective in July 2012.[112] Further extensions to this deadline are permitted, at the discretion of the regulatory agencies in connection with conditions for particular asset categories.

Currently, regulators and banks are assessing how to implement both the FSOC's recommendations and, specifically, its fundamental principles with regard to proprietary trading.[113] As to the former, the Council confirms that banks must close or sell

[110] See Financial Stability Oversight Council (2011, p. 3): "The Council strongly supports the robust implementation of the Volcker Rule and recommends that Agencies consider taking the following actions: 1. Require banking entities to sell or wind down all impermissible proprietary trading desks. 2. Require banking entities to implement a robust compliance regime, including public attestation by the CEO of the regime's effectiveness. 3. Require banking entities to perform quantitative analysis to detect potentially impermissible proprietary trading without provisions for safe harbors. 4. Perform supervisory review of trading activity to distinguish permitted activities from impermissible proprietary trading. 5. Require banking entities to implement a mechanism that identifies to Agencies which trades are customer-initiated. 6. Require divestiture of impermissible proprietary trading positions and impose penalties when warranted. 7. Prohibit banking entities from investing in or sponsoring any hedge fund or private equity fund, except to bona fide trust, fiduciary or investment advisory customers. 8. Prohibit banking entities from engaging in transactions that would allow them to bail out a hedge fund or private equity fund. 9. Identify similar funds that should be brought within the scope of the Volcker Rule prohibitions in order to prevent evasion of the intent of the rule. 10. Require banking entities to publicly disclose permitted exposure to hedge funds and private equity funds".

[111] Other than the Federal Reserve, the process of rulemaking involves the OCC, the FDIC, the SEC and the CFTC. The regulatory agencies are required to produce their proposals for regulation within nine months of publication of the FSOC study.

[112] The Federal Reserve initially proposed that the new regulation should become effective in November 2010 and that the subsequent 'final rule' should be issued in February 2011. See Federal Reserve System (2011a).

[113] The other recommendations regard relationships with hedge funds.

units involved in types of trading that the new regulations forbid. The latter has led to a request that banks identify all trades undertaken on clients' behalf, and that are hence permissible. The authorities will then be able to review the trading undertaken by any given bank, and assess conformity. Each bank CEO will have to issue a public statement on the conformity of his/her institution, and will be answerable in law to said statement. The construction of the definitive regulation is thus still in process, and the relationship between regulators and the regulated appears to be critical to such definition.

At the moment, debate appears to be split between two decidedly opposing poles. On the one hand, critics of current reform consider the final version of the Volcker Rule to be too lenient to major US banking names engaged in investment banking. This line of argument contends that regulatory rigour was excessively diluted, indeed, emptied, in the build-up to thr DFA. In contrast, the initial reaction of market participants is that the major US investment banks will be considerably and negatively impacted; the application of the Volcker Rule is perceived as classical case of regulatory asymmetry, one that will substantially disadvantage US investment banks in comparison with their European competitors.[114]

Another specific regulation introduced by US reform is that of pushout of banks' derivative trading activities; the aim of this provision is the same as that of the Volcker Rule, and Chapter 5 will give due attention to this issue.

3.2.4. Regulation of the shadow banking system

One of the structural problems to have emerged in the crisis is that the regulated financial institutions and markets coexist with a system of potential substitutes that originate and work in 'proximity' to the banks but that are entirely unregulated. This is the so-called 'shadow banking system', which played an important role in the generation of the US banking crisis. Immediately prior to the outbreak of the crisis, this ample and varied group counted amongst its number investment banks (which undertook many of the functions fulfilled by 'ordinary' commercial banks, but were not regulated with the same intensity), hedge funds, the special 'vehicles' created to receive the loans sold by the banks in the securitization process, money market funds (specialised in short- and very short-term investments); in a wider definition, the shadow banking system includes any institution that differs from traditional banks but that is equally capable of feeding the credit circuit.[115] The component institutions of the shadow banking system

[114] According to J.P. Morgan Cazenove, the effects of Section 619 will not be negligible in their impact on the earnings of major American players. Forecasts for 2012 show impact at about 10% on investment banking earnings for Goldman Sachs and of 5% for Morgan Stanley; lesser impacts, of about 2%, are estimated for Citigroup and Bank of America. See J.P. Morgan Cazenove (2011).

[115] This provision includes all non-banking institutions involved in retail lending activities. According to an estimate by the Federal Reserve Bank of New York (quoted by Reuter in a market comment published on October 4th, 2010), the size of the shadow banking system, as measured on the basis of the total sector liabilities, amounted at the end of the first quarter of 2010 to $16 trillion, a value that exceeded that of the traditional banking system ($13trillion). Prior to the crisis, the estimated value of this alternative credit market was even higher: about $20 trillion (according to the Federal Reserve Bank of New York estimate). See Gorton (2010).

bore two fundamental characteristics. On the one hand, they undertook similar activities to those of the traditional market participants, but operated outside the perimeter of regulation. On the other hand, they were profoundly interconnected with each other and with the banking system itself. The most telling case to emerge from the crisis is that of the vehicles created to support securitization operations, whereby such companies acquired loan portfolios from banks, securitized the loan and sold them on the market as bonds. These bonds ended up in the portfolios of investors (including money market funds), were used to guarantee repurchase agreements and were finally sold to other vehicles of banking origins; often, these latter financed such investments by issuing short term debt instruments, such as commercial paper.[116] Many of these vehicles were created by banks, and received liquidity from the same, without being consolidated within the originating banks and consequently did not affect the capital requirements of the banks themselves. When the income flows from securitised loans were insufficient to honour commitments to bondholders, the vehicle companies became insolvent. As such, the vehicles created a dilemma for the banks that had constituted them (the 'sponsor banks'): whether to intervene, at substantial cost, on the vehicles' behalf, or to let the vehicle fall. In the first case, the assets and liabilities of the vehicle, hitherto hidden, would now erupt into the sponsor bank's consolidated accounts, making inadequacies in capital structure evident. The lack of oversight for the shadow banking system, eased by accounting principles that allowed vehicles to be treated as separate entities from the sponsor bank, was one of the causes of the crisis and was brought to the legislators' attention in the process of defining the reform act.[117] Various measures have been devised to correct this weakness.

Firstly, in 2009, the Financial Accounting Standards Board (FASB) stipulated new accounting principles[118] that effectively obliged the banks to consolidate the majority of the vehicles used for securitization.[119]

The second measure consisted in a DFA ruling on securitization operations, which will be dealt with in the next section.

A third measure regarding Money Market Mutual Funds (hereinafter MMMFs), currently in the drafting phase, will establish various constraints aimed at raising the quality and the liquidity of assets, so that these Funds are at all times able to honour repayment commitments to investors.

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[116] In using commercial paper to finance investments in asset backed securities, the vehicles resorted to substantial 'maturity transformation', in that they used short-term liabilities to purchase medium/long-term assets (or long-term, in the case of securitized mortgage instruments). Aimed at exploiting the yield gap between long-term (higher yield) and short-term (lower yield) instruments, this tactic exposes proponents to potentially serious liquidity problems when market conditions deteriorate and liquidity becomes scarce; this is precisely what happened during the crisis.

[117] See the important acts of testimony proffered to the United States Senate. See Subcommittee on Securities *et al.* (2008).

[118] See FAS 166 and 167, issued in June 2009 and applicable to the 2010 financial statements of financial institutions.

[119] According to the Report presented to Congress by the Board of Governors of the Federal Reserve System in October 2010 (as per the mandate conferred by Section 941 of the DFA, of which more will be said below), the application of the new accounting principles constrained the commercial banks to consolidate $437 billion in loans that had previously been 'off-balance-sheet'. See Board of Governors of the Federal Reserve System (2010, pp. 68-69).

Overall, the authorities have shown that they intend to intervene comprehensively in an institutional area that was previously completely unregulated. This intention coheres with the orientation of international regulatory developments, and in particular with the work currently under way within the FSB, which assigned regulation of the shadow banking system as a priority for the second half of 2011.

3.2.5. Regulating securitization

As stated in the first Chapter, the securitization market was the origin of the crisis, and all its activities, right up to the onset of the crisis, laid bare the structural weaknesses (and/or the absence) of the regulatory framework.

The first problem to emerge was the qualitative inadequacy of securitized assets, particularly of subprime mortgages; shortcomings in credit rating agencies' assessments, maturity transformation operations in the shadow banking system, and banks' off-balance-sheet commitments (above all for the large investment banks) to the specialised vehicles all followed in hot pursuit. The pathological nature of the 'securitization chain' explains how risk-prone (i.e. insufficiently backed) securities entered the portfolios of so many international investors.

In view of the foregoing, the need for regulatory intervention was obvious. However, the market to be regulated played an important role within the US financial system, and beyond. Securitization plays a primary role in the financing of the real economy. It enables loan originators to transform illiquid assets, ordinarily destined to remain in the portfolio until maturity, into tradable securities that provide new liquidity for further loan originating activities. The transformation of asset liquidity profiles brings concrete credit cost benefits to businesses and to households; in the knowledge that they can onsell loan contracts, originators can offer more favourable price conditions. Numerous segments of the U.S. and international financial market have based their activities on this operational model. After the crisis, the securitization market underwent a severe contraction,[120] and caused the authorities consternation because it complicated their dual, and in some respects conflictual, duties: on the one hand, to effect regulation; on the other, to reinstate a duly modified version of this important source of finance for the economy.

Subtitle D of title IX of the DFA, which is dedicated to the protection of investors and to the regulation of the securities market,[121] defines regulations for securitization operations. Point (b) of Section 941 specifies the fundamental provision of the new regulation, the so-called 'risk retention' rule,[122] and modifies the Securities Exchange Act (SEA) of 1934 by the insertion of the new Section 15F, as defined by the DFA. The

[120] The issue of asset backed securities, of diverse forms (variously backed by non-conforming residential mortgages, business loans and mortgages, car purchase loans, leasing operations, credit card loans, student loans, etc.), which verged on $2 trillion in 2006, had contracted to a tenth of that amount by the end of the third quarter of 2010. Source: Department of the Treasury (2011b).

[121] See "Title IX – Investor Protections and Improvements to the Regulation of Securities. Subtitle D – Improvements to the Asset-Backed Securitization Process".

[122] Otherwise defined as the 'skin in the game principle'.

principle of risk retention is in itself very simple: if the issuer of securities backed by loans of varying nature is bound to retain a quota of the risk bearing on the securitized assets, said issuer will evidently have an economic incentive to ascertain that the quality of the securitized assets is good. The fundamental principle of the regulation, in other words, is to align the economic interests of the issuer with those of the investor, and to ensure that said alignment occurs at the very beginning of the securitization chain, when assets to be securitized are selected, and their quality verified.

Point (b) of the SEA's new Section 15F mandates the regulatory agencies to launch, within 270 days of the DFA's enactment, regulations that establish the principle that each securitizer[123] must retain a portion of the risk created and transferred by means of securitization.[124]

In its postponement of this specific rulemaking, the DFA determines the standards that the new regulation must observe; in particular, it must:

- prohibit the securitizer from hedging the risk to be retained and the portion of risk retained from going below 5% (other than in specific conditions);[125]

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[123] "Section 15G. Credit Risk Retention. (A) Definitions. (3) The term 'securitizer' means – (A) an issuer of an asset-backed security; or (B) a person who organizes and initiates an asset backed securities transaction by selling or transferring assets, either directly or indirectly, including through an affiliate, to the issuer".

[124] "Section 15G. Credit Risk Retention. (B) Regulations Required. – (1) In General. – Not later than 270 days after the date of enactment of this section, the Federal banking agencies and the Commission shall jointly prescribe regulations to require any securitizer to retain an economic interest in a portion of the credit risk for any asset that the securitizer, through the issuance of an asset-backed security, transfers, sells, or conveys to a third party. (2) Residential Mortgages. – Not later than 270 days after the date of the enactment of this section, the Federal banking agencies, the Commission, the Secretary of Housing and Urban Development, and the Federal Housing Finance Agency, shall jointly prescribe regulations to require any securitizer to retain an economic interest in a portion of the credit risk for any residential mortgage asset that the securitizer, through the issuance of an asset-backed security, transfers, sells, or conveys to a third party".

[125] "Section 15G. Credit Risk Retention. (C) Standards For Regulations. – (1) Standards. – The regulations prescribed under subsection (b) shall – (A) prohibit a securitizer from directly or indirectly hedging or otherwise transferring the credit risk that the securitizer is required to retain with respect to an asset; (B) require a securitizer to retain – (I) not less than 5 percent of the credit risk for any asset – (I) that is not a qualified residential mortgage that is transferred, sold, or conveyed through the issuance of an asset-backed security by the securitizer; or (II) that is a qualified residential mortgage that is transferred, sold, or conveyed through the issuance of an asset-backed security by the securitizer, if 1 or more of the assets that collateralize the asset-backed security are not qualified residential mortgages; or (II) less than 5 percent of the credit risk for an asset that is not a qualified residential mortgage that is transferred, sold, or conveyed through the issuance of an asset-backed security by the securitizer, if the originator of the asset meets the underwriting standards prescribed under paragraph (2)(B); (C) specify – (I) the permissible forms of risk retention for purposes of this section; (II) the minimum duration of the risk retention required under this section; and (III) that a securitizer is not required to retain any part of the credit risk for an asset that is transferred, sold or conveyed through the issuance of an asset backed security by the securitizer, if all of the assets that collateralize the asset-backed security are qualified residential mortgages; (D) apply, regardless of whether the securitizer is an insured depository institution; (E) with respect to a commercial mortgage, specify the permissible types, forms, and amounts of risk retention that would meet the requirements of subparagraph (B), which in the determination of the Federal banking agencies and the Commission may include – (I) retention of a specified amount or percentage of the total credit risk of the asset; (II) retention of the first-loss position by a third-party purchaser that specifically negotiates for the purchase of such first loss position, holds adequate financial resources to back losses, provides due diligence on all individual assets in the pool before the issuance of the asset-backed securities, and meets the same standards for risk retention as the Federal banking agencies and the Commission require of the securitizer; (III) a determination by the Federal banking agencies and the Commission that

- specify the form and the duration of risk retention;
- exempt qualified residential mortgages, i.e. loans with attributes that are explicitly defined in the Act and that confer lower risk status to said loans;
- contain the principle that risk retention applies to all market participants, irrespective of whether the securitizer is a financial institution that is covered by deposit insurance;
- establish specific rules for commercial mortgages;
- define appropriate standards for risk retention relating to products such as CDOs, securities backed by CDOs and instruments similarly guaranteed by other asset backed securities;
- establish exemption criteria, essentially on the basis of reasons of public interest (public securities or ones that are guaranteed by the State or by state agencies).

The new regulations must also establish criteria that are differentiated on the basis of the nature of the assets upon which securitization is based,[126] as well as providing for the risk percentage bearing upon the securitizer to be offset by the percentage retained from the originator[127] of the securitized loans.

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the underwriting standards and controls for the asset are adequate; and (IV) provision of adequate representations and warranties and related enforcement mechanisms; and (F) establish appropriate standards for retention of an economic interest with respect to collateralized debt obligations, securities collateralized by collateralized debt obligations, and similar instruments collateralized by other asset backed securities; and (G) provide for – (I) a total or partial exemption of any securitization, as may be appropriate in the public interest and for the protection of investors; (II) a total or partial exemption for the securitization of an asset issued or guaranteed by the United States, or an agency of the United States, as the Federal banking agencies and the Commission jointly determine appropriate in the public interest and for the protection of investors, except that, for purposes of this clause, the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation are not agencies of the United States; (III) a total or partial exemption for any assetbacked security that is a security issued or guaranteed by any State of the United States, or by any political subdivision of a State or territory, or by any public instrumentality of a State or territory that is exempt from the registration requirements of the Securities Act of 1933 by reason of section 3(a)(2) of that Act (15 U.S.C. 77c(a)(2)), or a security defined as a qualified scholarship funding bond in section 150(d)(2) of the Internal Revenue Code of 1986, as may be appropriate in the public interest and for the protection of investors; and (IV) the allocation of risk retention obligations between a securitizer and an originator in the case of a securitizer that purchases assets from an originator, as the Federal banking agencies and the Commission jointly determine appropriate".

[126] "Section 15G. Credit Risk Retention. (C) Standards for Regulations. (2) Asset Classes. – (A) Asset Classes. – The regulations prescribed under subsection (b) shall establish asset classes with separate rules for securitizers of different classes of assets, including residential mortgages, commercial mortgages, commercial loans, auto loans, and any other class of assets that the Federal banking agencies and the Commission deem appropriate. (B) Contents. – For each asset class established under subparagraph (A), the regulations prescribed under subsection (b) shall include underwriting standards established by the Federal banking agencies that specify the terms, conditions, and characteristics of a loan within the asset class that indicate a low credit risk with respect to the loan".

[127] "Section 15G. Credit Risk Retention. (D) Originators. – In determining how to allocate risk retention obligations between a securitizer and an originator under subsection (c)(1)(E)(IV), the Federal banking agencies and the Commission shall – (1) reduce the percentage of risk retention obligations required of the securitizer by the percentage of risk retention obligations required of the originator; and (2) consider – (A) whether the assets sold to the securitizer have terms, conditions, and characteristics that reflect low credit risk; (B) whether the form or volume of transactions in securitization markets creates incentives for imprudent origination of the type of loan or asset to be sold to the securitizer; and (C) the potential impact of the risk retention obligations on the access of consumers and businesses to credit on reasonable terms, which may not include the transfer of credit risk to a third party".

Finally, point (e) specifies the criteria, beyond those already defined, upon the basis of which the regulatory agencies may prescribe exemption[128] from the obligations on account of special circumstances regarding the subject (the nature of any given institution) or the type of assets securitized.

The impact of the new regulations defined by Section 941 of the DFA will be analysed and assessed in a study conducted by the Board of Governors of the Federal Reserve, in conjunction with other regulatory agencies.[129] Additionally, the President of

[128] "Section 15G. Credit Risk Retention. (E) Exemptions, Exceptions, and Adjustments. – (1) In General. – The Federal banking agencies and the Commission may jointly adopt or issue exemptions, exceptions, or adjustments to the rules issued under this section, including exemptions, exceptions, or adjustments for classes of institutions or assets relating to the risk retention requirement and the prohibition on hedging under subsection (c)(1). (2) Applicable Standards. – Any exemption, exception, or adjustment adopted or issued by the Federal banking agencies and the Commission under this paragraph shall – (A) help ensure high quality underwriting standards for the securitizers and originators of assets that are securitized or available for securitization; and (B) encourage appropriate risk management practices by the securitizers and originators of assets, improve the access of consumers and businesses to credit on reasonable terms, or otherwise be in the public interest and for the protection of investors. (3) Certain Institutions and Programs Exempt. – (A) Farm Credit System Institutions. – Notwithstanding any other provision of this section, the requirements of this section shall not apply to any loan or other financial asset made, insured, guaranteed, or purchased by any institution that is subject to the supervision of the Farm Credit Administration, including the Federal Agricultural Mortgage Corporation. (B) Other Federal Programs. – This section shall not apply to any residential, multifamily, or health care facility mortgage loan asset, or securitization based directly or indirectly on such an asset, which is insured or guaranteed by the United States or an agency of the United States. For purposes of this subsection, the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, and the Federal home loan banks shall not be considered an agency of the United States. (4) Exemption for Qualified Residential Mortgages. – (A) In General. – The Federal banking agencies, the Commission, the Secretary of Housing and Urban Development, and the Director of the Federal Housing Finance Agency shall jointly issue regulations to exempt qualified residential mortgages from the risk retention requirements of this subsection. (B) Qualified Residential Mortgage. – The Federal banking agencies, the Commission, the Secretary of Housing and Urban Development, and the Director of the Federal Housing Finance Agency shall jointly define the term 'qualified residential mortgage' for purposes of this subsection, taking into consideration underwriting and product features that historical loan performance data indicate result in a lower risk of default, such as – (I) documentation and verification of the financial resources relied upon to qualify the mortgagor; (II) standards with respect to – (I) the residual income of the mortgagor after all monthly obligations; (II) the ratio of the housing payments of the mortgagor to the monthly income of the mortgagor; (III) the ratio of total monthly installment payments of the mortgagor to the income of the mortgagor; (III) mitigating the potential for payment shock on adjustable rate mortgages through product features and underwriting standards; (IV) mortgage guarantee insurance or other types of insurance or credit enhancement obtained at the time of origination, to the extent such insurance or credit enhancement reduces the risk of default; and (V) prohibiting or restricting the use of balloon payments, negative amortization, prepayment penalties, interest-only payments, and other features that have been demonstrated to exhibit a higher risk of borrower default. (C) Limitation on Definition. – The Federal banking agencies, the Commission, the Secretary of Housing and Urban Development, and the Director of the Federal Housing Finance Agency in defining the term 'qualified residential mortgage', as required by subparagraph (B), shall define that term to be no broader than the definition 'qualified mortgage' as the term is defined under section 129C(c)(2) of the Truth in Lending Act, as amended by the Consumer Financial Protection Act of 2010, and regulations adopted thereunder. (5) Condition For Qualified Residential Mortgage Exemption. – The regulations issued under paragraph (4) shall provide that an asset-backed security that is collateralized by tranches of other asset-backed securities shall not be exempt from the risk retention requirements of this subsection. (6) Certification. – The Commission shall require an issuer to certify, for each issuance of an asset-backed security collateralized exclusively by qualified residential mortgages, that the issuer has evaluated the effectiveness of the internal supervisory controls of the issuer with respect to the process for ensuring that all assets that collateralize the asset-backed security are qualified residential mortgages".

[129] "Section 941(c) Study on Risk Retention. – (1) Study. – The Board of Governors of the Federal Reserve System, in coordination and consultation with the Comptroller of the Currency, the Director of the Office of

the FSOC is responsible for commissioning a study on the macroeconomic effects of the new requirements.[130]

Sections 943 and 945 of the Act[131] specify two provisions respectively aimed at conferring greater transparency to the issuance of asset backed securities and at defining mechanisms of alignment between the interests of securitization originators and those of investors.

Herein lies the substance of the so-called 'representations and warranties', the specification of the criteria on the basis of which loans then securitized were granted: the rationale of this mechanism is that of endowing the securitization process, from the very beginning, with greater transparency, so as to prevent future pathology. The credit

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Thrift Supervision, the Chairperson of the Federal Deposit Insurance Corporation, and the Securities and Exchange Commission shall conduct a study of the combined impact on each individual class of assetbacked security established under section 15G(c)(2) of the Securities Exchange Act of 1934, as added by subsection (b), of – (A) the new credit risk retention requirements contained in the amendment made by subsection (b), including the effect credit risk retention requirements have on increasing the market for Federally subsidized loans; and (B) the Financial Accounting Statements 166 and 167 issued by the Financial Accounting Standards Board. (2) Report. – Not later than 90 days after the date of enactment of this Act, the Board of Governors of the Federal Reserve System shall submit to Congress a report on the study conducted under paragraph (1). Such report shall include statutory and regulatory recommendations for eliminating any negative impacts on the continued viability of the asset-backed securitization markets and on the availability of credit for new lending identified by the study conducted under paragraph (1)".

[130] "Section 946. Study on the Macroeconomic Effects of Risk Retention Requirements. (a) Study Required.– The Chairman of the Financial Services Oversight Council shall carry out a study on the macroeconomic effects of the risk retention requirements under this subtitle, and the amendments made by this subtitle, with emphasis placed on potential beneficial effects with respect to stabilizing the real estate market. Such study shall include – (1) an analysis of the effects of risk retention on real estate asset price bubbles, including a retrospective estimate of what fraction of real estate losses may have been averted had such requirements been in force in recent years; (2) an analysis of the feasibility of minimizing real estate price bubbles by proactively adjusting the percentage of risk retention that must be borne by creditors and securitizers of real estate debt, as a function of regional or national market conditions; (3) a comparable analysis for proactively adjusting mortgage origination requirements; (4) an assessment of whether such proactive adjustments should be made by an independent regulator, or in a formulaic and transparent manner; (5) an assessment of whether such adjustments should take place independently or in concert with monetary policy; and (6) recommendations for implementation and enabling legislation. (b) Report. – Not later than the end of the 180-day period beginning on the date of the enactment of this title, the Chairman of the Financial Services Oversight Council shall issue a report to the Congress containing any findings and determinations made in carrying out the study required under subsection (a)".

[131] "Section 943. Representations and Warranties In Asset-Backed Offerings. Not later than 180 days after the date of enactment of this Act, the Securities and Exchange Commission shall prescribe regulations on the use of representations and warranties in the market for asset backed securities (as that term is defined in section 3(a)(77) of the Securities Exchange Act of 1934, as added by this subtitle) that – (1) require each national recognized statistical rating organization to include in any report accompanying a credit rating a description of – (A) the representations, warranties, and enforcement mechanisms available to investors; and (B) how they differ from the representations, warranties, and enforcement mechanisms in issuances of similar securities; and (2) require any securitizer (as that term is defined in section 15G(a) of the Securities Exchange Act of 1934, as added by this subtitle) to disclose fulfilled and unfulfilled repurchase requests across all trusts aggregated by the securitizer, so that investors may identify asset originators with clear underwriting deficiencies. Section 945. Due Diligence Analysis and Disclosure in Assetbacked Securities Issues. Section 7 of the Securities Act of 1933 (15 U.S.C. 77g), as amended by this subtitle, is amended by adding at the end the following: (d) Registration Statement for Asset-Backed Securities. – Not later than 180 days after the date of enactment of this subsection, the Commission shall issue rules relating to the registration statement required to be filed by any issuer of an asset-backed security (as that term is defined in section 3(a)(77) of the Securities Exchange Act of 1934) that require any issuer of an asset-backed security – (1) to perform a review of the assets underlying the assetbacked security; and (2) to disclose the nature of the review under paragraph (1)".

rating agencies, under the guidance of SEC regulation, are bound in their assessments to demonstrate the criteria in question and any divergences from the same in any securitization issuance. The importance of this provision is that, should pathologies explode, and should the criteria specified in 'representations and warranties' be violated, investors have the right to seek redress from securitizers.

The provisions of Section 945 move in the same direction by requiring the securitizer to provide an analysis, here termed 'due diligence', of the assets underlying securitized instruments, and to render the results of said analysis public. In this case too, the Act assigns responsibility for defining the contents of the due diligence provision to the SEC.

In October 2010,[132] the Board of Governors of the Federal Reserve published the study, prescribed in Section 941, that prospectively analyses the rulemaking expected of the regulatory agencies. The study begins by noting that securitization is an important source of financing for the Nation's economy and that, accordingly, any pertinent regulation should simultaneously protect investors' interests and the existence of securitization itself. The study then reviews all the varying types of securitization, describes the investor protection mechanisms in force up until the crisis, and recognises that the latter mostly failed. It confirms the soundness of the Act's provision that risk retention mechanisms be differentiated on the basis of the diverse types of operation. It also formulates some of the fundamental principles that the regulatory agencies must observe in the definition of the specific rules prescribed by the DFA.[133]

As required by Section 946, in January 2011 the President of the FSOC published a report on the macroeconomic implications of the risk retention rule (Geithner 2011). The report thoroughly addresses the dilemma faced by the authorities as they rewrite the rules of securitization: the importance of securitization to economic growth, on the one hand, the deleterious effects of inadequate regulation and of instrumental abuse on the other. It presents the need for regulation as unquestionably evident, and argues that if properly implemented, the risk retention rule will help to stabilise this important market. At the same time, the report advises against excessively restrictive application

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[132] Board of Governors of the Federal Reserve System (2010).

[133] Board of Governors of the Federal Reserve System (2010, pp. 3-4): "Specifically, the rulemaking agencies should: 1. Consider the specific incentive alignment problems to be addressed by each credit risk retention requirement established under the jointly prescribed rules. 2. Consider the economics of asset classes and securitization structure in designing credit risk retention requirements. 3. Consider the potential effect of credit risk retention requirements on the capacity of smaller market participants to comply and remain active in the securitization market. 4. Consider the potential for other incentive alignment mechanisms to function as either an alternative or a complement to mandated credit risk retention. 5. Consider the interaction of credit risk retention with both accounting treatment and regulatory capital requirements.6. Consider credit risk retention requirements in the context of all the rulemakings required under the Dodd-Frank Act, some of which might magnify the effect of, or influence, the optimal form of credit risk retention requirements. 7. Consider that investors may appropriately demand that originators and securitizers hold alternate forms of risk retention beyond that required by the credit risk retention regulations. 8. Consider that capital markets are, and should remain, dynamic, and thus periodic adjustments to any credit risk retention requirement may be necessary to ensure that the requirements remain effective over the longer term, and do not provide undue incentives to move intermediation into other venues where such requirements are less stringent or may not apply".

of the risk retention principle, lest such application lead to market blockage and consequently to negative macroeconomic trends.[134]

In response to the requirement stipulated in Section 941 of the DFA, the agencies responsible for rulemaking have published a proposal for legislation in the Federal Register. The proposal explains the risk retention technicalities to which securitizers and originators are subjected.[135] For present purposes, two features of this complex document stand out:

- the clarification that the risk retention principle is part of a wider regulatory process for the securitization market, and that the 5% retention coefficient should be considered as a minimum value and as such subject to increase in specific circumstances;
- the listing of all the possible ways in which the risk retention principle may be applied;[136] the variety of the options available to securitization market participants is intended to facilitate operational flexibility by recognising the heterogeneity of such operations and the consequent differences in their respective structures.

The agencies distributed the joint regulatory proposal to market participants with a request for comments and suggestions to be returned by mid-June 2011.

3.2.6. Conclusions

Based on the aspects of reform presented in the current chapter, the following concluding remarks will consider the possible impact of reform on the United States banking system.

The necessary premise is that the process of re-regulation is still under way, and that we are far from being in a position to understand what definitive regulatory frame-

[134] Geithner (2011, pp 3-4): "Although a risk retention framework can help align incentives and improve underwriting standards, the macroeconomic implications of risk retention are complex. A risk retention framework can incent better lending decisions and consequently help strengthen the quality of assets underlying a securitization. It may also help mitigate some of the pro-cyclical effects that asset-backed securitization can have on the economy. However, if overly restrictive, risk retention could constrain the formation of credit, which could adversely impact economic growth. The challenge is to design a risk retention framework that maximizes benefits while minimizing its costs".

[135] Department of the Treasury (2011b).

[136] For example, vertical risk retention occurs when a securitizer withholds an identical percentage of all the tranches of asset backed securities issued. Horizontal risk retention occurs when the minimum percentage is withheld exclusively from tranches of securities at greatest risk; in this scenario, security holders will bear the credit risk only when the retention percentage is reached. The so-called 'L-shaped' risk retention is a combination of the previous two (for example, 2.5% of vertical retention and 2.5% of horizontal retention). The listing of additional permissible forms of retention is in keeping both with recognition of the complexity of the securitization market and with the precept that, beyond the minimum 5% risk retention mechanism as a *sine qua non*, market participants should be provided with Appropriate flexibility. Through these provisions the authorities aimed at restoring the functioning of a market which was substantially blocked after the outbreak of the crisis.

work will emerge from the reform. The concrete translation of the principles defined by the DFA into specific regulation will in many cases be left to the previously mentioned regulatory agencies, whose total output of specific provisions will be necessarily high;[137] some provisions are already in effect, others fall due in the coming months, yet others are not subject to explicit deadlines. Rulemaking in the post reform law phase will not lack debate or conflict, whether in the rulemaking agencies themselves, or before judges in court, where regulators and the regulated will contest bitter trials.

Despite these necessary caveats, some initial observations on the reform and on its potential effects are appropriate. The first is that in the United States, regulatory intervention has affected banking governance at all levels: regulation, supervision and crisis management. In Europe, the main achievement of reform is the new architecture of supervision, and the shift of the supervisory epicentre from a national to a European level; in the future, the crisis management project here described could produce substantial developments.

Recognising – in our opinion, correctly – the structural weaknesses of the banking system prior to the crisis, regulators in the United States show a clear desire to extensively re-design said system. The Volcker Rule, the reining-in of the shadow banking system, the regulation of securitization operations, the new accounting rules for the consolidation of off-balance-sheet vehicles, the new provisions governing derivates (see Chapter 5), have collectively and significantly modified the *modus operandi* of the banks by imposing previously non-existent limits and by inverting a medium-term path towards increasingly liberalised activities.

Judgements on the effective scope of these regulatory innovations differ widely. The reform's critics consider the current provisions to be insufficiently severe, at least in comparison with the regulators' initial declarations of intent. Proponents of this criticism generally cite the softening both of the Volcker Rule and of the constraints on derivative trading as supporting evidence. Another criticism is that the reform would not secure one of its major and long declared aims: that of avoiding any repetition of the 'too big to fail' effect.

The provisions of the incipient regulatory framework would not be entirely effective in limiting the growth and the increasing complexity of financial institutions, nor would they isolate the major institutions from the safety network that the U.S. system provides. According to some commentators,[138] the liquidation procedures prescribed by the DFA would perpetuate life-saving mechanisms for the large financial institutions. Another criticism is that the process of re-regulation is in part progressive, and hence gives the financial industry's lobbies time to exercise opposition. With the crisis ever further from the front pages, and the fading of a climate that favours severity, such opposition will have an increasing chance of success.

Opposition to the reform starts with members of the financial community, who see the process as imposing excessive limitations and hence as weakening the profitability

[137] According to Copeland (2010), the regulatory agencies will issue around 250 provisions in all. Some will be issued mandatorily, because based on specific provisions of the reform law, while others will be at the discretion of the agencies.
[138] Wilmarth (2011); Fein (2010b); Schwarcz (2011); Omarova (2011); Cluchey (2011); Awrey (2010).

and the competitiveness of the whole U.S. financial industry. Various recently published studies have reiterated the loss-of-competitiveness argument, at least as regards certain areas of financial activity.[139]

One reason for optimism, in our opinion justified, is the fact that oversight of the large banks is now unequivocally assigned to the Federal Reserve,[140] which enjoys greater powers than in the past, and can thus exercise a fair degree of discretion and differentiate its actions on a case-by-case basis.[141]

It is self-evident that the Fed, in its capacity as the central bank, should assume much of the responsibility for the effectiveness of reform; it is richly endowed with competences and resources, with experience in intervening in financial markets, and with analytical capacities that can adapt to the specific circumstances of single cases. Confronted with a choice between wider and more exhaustive regulation designed to constrain financial institutions' activities, on the one hand, and the extension of greater interventional powers to the Federal Reserve on the other, the reform law appears to have opted (rightly, in our opinion) for the second alternative. It will be the concrete actions of the Federal Reserve that define the quality of the future development of the US financial industry.

[139] J.P. Morgan Cazenove (2011). This report reveals the conviction that the application of the Volcker Rule and of the new regulation that obliges banks to push out derivative activities will disadvantage the major U.S. banks in their investment banking activities. Public Policy Research, July-August 2010.

[140] On the implementation of the DFA by the Federal Reserve, see Bernanke (2011). On the role of central banks in crises, see the reflections, which preceded approval of the reform, contained in Cukierman (2011). The idea that excessive powers were attributed to the Federal Reserve, and that the DFA impacted negatively on innovation and competitiveness in the U.S. financial industry, is expressed, immediately after approval of the reform law, by Wallison (2010). For analogous criticism of the overall setup of the reform law, see Skeel (2010).

[141] For critical appraisal of the theme of discretionary choice as exercised by the supervisory authorities, and of its effectiveness in the context of prudential regulation, see Tonveronachi (2010).

Chapter 4

Review of the Agreements Regarding Prudential Supervision of Banks (Basel 3)

4.1. Foreword

Stability of the banking and international financial system, a 'public good' essential in accompanying and encouraging international economic growth, was addressed, as of the Seventies, as a target to achieve through joint action on an international scale. Economy ministers, regulators and supervisors of leading industrialised countries started preparing the way for the definition of the most suitable procedures to implement this action, finding in the so-called 'Basel Committee',[1] the most qualified forum to encourage comparison and agree on action to take.

Since then, the Committee, which gradually grew to encompass the authorities of new countries which had become important in the international economy and finance,[2] has become the place appointed to guarantee cooperation between domestic authorities and banking supervision. As of the Eighties, the theme of international banking system stability has become increasingly significant on the Committee's agenda. Within the framework of those years, featuring gradual liberalisation of financial activities in leading industrialised countries and growing integration, on an international scale, of domestic systems, a new governance approach, called 'prudential supervision' gradually took shape. On the basis of this orientation, banks were acknowledged the right to more discretionally decide their allocation choices, on condition they preserved enough capital to face risks ensuing from investments carried out. As compared to the previous system of 'structural supervision', based on a series of obligations and explicit prohibitions, prudential supervision seemed to be decidedly more oriented towards encouraging the entrepreneurial freedom of financial companies, of stimulating competition between the latter, and of guaranteeing a higher level of efficiency to the benefit of clients, savers and borrowers.

From this viewpoint, capital became the real defence line against risks taken on by a banking company when exerting its own entrepreneurial activity. The Committee's

[1] The Committee was created at the end of 1974 on initiative taken by central banks in G-10 countries, in the conviction that international financial problems, at the time currency crises, could only be tackled through close international cooperation.

[2] Today, the following countries are part of the Committee: Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong, India, Indonesia, Italy, Japan, Korea, Luxemburg, Mexico, Holland, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States.

work, aimed at drawing up regulations concerning capital in banks,[3] materialised in 1988 with the 'Basel Capital Agreement', on the basis of which provision was made that banks should keep enough capital in proportion to the risk taken on.[4] The method adopted in what is today called 'Basel 1', for the measuring of risks and correlated capital, seems to draw inspiration from a simple criterion today, coherent with the historical period in which the Agreement was defined; its implementation, entrusted to the monitoring authorities of individual states, has guaranteed a long period of stability for the international banking system.

Transformations which took place in the financial industry in the Nineties, gradually made the Agreement's methodology obsolete and led to considering the possibility of introducing changes which would take into account the greater complexity of financial activities, as well as of the gradual upgrading of risk management practices developed by leading financial institutions. Preliminary work to launch the new Agreement ('Basel 2'), started in 1999 and was completed with its issue in 2004 and its adoption in 2008.[5] The new Agreement confirms the first's approach, establishing proportions between risks undertaken and capital required to tackle them; the Agreement also considers a variety of risks (market and operating risks[6] further to credit risk) and offers banks the faculty of choosing between two different calculation methods: the standard approach, very similar to the first version in the Agreement, and the so-called 'internal rating' based approach, in its turn structured into two versions, basic and advanced. The second option provides for banks to develop internal methodologies, in order to measure the size and composition of risks undertaken; the difference between the basic and advanced methods lies in extending the enforcement of internal measuring methodologies.[7] Leading banks operating on an international level have decided to migrate towards advanced methodologies, in the belief that they can obtain, on one hand, more accurate assessments and, on the other, a substantial 'capital saving'.

[3] Substantial attention was placed on the capitalisation of banks during the first half of the Eighties; in particular, there was fear about the difficulties faced by many leading international banks, heavily exposed in emerging countries, which then had to face crises in that historical phase and were unable to meet with debts incurred by the banks themselves.

[4] Obviously, the Committee did not have and does not have, the power to take action within the regulatory framework of individual countries, but only has the faculty to make recommendations and express orientations; representatives of supervisory authorities participating in the Committee and who share adopted choices and resolutions, undertake to transfer measures approved by the agreements reached during the Committee's work into their own systems.

[5] In truth, as we shall see below, adoption of the body of regulations giving implementation to the second version of the Agreement was not simultaneous; 2008 marks implementation in Europe, whereas implementation was postponed by about two years in the United States.

[6] Amendment of the first Agreement, aimed at introducing capital allocation for market risk, historically comes before the launch of the new Agreement, which was actually defined during 1997.

[7] In the basic version, banks evaluate, according to internal models, default probabilities for their borrowers, whereas the other two important parameters to assess credit risk, loss in case of default ('loss given default') and exposure at time of default ('exposure at default'), are standard coefficients decided by supervisory authorities. Likewise, operating risk is established on a lump-sum basis, as a percentage of the intermediation margin. On the other hand, according to the advanced methodology, banks estimate internally all parameters on which credit risk depends and operating risk is also entirely calculated according to models which assess its expected size on the basis of historically endured losses on different lines of business. See Basel Committee for banking supervision (2004).

On the basis of the new Agreement's guidelines, regulation regarding bank capital requirements in the European Union has been defined, before the outbreak of the crisis, by the 2006 Directives 48 and 49.[8] Through the latter, European authorities absorbed the contents of the new Agreement on capital as set forth by the Basel Committee, which modified the first 1988 Agreement. As regulations launched in member states to implement the aforesaid directives came into force between the beginning of 2007 and beginning of 2008, the European banking system entered the crisis having the benchmark of the first directive on capital,[9] while the implementation of Basel 2 guidelines remained at the initial stage.

The outbreak of the crisis suddenly put the need to modify the newly defined regulatory framework on the carpet.

First of all, while waiting for the launch of the Agreement's third version on capital, the Basel Committee issued, in July 2009, a modification to criteria contained in the Basel Agreement 2, as regards calculation of market risk[10] ensuing from the 'trading book'; after new regulation was agreed and reviewed in June 2010, usually referred to as 'Basel 2.5', it will come into force as of the beginning of 2012. The aim in reviewing regulation is to set up protection against risks arising inside the 'trading book', the portfolio containing securities held for trading purposes, by arranging an increase in capital requirements through review of their calculation requisites. In the first place, banks – which establish capital requirements for assets held in the trading portfolio on the basis of internal models – shall have to submit their assessments to conditions of stress based on data over the last twelve months. Secondly, models used shall have to take into account default risk and 'migration risk',[11] by integrating measures based on interest rate risk with assessment of risks relating to debtor's credit profile. On the whole,[12] the new regulations will increase capital requirements for securities trading; the procedures adopted are the answer to evidence which surfaced with the crisis, when it became clear that the trading book was a source of heavy losses and how, at the same time, the framework to calculate market risk anticipated by Basel 2 was unable to capture the overall risk arising in this specific area, in particular credit risk.

In Europe, therefore, the process was carried on to review agreements on capital with the launch of Directive 2009/111/EC13, known as CRD II, insofar as it represents the first amendment to the 2006 Directive; among other particularly current issues of

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[8] Directive of the European Parliament and of the Council (2006a; 2006b).

[9] When saying 'first European directive on capital (Capital Requirements Directive – CRD), reference is usually made to Directive No. 48/2006 (49/2006 concentrates, in fact, on 'investment firms'), with the aim of differentiating the first from subsequent amendments introduced by directives issued subsequently, the so-called CRD II, CRD III and CRD IV, which we shall discuss further below.

[10] Basel Committee on Banking Supervision (2009a).

[11] By the term 'migration risk', we mean the possibility that a debtor's rating can become worse over a given period of time. See Basel Committee on Banking Supervision (1999, page 32): "In general, the random variable assumed to determine the change in a customer's risk rating, including default (e.g. customer asset value or net worth) is called the migration risk factor".

[12] The review of the Agreement contains another two rules: the first is that positions in securities ensuing from securitisation entered in the trading book will have to submit to the same capital requirements scheduled in the 'banking book'; the second concerns the fact that capital requirements as related to trading of securities ensuing from securitisation will be determined on the basis of the sum of net total sales and net total purchases. The minimum capital requirement will be equivalent to at least 8%.

the crisis, the Directive tackles capital requirements for securitisation,[13] how to deal with large exposure by banks towards major clients and how to deal with hybrid capitalisation instruments.[14]

A second amendment to the directive on capital was made with Directive 2010/7/EC, known as CRD III,[15] which disciplines so-called 're-securitisation' activity, capital requirements against risks undertaken in bank 'trading books' and principles regarding executive compensation policies, analysed in Chapter 7.

A third amendment, the so-called CRD IV, is under discussion by European Union governance bodies. Thanks to this last intervention, most of the innovations contained in the new Basel Agreement (Basel 3) will be introduced and greater uniformity will be given to capital regulation, through conversion of all the directives carried in a 'single rule book', a consolidation act for capital regulations, in the aim of creating greater uniformity in regulations for all EU countries.

In the United States, implementation of the Basel 2 followed a different route. As from the start, United States regulators made it clear that their orientation would be towards implementation of the new regulations for a very limited number of financial institutions, those featuring a particularly significant dimension (total assets over 250 billion dollars) and relevant foreign activity (over 10 billion exposure).[16] According to this approach, announced during work to establish the new Agreement's structure, US banks subject to the capital requirements set by the new procedures would have been about ten.[17] United States regulators gave their reasons for this limited implementation in various ways. The first line of reasoning was related to assessment of the Agreement's technical contents; according to United States authorities, only the version based on internal rating, particularly the advanced version, could produce significant benefits as regards measuring and managing risk. Moreover, their reasoning was also that this approach could not be implemented in all United States banks, featuring smaller dimensions, less resources and an unsophisticated business model. Under these conditions, transition costs would be higher than benefits. Another reason put forward was to con-

[13] In Chapter 2, Directive 2006, Section 7 (Art. 122a) is introduced, setting the principle – similar to the one introduced in the United States with the DFA – of risk retention (higher or equivalent to 5%) on securitisation operations.
[14] Eligibility criteria are established with reference to these instruments.
[15] Directive of the European Parliament and of the Council (2010).
[16] See Herring (2007).
[17] Authorities have scheduled implementation of the regulations provided for in the more advanced version of the new Agreement for banks supporting the idea, with risk calculated by means of the internal rating method; therefore the so-called 'standardized approach' was excluded, unlike provisions for Europe, an approach which is simpler to implement and very similar to the first Basel Agreement. According to Herring, the new Agreement would have been implemented in 11 institutions (Bank of America, JP Morgan Chase, Citibank, Wachovia, Wells Fargo, Washington Mutual, HSBC*, State Street*, Bank of New York*, Northern Trust*, Deutsche Bank*; the banks with an asterisk would have been included owing to their international exposure). On the whole, these banks represented 42% of the United States banking system's total assets. 8,700 banks, representing the remaining 52% of the system's total assets, were excluded from implementation of the new requirements and new calculation criteria. For the other banks, implementation of regulations in the new Agreement was optional and, always according to Herring's report, authorities had forecast that a further ten institutions would have voluntarily opted for implementation of the new regulations.

sider the fact that United States banks are already submitted to supervisory control similar to the provisions contained in the Agreement (Pillar 2) and to disclosure constraints provided for in Pillar 3. However, the most important reason concerned provisions contained in the 1991 Federal Deposit Insurance Corporation Improvement Act. On the basis of this Act, financial institutions, classified, on the basis of standards shared by all regulatory agencies, into four categories, according to their capital, were submitted to a leverage limit and bound to take corrective action should their capital base decrease ('capital-base prompt corrective action'). By virtue of all these considerations, United States authorities believed, on one hand, that measurement and control of risk were sufficiently protected and, on the other, that capital was adequate.

Moreover, according to regulators, limited and selective implementation of the new Basel 2 Agreement would, most likely, curtail opposition by the financial industry; from their point of view, implementation of the new regulations, for which they believed they were already sufficiently equipped, led to expecting a decrease, by means of the new calculation methods, in capital required and, what is more, had them convinced that, in exchange for the implementation of the new regulations, authorities would remove leverage limits, provided for by US regulations, but not according to the dictates of the new agreement.

Final approval of regulations able to definitely confirm implementation of the new agreement took place at the end of 2007, on the financial crisis beginning,[18] and the highly selective and explicit implementation principles set forth beforehand were complied with, after having overcome non-negligible opposition by leading banks potentially involved in having to implement said principles. Moreover, the final text of the regulations provided for a transitory period, having the effect of delaying enforcement of these regulations by two years, as compared to other countries, Europe in particular.

4.2. Towards Basel 3

Crisis in fact interrupted the implementation process, as regards the regulations provided for in the second agreement, rendering further, more prudential, modification necessary.

Losses generated in banking assets, owing to the crisis, caused by insolvencies in mortgage-backed securities, have impoverished bank capital, in many cases revealing the latter's structural insufficiency as compared to the size of risks which surfaced during the crisis. Shortages in capital became apparent on two different fronts: the first, regarding quantity, became obvious when the heavy losses incurred by banks during the crisis could not be tackled; the second, regarding quality, surfaced with reference to so-called 'hybrid' instruments included by banks within their supervisory capital, on the basis of dictates contained in the previous agreement on capital. We are dealing with instruments having technical features similar to bonds, accepted as part of capital by virtue of various clauses, such as, typically, their being subordinated, which increases

[18] See Department of the Treasury (2007).

their risk as compared to bonds, thereby making them a kind of 'in-between' instrument between ordinary debt and full capital. During the crisis, it became clear that these instruments were only able to absorb losses in case of bank default, thus thwarting the stability they had to guarantee.[19]

The incapacity of capital, in many international banks, to guarantee its stability, triggered off a new review process for the agreement which had just come into force, in the aim of drawing up a new text which would avoid a repetition of the events which had generated the crisis.

The Basel Committee undertook the review process by publishing two documents for consultation in December 2009,[20] in the aim of receiving opinions and observations from market participants; in September 2010, a shared position was reached inside the Committee itself, which issued the agreement's final text, approved by G-20 representatives during the summit held in Seoul in November 2010.

On defining the inspiring principles for the review of discipline regarding financial institution prudential supervision, the Committee began by taking due note of the decisive factors having caused the crisis.

Two aspects were put under observation and identified as reform cornerstones: on one hand, the amount and quality of capital resources to face risk taken on by banks and, on the other, the so-called 'liquidity reserves'.

As regards the first, Committee members took due note of the fact that capital resources accumulated by banks to guarantee their own stability, have proven resoundingly insufficient as compared to risks which surfaced during the crisis. To solve this problem, at the international level, public action was taken on by states, action which governments all over the world would certainly not repeat today.

As to the second aspect, regarding liquidity policies, Committee members have acknowledged the need to take regulatory action on bank behaviour, thus filling a gap in previous regulations.

Over time, banking activity evolution led to believing that liquidity was a resource always available for banks needing it; in different market conditions, belief was that cost of funding could be changed, but there was never any doubt as to whether funding itself was possible. Market modernisation and integration had contributed towards creating an international liquidity market, of which the international inter-bank market is fully representative, a compensation marketplace for banks who could lend or borrow liquid resources according to their respective position, contingent or structural. The habit of handling liquidity problems by turning to the market gradually led banks to decreasing minimum levels, near-on zero, of internal liquidity reserves, considered as costly protection as compared to a risk which would probably never arise. The crisis has resoundingly belied this conviction, on the contrary highlighting the pathological correlation between illiquidity and insolvency. Crisis of some institutions undermined

[19] See Basel Committee on Banking Supervision (2010b).
[20] The two documents respectively concern, on one hand, the issue of bank capital requirements and, on the other, measurement and protection of the liquidity risk; this second type of risk had never been considered in previous versions of agreements, as will be discussed in the following pages. See Basel Committee on Banking Supervision (2009c; 2009d).

the reciprocal trust between banks and gradually dried up the international inter-bank market. Banks in need of liquidity searched for a solution to their problems by selling assets; what is more, in a market having suddenly become scantily liquid and heavily 'risk adverse', these sales brought about a decrease of asset price. Ensuing losses further damaged banks' profitability and, for these same reasons, banks' capital. Only massive action by central banks prevented the illiquidity/insolvency spiral to continue and lead to a systemic crisis.

For the reasons summed up above, reform promoted by the Basel Committee has weighed on two aspects; on one hand, banks have been asked to reinforce their capital and, on the other, to provide for internal liquidity reserves, so as to ward off repetition of the events which occurred during the crisis.

4.2.1. New capital requirements

The new discipline regarding capital requirements set forth, following work by the Committee, is structured on the cornerstones described below.

The first line of action materialises with an increase in size, quality and transparency of bank capital.

The capital of financial institutions is split into Tier 1 Capital (in its turn divided into Common Equity Tier 1 and additional Tier 1) and Tier 2 Capital.

Inside Tier 1, the importance of top quality capital, 'common equity',[21] is stressed, its total being raised to 4.5% of risk weighted assets against the 2% currently in force. Hybrid instruments calculable for Tier 1 purposes are limited[22] and a 6% minimum level of Tier 1 to risk weighted assets is set. The new Agreement, moreover, define a gradual process to exclude calculation of instruments,[23] to date widely used, but which during the crisis have not shown sufficient quality to guarantee absorption of losses.

In the agreement, definition of Tier 2 Capital also draws inspiration from stricter criteria, in the aim of excluding liabilities which the crisis have shown to be inadequate, as compared to loss coverage requirements.

[21] Emphasis on 'common equity', formed by shares issued and non-distributed profit is justified by the fact that it is this kind of capital which reveals greater capacity to absorb losses. The text of the Agreement defines fourteen criteria which must be met in the aim of being able to include capital items inside the Common Equity Tier 1. Aggregate defined in this way is calculated net of assets such as deferred taxes, participations in insurance companies, minority interests in participated companies. The above-mentioned deductions are aimed at guaranteeing a higher quality of bank capital.

[22] "The remainder of the Tier 1 capital base must be comprised of instruments that are subordinated, have fully discretionary non cumulative dividends or coupons and have neither a maturity nor an incentive to redeem". The Agreement clearly states the five inclusion criteria which must be met with in the aim of being able to include some special liabilities inside the Additional Tier 1 Capital. See Basel Committee on Banking Supervision (2009c; 2010d).

[23] "Innovative hybrid capital instruments with an incentive to redeem through features like step up clauses, currently limited to 15% of Tier 1 capital base, will be phased out". See Basel Committee on Banking Supervision (2010d).

‘Total capital ratio’, defined by totalling Tier 1 e Tier 2 Capital, is set at 8%, a level equivalent to current level in force, but defined through a composition aiming at raising the ‘quality’ of capital itself.

Strengthening capital is achieved by adding a further element to ‘total capital ratio’, called ‘conservation buffer’, equivalent to 2.5% of risk weighted assets. We are dealing with additional capital, formed by the same elements as CET1, which banks are bound to accumulate during favourable periods and can then use in conditions of stress. When this ‘reserve capital’ is used and its size goes below 2.5% of risk weighted assets, banks are automatically under the obligation to re-establish said ‘reserve capital’. On this subject, the new text of the Agreement anticipates constraints on earnings distribution to which banks themselves have to submit until ‘reserve capital’ is re-established.

Considering that the total between CET1 and capital conservation buffer must be equivalent, when system is operative, to 7% of risk weighted assets, the new discipline sets the following limits:

CET1 ratio	pay out ratio	retention ratio
4.500%-5.125%	0%	100%
5.125%-5.750%	20%	80%
5.750%-6.375%	40%	60%
6.375%-7.000%	60%	40%
> 7.000%	100%	0%

Table 4.1. Levels of capitalisation and earnings distribution
Source: Basel Committee on Banking Supervision (2010d)

The following are included in the concept of earnings distribution: payment of dividends, discretional payments to bearers of other instruments included in Tier1 capital, including discretional bonuses to employees. This last provision makes regulations regarding capital cross over with so-called ‘executive compensation discipline’, which we shall deal with in Chapter 7, establishing the principle according to which compensation must be subordinated to compliance with bank capital requirements.

Therefore, on the whole, capital required will go up from the current 8% to 10.5% of risk weighted assets[24] and will gradually lead to complete implementation of the new system by January 1st, 2019;[25] as of that date the international banking system will feature more and higher quality capital.

[24] The Committee has also considered introducing measures aimed at encouraging construction of further ‘capital buffers’ with an anti-cyclical nature; the formation of this ‘additional capital’ should be carried out during favourable periods in the economic cycle, whereas its use would be for the unfavourable periods of the aforesaid cycle. Additional capital varies between 0 and 2.5%.
[25] The requisite regarding ‘common equity’ will go up to 3.5% in 2013 and will be in full regime (4.5%) in 2015; the capital conservation buffer will start to be accumulated as of 2016 and will be brought to regime

Annex 4

Phase-in arrangements

(shading indicates transition periods - all dates are as of 1 January)

	2011	2012	2013	2014	2015	2016	2017	2018	As of 1 January 2019
Leverage Ratio	Supervisory monitoring		Parallel run 1 Jan 2013 – 1 Jan 2017 Disclosure starts 1 Jan 2015					Migration to Pillar 1	
Minimum Common Equity Capital Ratio			3.5%	4.0%	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer						0.625%	1.25%	1.875%	2.50%
Minimum common equity plus capital conservation buffer			3.5%	4.0%	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)				20%	40%	60%	80%	100%	100%
Minimum Tier 1 Capital			4.5%	5.5%	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum Total Capital			8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum Total Capital plus conservation buffer			8.0%	8.0%	8.0%	8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify as non-core Tier 1 capital or Tier 2 capital			Phased out over 10 year horizon beginning 2013						
Liquidity coverage ratio	Observation period begins				Introduce minimum standard				
Net stable funding ratio	Observation period begins							Introduce minimum standard	

Table 4.2. Basel 3 phase-in
Source: Basel Committee on Banking Supervision (2010d)

The second line of action is the introduction of a ‘leverage ratio’, having the target, through definition of its maximum threshold, of preventing excessive debt accumulation by banks. The ratio is calculated not by considering risk weighted assets, but total assets, either ‘on’ and ‘off’ balance-sheet, thus giving shape to a kind of further constraint as compared to capital requirements defined by risk weighting. The rationality of this further measure, of a clear prudential nature, does not stop perplexity and objections from arising. In fact, if we start with the assumption that banks are able to correctly measure risk undertaken, the imposition of minimum capital coefficients, as compared to risk weighted assets, should be sufficient to set up effective protection against potential losses. Imposing a further limit to banking activity, by means of a coefficient placing a ceiling on financial leverage, independently from risk level inherent to banking assets themselves, is like admitting that measuring systems can be inaccurate, as has been, what is more, proven by the crisis, therefore making it clear that additional prudential coverage is needed.

The reform’s third cornerstone concerns the range of risks subject to coverage by bank capital, substantially enlarged compared to the pre crisis situation.

The process of enlarging the range of risks subject to coverage had already taken place at the beginning of the crisis,[26] with the issue of a document in which changes to

(2.5%) as of January 1st, 2019; deduction of assets postings from common equity, mentioned in footnote 22, will take place gradually (20% per year), as of 2014; exclusion from Tier 2 of postings which the Committee has decided to no longer qualify as capital will take place over a ten year period, as of 2013.

[26] See Basel Committee on Banking Supervision (2009b).

the framework defined by Basel 2 were anticipated. For this reason, capital protection was reinforced so as to face the risks deriving from the trading and securitisation portfolios. Moreover, as said above, capital requirements against these risks are defined through assessments made under conditions of stress, causing, according to 'value at risk methodologies', potential losses within a twelve months period. In the new agreement, launched in September 2010, capital allocations are scheduled against counterpart risk in derivatives trading, spot-forward and, generally speaking, loans guaranteed by securities. As regards derivatives, capital requirements against counterparty risk represent an incentive to centralise trading on regulated markets, an orientation strongly sustained by reform underway, as regards this particular market, a source of great stress during the crisis.

As regards loans guaranteed by securities, the new discipline aims at evaluating and forming protection against transactions considered less risky for the security's inherent guarantee; the crisis has shown how loss of securities value, a consequence of unexpectedly high volatility, has steeply raised the risk of these transactions.

Lastly, the new agreement schedules a series of directions so as to reduce bank reliance on rating assessments, in the aim of defining the risk inherent to its own investments. Instead of basing their own evaluations exclusively on outside assessments, banks have been called upon to develop their own methodologies of risk assessment, in particular as regards securities deriving from securitisation.

Whereas the launching of Basel 3 had the effect of solving many of the problems connected to a different definition of capital, within the different national frameworks of regulations, today new debate has started as regards the concept of 'risk weighted assets', the aggregate to which capital must be compared to check compliance with new capital requirements as defined in the new version of the agreement (Citi 2011). First analyses performed to date by market participants reveal that there are marked differences between banks, in terms of ratio between risk weighted assets and total assets;[27] in particular, it has been verified how, on average, United States banks state a ratio between the two aggregates which is significantly higher than in Europe. As capital requirements depend on risk weighted assets, verification must be made as regards the reasons for these discrepancies and to understand whether they are effectively ascribable to different bank business models[28] or whether discrepancies are due to differences in existing regulations on how risk weighted assets are calculated; in the second case, synchronization of procedures to implement regulations will be needed, so as to ensure balance between all subjects having to comply with said regulations.

[27] This means that, given the same level of total assets, risk weighted assets can differ significantly between two banks, in view of their different weighting. Analyses underway are trying to verify if these differences are exclusively ascribable to different banks' business models , such as a different asset mix producing different average weighting and a different overall weighted asset level, or whether behind these differences there is a lack of regulatory symmetry harmful to the principle of equal treatment for different subjects.

[28] This means that, given the same level of total assets, their different mix implies different weighting owing to the different risk profile, a different level of weighted assets and a different capital requirement.

4.2.2. Liquidity requirements

The Committee has defined two rules, one oriented towards the short-term and the other towards the medium to long term, by which monitoring individual banks' position is carried out, in the aim of preventing the risk of a liquidity crisis.

The first is called 'Liquidity Coverage Ratio' (LCR) and is formed by comparing high quality liquid assets held by the bank (the numerator) with potential 'net cash outflows' estimated over thirty calendar days (the denominator); the value of the ratio must be equivalent to at least 100%.

Items put in the numerator, a guarantee for a bank having to face unexpected and significant cash outflows, must have coherent features with its reserve function.[29]

Potential outflows put in the denominator, from which bank liquidity requirements depend, over the period of time mentioned above, must be estimated under stress conditions.[30]

This approach implies coherence between position measuring procedures for short term liquidity and conditions under which position is evaluated: in fact, the bank's liquidity profile is stressed under conditions of a critical market, not during 'normal' periods, and bank capacity to meet with its short term commitments must be evaluated under these conditions.

The second liquidity indicator, called 'Net Stable Funding Ratio' (NSFR), is defined in the aim of monitoring bank's financial equilibrium over a longer period of time, say a year. It is calculated taking into account specificity of bank activity features and consequent composition of its assets[31] as well as off-balance exposures, by means of a ratio showing:

- in the numerator, extent of liquidity sources considered stable over a one year period;
- in the denominator, the need for stable funding over the same period of time.

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[29] The essential features singled out by the Committee for these assets are a very low level of credit risk, an easy evaluation and low level of correlation with risky assets; these assets must be listed on an official market. As regards this latter feature, the market on which they are listed must be relevant in terms of size and volumes of trading and must be featured by the presence of market makers and by a low level of concentration. All the features mentioned, considered on the whole, contribute towards ascribing a degree of high liquidity for assets at issue.

[30] A great number of conditions have been singled out to define the context within which bank liquidity position must be assessed; the reference framework does not apply to normal market conditions, but, on the contrary, to stress situations arising in which liquidity is put under pressure. In particular, the following points have been singled out: the downgrading of the bank, unexpected outflows of an important share of deposits, losses occurring on guaranteed short-term financial transactions, increase of market volatility determining growth of exposure on derivatives, decrease in unused liquidity lines, the need to face non-contractual commitments, only fulfilled to preserve a bank's reputation. As can be gathered from this long list, overall framework conditions tend to repeat many of the events having occurred during the crisis. Domestic authorities, by responding to points set forth by the Committee, are called upon to verify under this new framework the liquidity position of banks under their supervision.

[31] The Agreement takes into consideration investment banking activities and off-balance exposure ensuing from securitisation, by making provision that all these activities be financed with a pre-established percentage of medium term stable funds.

The ratio between availability and requirements for stable funding must be kept at a level of one unit higher.

Available stable funds, defined as being the kind of funds on which banks can reasonably count over a year – even under stress conditions – include own capital, liabilities[32] having a maturity of at least one year, as well as the share of sight deposits assessable as stable even under conditions of stress.[33]

Calculation of 'available stable funds' (AFS) is carried out by ascribing a 'conversion factor' to bank capital and liabilities, in proportion to the stability features of these funds.[34] The index numerator, calculated in this way, is compared to stable fund requirements. The latter are determined through analysis of banks assets, by applying to different categories a conversion factor able to determine its respective stable fund requirement. This conversion factor is equivalent to zero or at a minimum, in the case of more liquiditems[35] and goes up in cases of lower liquid categories featuring price volatility and uncertainty on sale value.[36] All other assets than explicitly described and carried in the footnote, have a conversion factor equivalent to 100%. Determination of liquidity requirements also extends to off-balance activity, for which a list has been drawn up, re-including major cases in point; for some of these, liquidity requirements are established, whereas for others, decision is left up to domestic authorities, called upon to autonomously determine individual liquidity requirements, on the basis of their knowledge of specific market conditions.

4.2.3. The new discipline's impact

The issues we have dealt with in this chapter are those which best lend themselves to illustrating trade-off between reform requirements and implementation of said reforms.

As regards the case being discussed, stricter bank regulations, aimed at a collectively agreed target, the preservation of their stability, must also be assessed in view of possible ensuing costs.

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[32] Including preferred stocks, should they have a formal maturity.

[33] Among these, the Agreement foresees the following situations: deterioration of bank profitability or solvency conditions, bank downgrading by rating agencies, situations occurring putting bank reputation or quality of its credit in discussion. Among stable sources of funding, financing at the central bank is not included.

[34] Capital instruments and liabilities with a maturity over a year are calculated fully (100%); some deposit categories (among retail deposits, sight deposits considered stable and those with a maturity under a year; among wholesale deposits, sight deposits of small non-financial companies) are calculated at 85%; other deposit categories, featuring lower liquidity, are calculated at 70%; yet others, corporate client deposits, are calculated at 50%. All other liabilities categories have a conversion factor equivalent to zero, being considered unsuitable to preserve bank liquidity.

[35] The conversion factor is equivalent to zero for cash on hand, money market instruments and loans to financial institutions with maturity under a year; it is equivalent to 5% for market instruments with maturity over a year, if issued by supranational bodies; it is equivalent to 20% in the case of securities with at least an AA rating.

[36] Gold, listed securities (stocks and bonds with a minimum rating included between AA- and A-) and loans to corporate clients with a maturity under a year, have a 5% conversion factor, whereas loans to clients who are not financial institutions are calculated at 85%, on condition they have a formal due-date under a year.

The crucial factor to evaluate, today at the centre of debate, is impact that the above-mentioned measures will have on cost and availability of credit and, as a consequence, on economic growth. Obviously, the driving chain of these effects goes through bank capital strenghtening: greater capital requirements, as determined by the new agreement,[37] will lead banks themselves to a redoubled effort; on one hand, internal rebalancing and, on the other, obtaining new capital on the market.

The two lines of action are reasonably destined to produce similar effects; internal rebalancing goes through both greater profit generation and retention and a decrease in risk weighted assets. Obtaining capital on the market becomes possible only on condition of guaranteeing adequate returns to investors for the risk taken, by underwriting issue of suitable securities to be included in capital's new definition.

Bank capital requirements

A first consequence ensuing from the new agreement's implementation is, therefore, represented by the need for banks to adjust to the new regime of capital requirements; considering the raise in thresholds, the stricter eligibility criteria and gradual exclusion of items calculated in capital to date, banks will have to evaluate their own capital situation, check the existing gap, as compared to new standards, and define action to fill in other arising gaps. A first estimate of a hidden 'capital gap' at the global level was performed by the Basel Committee itself, by means of research published at the end of 2010[38] and carried out on the basis of 2009 balance-sheets on a representative sample of banks in all Committee member countries. Requests for data were sent to 263 banks, split into two groups: a first group of diversified and internationally highly active 94 institutions, with a Tier 1 over 3 billion Euro, and a second group of 169 financial companies, not having the same requisites.

Data collected, including data requested in a subsequent follow-up, carried out in the aim of taking into account the agreement's final version signed in September 2010, concerned 91 banks in the first group and 158 in the second; excluding banks which were unable to supply complete data as outlined by the Committee, published research refers to 74 banks in the first group and 133 in the second.

Many results ensuing from this research appear interesting to outline the impact of new regulations on equilibrium of leading banks at both the international and domestic levels.

a) Common Equity Tier 1. First of all, the Committee evaluated impact of the new regulations on this aggregate, capital protection's 'hard core', which banks must preserve against risks taken on. Two magnitudes were compared:

[37] We must remember that the Basel Committee has no regulatory powers and how efficiency of its measures depends on transfer of said measures to domestic regulations by government bodies in different countries. Therefore, there is no certainty that the new Agreement's dictates will be implemented in all jurisdictions; assessments we will mention in these pages are all subordinated to the fact that Agreement contents be effectively transferred into domestic law and that, as of January 1st, 2013, the convergence process anticipated in the Agreement begin. In the two years which separate us from this date, many of the issues we have dealt with will be more clearly outlined.

[38] Basel Committee on Banking Supervision (2010e).

- ratio between gross CET1[39] at the end of 2009 and risk weighted assets according to regulations in force today;
- ratio between CET1 according to the new definition and risk weighted assets according to the definition in the new agreement.

The result is that first group of banks see the ratio decrease significantly, from 11.1% to 5.7%, whereas, for the second group, the decrease is more limited (from 10.7 to 7.8%). Results are ascribable to two same sign effects, but have a different size. The first effect of the new regulations, the most significant, is represented by implementation of CET1's new definition and by the new deductions which will have validity on the same capital aggregate. The second effect, smaller in dimension, concerns the wider boundaries of risk weighted assets; in fact, one of the logical hinges of the new agreement is, as we have said, to widen the range of activities for which capital coverage is scheduled.

b) Tier 1: the ratio between this capital aggregate and risk weighted activities goes down from 10.5% to 6.3% for first group banks and from 9.8 to 8.1% for second group banks.

c) Total Capital Ratio: the ratio between this capital aggregate and risk weighted activities goes down from 14% to 8.4% for first group banks and from 12.8 to 10.3% for second group banks.

Data we have commented obviously represent averages of the two aggregates for the institutions taken into consideration; considering internal variability of the two groups, we can observe that there are banks showing capital surplus and banks which, on the contrary, show a capital gap.

Starting with the situation at the end of 2009, we can observe how:

- as compared to the CET1 requisite equivalent to 4.5%, the sample examined shows a 173 billion Euro capital gap,[40] 165 for first group banks and 8 for second group banks;
- by making the hypothesis, instead, of a requisite in terms of CET1 equivalent to 7% (4.5% plus a conservation buffer equivalent to 2.5%), the capital gap would stand at 600 billion Euro, 577 as regards first group banks and 25 as regards second group banks.

So as to offer an order of magnitude to which reference can be made of capital gaps we have just mentioned, it is worth remembering how, in 2009, first group banks stated overall profit after taxes equivalent to 209 billion Euro (20 second group banks). Capital requirements to bring the CET1 to 4.5.%, a constraint which will become effective in 2015, is therefore close to yearly profit, whereas implementation of the additional 'capital buffer' requirement triples shortfalls; we can then understand why this regulation will be implemented gradually and diluted over the 2016-2019 four year period.

[39] Before currently anticipated deductions.
[40] Deficit is calculated compared to situation at regime, scheduled for 2019.

Therefore overall new capital requirements represent a demanding challenge for the international banking system, above all if, instead of average data, we consider the differentiated situations of individual banks, some of which, featuring a lower capital base than average, will be faced with the need to significantly increase said capital. To all the above, a further consideration must be made, regarding so-called G-SIFI (Globally Systematically Important Financial Institutions), for which the FSB is working out whether it would be possible to foresee additional capital requirements as compared to those provided for in the agreement's new version.[41]

Effects on economy

The Committee has processed extremely analytical and structured evaluations in order to estimate the impact of the new discipline on the evolution of the international economic system. The document published in August 2010[42] presents a synthesis of the Committee's conclusions about the correlation between output growth and performance of the international economic system on one hand and new capital and liquidity coefficients on the other.

Analysis is structured on assessment of potential costs and benefits connected to the new discipline.

Long term benefits are those associated to decrease in the frequency and size of bank crisis. The quantitative profile of this benefit has been calculated by determining, on the basis of historical experience, costs associated to banks' crisis in terms of output losses on one hand, and, on the other, the probability of banks' default able to trigger off crisis. Historically recorded cases of banking crisis by the Committee are numerous and determine accumulated output losses, as compared to the pre-crisis situation, variables, according to crisis duration and intensity; these losses can be of ten percentage points (considering the years over which the crisis takes place) and, in some cases, the pre-crisis level is never reached.[43] These empirical evidences have been collected and made public by the Committee with the intent of highlighting the need for measures aimed at strengthening the international financial system's stability.

The likelihood of a banking crisis occurring, which could determine output losses as said above, has been singled out by the Committee with values between 4 and 5%.[44] By taking the average value of crisis real costs as a reference, the Committee arrived at the conclusion that, for each percentage point decreasing crisis likelihood, there is a net benefit equivalent to 0.6% of the international economic system's real output.

The second aspect needed to understand the effect of new regulations is, therefore, evaluation of their impact, in terms of capital and liquidity, as regards the likelihood of banks going bankrupt. The probability of default of banks decreases as capitalisation and liquidity requirements increase, but as can be inferred, at decreasing rates; greater benefits, in terms of reducing the probability of bank default, are observed, in other

[41] See next paragraph.
[42] Basel Committee on Banking Supervision (2010c).
[43] Basel Committee on Banking Supervision (2010c, pages 9-12).
[44] The datum arises from historical experience, the observation of which confirms that crises tend to occur once every twenty to twenty-five years.

words, on first restrictive action and tend to decrease with further action.[45] This evidence lead towards reinforcing the Committee's conviction that the measures adopted represent an efficient synthesis, able to seize the best possible result with a minimum effort requested of banks and their clients.

Evaluation of the costs connected to the recently launched measures was carried out by determining potential rise in credit cost which could ensue and, consequently, its impact on global economic growth.

Data processing carried out by the Committee used, as a benchmark, the structure of balance-sheets in banking systems in different countries, as presented before the crisis; starting with this situation, and assuming that implicit cost connected to new regulatory requirements is completely transferred to clients,[46] the Committee evaluated impact on spreads requested to borrowers. Results published highlight two main effects: the first is that each increased percentage point in capital requirements brings about an increase equivalent to 13 basis points of the spread requested to clients; the second concerns impact of the liquidity requirements and points out how compliance with the new rules leads to a further spread increase, for a total equivalent to 25 basis points.[47]

Effects on rates requested to clients could be mitigated by a combination of other factors, therefore removing the hypothesis that economic impact of the new requirements be *in toto* transferred downstream to the lending chain. Among these factors, the Committee recalls the reduction in returns on equity capital (in this case, bank shareholders would partly bear costs connected to the new requirements), recovery of operational efficiency with a consequent compression of operating costs and recovery of profitability ensuing from the increase of non interest revenues. We can reasonably believe that the adjustment, as compared to charges ensuing from the new regulations and in view of heavy competition within banking markets, will be found through a mix between transfer of the charges to clients, a more efficient use of capital and realisation of above-mentioned managerial actions. The Committee, on the basis of the above considerations, reached the conclusion that an increase of one percentage point on the capitalisation requirement could bring about a 0.09% volume contraction of the output obtained by the international economic system. The effect of the liquidity requirements is similar (0.08%).

In short, net balance between the beneficial impact of greater stability and necessary costs to achieve these conditions appears positive, even if the Committee acknowl-

[45] In the example given in the document mentioned, statement is made that the estimated benefit in increasing capitalisation from 7 to 8% is equivalent to three times the benefit produced by a raise from 10 to 11%.

[46] Drawing inspiration from prudential criteria, the Committee has assumed, in its analysis, the hypothesis that cost of bank capital does not change with the implementation of new regulation. In truth, on the other hand, more capitalised banks are less risky and investors could take into account this situation by requesting a lower rate of return for their investments in bank capital; the lower cost of (higher) bank capital could reflect on mitigation of the spread increase towards clients.

[47] This value goes down considerably, approximately 14 basis points, taking into account the fact that holding less risky assets and/or a lower volume of risk weighted assets, two consequences of the liquidity requirements, could lead to a decrease in capital requirements needed to comply with the new capital regulation.

edges the presence of factors which are not adequately incorporated in evaluations[48] and which could bring about variability in net benefits as compared to first estimates.

From a methodological viewpoint, analysis performed by the Committee and stated in the August 2010 document compares two alternative situations – a pre-crisis situation, featuring less regulations and less bank stability and a post-reform situation, featuring higher capital and liquidity requirements and greater banking system stability – without tackling the transition problem from first to second.

This task was faced by the Macroeconomic Assessment Group, a work group jointly formed by the Basel Committee and the Financial Stability Board.[49] Their analysis also showed evidence leading to favourably considering introduction of new capital and liquidity requirements. Having acknowledged that the impact also depends on time factors over the period in which reform is introduced, the work group arrived at the conclusion that increase by one percentage point of capital requirements can bring about a decrease in gross domestic product equivalent to 0.19% over a four and a half year period (equivalent to 0.04% per year). The evaluations carried out separately to assess the liquidity requirements' impact have led to singling out a result approximately equivalent to 0.08%. Moreover, the work group points out how the joint impact of higher capital and greater liquidity is probably more contained as compared to the total of the two impacts considered separately; the circumstance is ascribable to virtuous interaction which can be triggered off between conditions of solvency and liquidity, where the improvement of one produces improvement in the other.

4.3. Dealing with Systematically Important Financial Institutions - SIFIs and Globally Systematically Important Financial Institutions - G-SIFIs[50]

4.3.1. Capital requirements

Whereas the third version of the Basel Agreement can, by now, be considered as part and parcel of the new bank regulations framework for all G-20 countries having committed themselves to adopt it, when this book was being written, provisions were being processed, concerning additional capital requirements to apply to Globally Systematically Important Financial Institutions (G-SIFIs).

This further regulatory development meets with clear targets as regards protection of the international financial system's stability and begins with work carried out internally by the FSB and subsequent G-20's endorsement at the November 2010 meeting in Seoul. As has been observed in the two previous chapters, major financial institution stability must be protected in a 'special' way, insofar as their default would cause destabilising consequences on the entire international financial system. These institutions must be given more solidity and this target must be pursued by requesting that they

[48] Basel Committee on Banking Supervision (2010c, pages 28-31).
[49] Macroeconomic Assessment Group (2010); Carosio (2010).
[50] In these pages, as set forth in documents issued by international bodies, we shall indifferently use the acronyms SIFIs, G-SIFIs and SIBs ('Systematically Important Banks').

have a higher capital as compared to banks not belonging to this group of systematically important institutions.

In Chapter 2, we have reported positions stated by the FSB as regards this particular subject: in the aim of realising the principles and recommendations put forward by this body, the Basel Committee issued, at the end of July 2011, a document for consultation in which methodology to use for singling out these institutions is described, including its anticipations regarding additional capital requirements.[51]

The Committee proposes to assess the systemic importance of a bank by using five quantitative indicators reflecting: size, interconnectedness with other financial institutions, the lack of readily available substitutes, cross jurisdictional activity and complexity; each of these five profiles contribute with the same importance to the determination of the final result, the systemic importance of a financial institution. Whereas size can easily and univocally be determined (the document assumes total exposure as defined for use in the Basel 3 'leverage ratio'), all other attributes singling out G-SIFIs are defined by means of calculating multiple indicators aiming at giving the identification process objectivity:

- international activity of financial institutions is determined with reference to two indicators which measure cross jurisdictional claims and liabilities;
- interconnectedness is quantified by means of three indicators: the first two single out assets and liabilities which have other financial institutions as a counterpart ('intra-financial system assets and liabilities'), whereas the third is represented by the so-called 'wholesale funding ratio', obtained by the ratio between 'wholesale funding' on financial markets and overall funding; the higher the rate at issue, the higher bank dependence on financial markets and the greater its systemic importance;
- the concept of non substitutability measures the importance of a bank in supplying specific services which are important for the overall international financial system's functioning. Said services are used by a great number of other market participants who would find it difficult to replace the bank offering them, should the latter find itself in a situation of stress or default. The Basel Committee singled out three types of important services: the first is custody of assets for both final clients and other financial institutions; the second relates payments cleared and settled through payment systems; the third is the value of underwritten trasactions in debt and equity markets. The default of a bank playing a leading role in these different areas risks to create a crisis for system functioning, insofar as it would be difficult for counterparts to immediately find an alternative supplier for these services; the conclusion is that a bank's systemic importance is directly in proportion to its market share in each of these business areas;

[51] Basel Committee on Banking Supervision (2011).

- the complexity attribute, considered important insofar as it is connected to the capacity of rapidly and efficiently solving a bank's crisis, is measured by means of three indicators: the first is volume of OTC derivatives transactions carried out by the bank; an institution which is deeply involved in this type of negotiations increases its own degree of complexity, insofar as its own commitments and claims, as we shall see in the following chapter, are connected to contracts featuring opacity and significant counterparty risk. The second indicator is represented by the dimensions of so-called 'Level 3 assets', assets the value of which is difficult to determine according to conventional criteria, based on market price or widely used pricing models. A significant dimension of these assets would involve obvious difficulties, in the case of a crisis, in determining recoverable value and obtaining a symmetric quantification of losses. The third indicator measures the dimension of the bank's securities portfolio ('trading book' and 'available for sale'), on the assumption that a bigger portfolio determines greater financial institution complexity. The reason is, in situations of stress, that the bank could be tempted to dispose of these assets thereby negatively influencing relative prices.

The methodology we have just described has been applied to a sample of 73 international banks, chosen on the basis of size and judgement by supervisory authorities belonging to the Basel Committee. By processing data at the end of 2009, the Committee determined an overall 'score' for each bank ensuing from calculation of the above-mentioned indicators. The test performed by the Committee singled out 28 leading international banks having G-SIBs features;[52] placed in five categories, the banks themselves shall have to submit to the additional capital requirement, determinable by values included between 1 and 2.5% according to the category to which they belong.[53]

The methodology put forward by the Committee schedules a list of systemically important banks and that their allocation into distinct categories be periodically updated, so as to take into account bank activity developments. Depending on the evolution of said activities, the number of systemically important banks and their allocation into different categories vary. Publication of the consultation document and scheduled periodic updating clearly represent an incentive as regards supervised banks; the latter would, in fact, be able to try to avoid being on the list, or could try to position themselves in lower categories, by modifying their business model and ensuing risk factors.

[52] The consultation document, which uses the term Globally Systematically Important Banks, foresees that the indicator methodology shown above be integrated with evaluation by domestic supervisory authorities participating in the Committee. This intervention by authorities can contribute to enrich and consolidate the indicator methodology, but must be carried out on the basis of possibly objective factors, so as to avoid that the entire process be affected by excessive discretionary powers. For these reasons, the document published by the Committee schedules criteria which tend to make intervention objective.

[53] Banks are placed in five classes; the first class, which would have to comply with an additional 3.5% requisite has been left empty on purpose at the starting stage. This class's objective is to stimulate banks into not increasing their level of systemic importance, so as not to enter this first class with the highest capitalization requirement. Banks which turned out to be important from the systemic viewpoint were placed between the second class (2.5%) and fifth (1% additional requirement).

Additional capital requirements, determined on the basis of the methodology described above, will have to be met by means of a series of suitable instruments ensuring loss absorption capacity and continuation of systemically important bank activity (the 'going concern' principle). For this reason, the main technical form to meet with requisites is high quality capital, the Common Equity Tier 1 (CET1). As regards other instruments which banks can use so as to increase their own capitalisation, the document issued by the Committee puts forward some differences. At many banks, debt instruments have become widely used as they can be transformed into capital when the bank faces difficulties ('bail in debt');[54] following the logics of guaranteeing business continuity of these leading and important institutions, the Committee believes that these instruments cannot be considered in the aim of the additional capital requisite requested of G-SIBs. In the opinion of the Committee, a different consideration must be made as regards debt instruments which can be converted into capital in a situation of 'going concern' ('higher trigger contingent capital'), thanks to contract forecasts which trigger off conversion before the bank finds itself in a situation of default. After detailed analysis of these instruments' features and *pro* and *con* debate as to their use to meet with requirements imposed on G-SIBs, the Committee concludes that only CET1 can be used to meet with said requirements and that debt instruments of the second type can be taken into consideration by domestic authorities to meet with the additional requisites the latter could decide to impose on banks submitted to their jurisdiction. In the aim of protecting systematically important bank stability at the international level, only capital in its 'purest' form can be used.[55]

Implementation of the new regulation for systemically important banks will be carried out in parallel to the new Basel 3 Agreement coming into force, more specifically over the 2016-2018 period, at the same time as the 'capital conservation buffer' imposed on all banks; the Committee and the FSB have asked the Macroeconomic Assessment Group to estimate impacts the new discipline could have on real economy.

4.3.2. Supervision and crisis management

New discipline on capital requirements integrate with those concerning SIFIs' supervision and resolution, creating an integrated framework, at the international level, capable of governing these institutions in a comprehensive and specific way.

[54] We are dealing with debt instruments able to absorb losses when company situation turns into crisis ('Bail-in debt and capital instruments that absorb losses at the point of non viability-low-trigger contingent capital'). These instruments can be useful in the aim of guaranteeing third parties, in the case of crisis, but not in avoiding crisis itself occurring.

[55] See Basel Committee on Banking Supervision (2011, pages 19-20: "D. Conclusion on the use of going-concern contingent capital. 88. Based on the balance of pros and cons described above, the Basel Committee concluded that G-SIBs be required to meet their additional loss absorbency requirement with Common Equity Tier 1 only. 89. The Group of Governors and Heads of Supervision and the Basel Committee will continue to review contingent capital, and support the use of contingent capital to meet 20 Global systemically important banks: Assessment methodology and the additional loss absorbency requirement higher national loss absorbency requirements than the global requirement, as high-trigger contingent capital could help absorb losses on a going concern basis".

The issue of supervision was tackled by the FSB in a November 2010 document, in which a series of recommendations were put forward and were goal-oriented towards reinforcing supervision of SIFIs.[56] The FSB's contribution fits into a framework, the outlines of which had already been defined, at the international level, by work carried out by the Basel Committee, charged with defining, at the global level, conditions for the functioning of efficient supervisory systems on banks.[57] The Committee's first intervention on these themes goes back to 1997, when, upon request by G-7 finance ministers, a list of recommendations was defined and published, which supervisory authorities in different countries at global level should follow, in the aim of implementing an efficient supervisory system on banks. Verification of correct implementation of the principles established by the Committee was carried out in two ways: on one hand, the authorities in different countries, were called upon to self-assess state of recommendations' implementation; on the other, the World Bank and International Monetary Fund were using the 'core principles' while working on analysis and assessment of domestic financial systems (Financial Sector Assessment Programmes – FSAPs), in the aim of checking supervisory practices in various countries and their degree of efficiency. With the 2006 review, oriented not towards structurally changing principles but only in taking into account some developments having occurred over the years,[58] 'core principles' have, to date, represented a benchmark for convergence of supervisory activity on banks at the international level. The crisis showed gaps in the process adopted to reinforce supervision at the international level and contribution by the FSB aims at defining the hinges of an overall more solid framework, starting with financial institutions important for systemic stability. The FSB's logical introduction to its recommendations is that supervision represents an essential complement for stability, together with regulation, which could not reasonably achieve the target on its own. Recommendations concentrate on ten essential points of supervisory activity; generally speaking, many of these recommendations concern effectiveness in supervisory action, whereas some specific principles refer to SIFIs as a special case for implementation of more general recommendations. There is an obvious correlation between the two aspects, insofar as effective supervision of SIFIs can more easily be carried out in a general supervisory framework incisively taking action on the entire system of financial intermediation.

The Table below synthetically illustrates the more important contents of FSB recommendations. As can be inferred by observing them, from many points of view, we are dealing with principles and guidelines already examined when analysing evolution underway in Europe and the United States.[59]

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[56] Financial Stability Board (2010e).
[57] Basel Committee on Banking Supervision (1997; 2006a); 2006b).
[58] "2. In conducting this review of the Core Principles and their Methodology, the Committee was motivated by a desire to ensure continuity and comparability with the 1997 framework. The 1997 framework has functioned well and is seen to have withstood the test of time. Thus the intention was not to radically rewrite the Core Principles but rather to focus on those areas where adjustments to the existing framework were required to ensure their continued relevance. The review does not in any way call into question the validity of previous work already conducted, not least country assessments and reform agendas based on the 1997 framework". See Basel Committee on Banking Supervision (2006a, page 1).
[59] See Nolle (2011).

Recommendations	**Contents**
Authorities' mandate	Authorities must take action on the basis of a clear mandate, encouraging a culture of 'early intervention', aimed at preventing crisis situations. Mandate given to the authorities must not be influenced by the pursuit of other objectives than those of SIFIs' stability. Mandate given to the authorities must include the possibility of taking anti-cyclical action (e.g. higher capital requirements and stricter credit underwriting standards during favourable economic cycles).
Independence	Supervisory authorities' independence must be reinforced, especially in the case of SIFIs, these subjects having extensive powers to affect the work and results obtained by supervisory authorities.
Resources	Supervisory authorities must dispose of adequate resources to carry out their task; in the particular case of SIFIs, authorities must program a coherent amount of work to achieve efficient supervision and must obtain the availability of resources necessary for their task.
Powers granted to authorities	Authorities must have all the necessary powers to exert reinforced supervision (e.g. power to impose additional capital and liquidity requirements, power to cut dividend distribution, faculty to obtain all necessary data to have an overall picture of the company's situation).
Technical supervisory instruments	The recommendation starts by observing that in the pre-crisis period, many supervisory authorities had assessed risk management procedures adequate in many institutions today considered SIFIs. The recommendation is for an approach focusing not only on procedures but on final result of management choices in terms of return and risk. 'Horizontal reviews' between institutions are recommended, aiming at verifying practices adopted by institutions on particular issues. Supervisory authorities must focus their attention on Board effectiveness, by assessing functions performed, expertise and efficiency. Authorities should strongly focus on analysis of data ensuing from balance sheet, in order to properly assess the economic and financial situation of the company. Special attention must be paid to analysis and understanding of SIFIs' business model, considering their non-stop capacity of renewing products and techniques, thereby generating new and different sources of risk. Special focus is recommended on quantitative models used by many SIFIs for assessing risk in different management areas. Analysis of models must be carried out both at the time of first approval and when, subsequently, over time, these same models are used under different conditions of context. The practice of stress tests is favourably looked upon and is spreading to many countries. Development of a 'parental approach' is recommended between authorities and financial companies in conducting stress tests.
Supervision on a consolidated basis	Recommendation is that supervision of financial institutions be carried out by taking into account the overall situation of the group to which they belong.
Supervision continuity and coverage	Stronger communication between supervisory authorities and supervised institutions is recommended, especially at senior level. The objective is to report significant developments underway at supervised institutions to the authorities.
Boards of supervisors: information-sharing between authorities in the country of origin and country hosting a financial institution	Forms of collaboration between authorities in different countries (boards of supervisors) are recommended in the aim of giving greater efficiency to the supervision of groups operating on a wide scale internationally.

Macro prudential supervision; a multidisciplinary and 'forward looking' approach	Recommendations on this point request that authorities carry out their task using an interdisciplinary approach, oriented to future market developments and able to supply *ex ante* information about surfacing crisis factors.
Use of third party work for supervisory purposes	Use of third parties, as regards performing work which is part of the supervisory process, is acknowledged as a practice presenting, at times, significant risks, owing to the fact that third parties employed to perform said work could be more in line with the interests of supervised subjects, their potential clients, rather than with the interests of supervisory authorities. The practice at issue is not forbidden, but authorities using it are requested to enforce discipline and submit the practice to monitoring, so as to avoid the above-mentioned risks.

Table 4.3. Summary of FSB recommendations on the issue of SIFIs' supervision
Source: Financial Stability Board (2010e)

The third basic factor in the attempt to make systematically important institutions safe is represented by crisis management instruments. In this case too, we limit ourselves to reporting main anticipations contained in the FSB document, insofar as many of the points highlighted have already been subject to analysis in the above pages, when discussing developments underway in Europe and the United States.

Recommendations	**Contents**
Efficient resolution régimes	Each country must have efficient resolution régimes giving authorities the powers to take action and the suitable instruments to guarantee continuity of significant functions for system stability. Resolution of financial institutions must be 'special' and differ from resolution of other companies. Intervention instruments must schedule options such as sale of the financial company in difficulty, 'break up' and eventual sale of certain activities considered important for system functioning, recapitalisation and restructuring of liabilities. These requisites must become the international standard for all countries.
'Bail in powers'	Resolution régimes must schedule a forced recapitalisation option for the financial institution in difficulty by means of debt forgiveness, or conversion of some of these debts into capital.
'Cross border cooperation'	The resolution framework for G-SIFIs must include suitable measures for organizing cooperation between the authorities which, in different countries, are appointed to manage resolution procedures. Cooperation agreements between different countries and referring to specific financial institutions singled out as G-SIFIs can facilitate transition towards a more generalized model.
'Resolvability assessment'	Each G-SIFI must submit to assessment of its 'resolvability' degree, in other words, let authorities go ahead with its resolution without causing system disruptions. Resolvability assessment starts with feasibility analysis of resolution programs, continues with assessment of its impact and ends with actions the institution must take to increase its own degree of resolvability. Assessment referred to must be carried out by country of origin authorities, in close collaboration with those of the countries in which the financial company performs significant activities.

'Recovery and resolution plans'	Each systemically important institution must prepare a resolution plan to submit to the authorities having jurisdiction, in which actions to take, in the case of crisis, is set forth, in the aim of restoring conditions of company continuity. Plans must be approved by house organs having jurisdiction, renewed yearly and submitted to examination by supervisory authorities.
'Improving resolvability'	Systemically important institutions must take action in advance enabling the removal of obstacles to their resolvability. Four specific critical areas are singled out for taking this kind of action: IT systems, use of service providers for special company functions, infra-group transactions, payment transactions.
'Discussion note: Creditor hierarchy, depositor preference and depositor protection in resolution'	The FSB stated its opinion as regards creditor hierarchy and depositor preference and protection in the case of resolution. Market participants are requested to give their opinion as regards the need/timeliness of defining a common standard for these aspects at the international level.
'Discussion note: Conditions for imposing temporary stay'	The FSB stated its opinion as regards contract withdrawal rights existing in financial institutions at the time a resolution procedure is started. Exertion of these rights by the different counterparts, usually provided for in contracts, can represent a significant obstacle to orderly execution of the procedure. Market participants are requested to give their opinion on this subject, in the aim of verifying whether to also issue recommendations on this point.

Table 4.4. Summary of FSB recommendations on the subject of SIFIs' resolution
Source: Financial Stability Board (2011g)

4.4. The hypothesis of 'ring fencing' being discussed in the United Kingdom and the 'Swiss finish'

In parallel to action being carried out at the international level, the hypothesis of complementary regulations are developing in some countries, on the basis of considerations connected to the specific structure of banking markets and subsequent problems, somewhat special problems, for stability. There is no logical contradiction between the two procedures; discipline shared at the international level establishes a common regulatory framework to which all leading systems must comply, whereas domestic declensions sets them as integrating measures aimed at reinforcing a stability profile.

This is the framework within which the document for consultation issued in April 2011[60] by the Independent Commission on Banking in the United Kingdom finds its place. Founded in June 2010 by the Chancellor of the Exchequer, the Commission has the task of putting forward reform proposals to the English government; proposals which can make the British banking system both more stable and more efficient, by means of raising the level of competition. The contribution requested by the English government to the Commission obviously finds justification in the great importance banking and financial industries have for the country's economy and in the wake of the

[60] Independent Commission on Banking (2011). Between the outbreak of the crisis and before this action was taken, the English banking system was affected by a further reform intervention which, aimed at regulating bank liquidity, actually anticipated many of the principles incorporated in Basel 3. See Financial Services Authority (2009b).

serious consequences caused by the crisis. Historically, Great Britain has pursued leadership in the financial world, strengthening London's role as a benchmark for financial markets at the international level; leading English banks are big market participants and have significant roles on the international scene. The importance of banking and financial systems in British economy is evident on observing the datum regarding ratio between bank assets and gross domestic product, near-on 5 at the end of 2009, a maximum value at the international level.[61] The need is clear, within a similar context, to make the banking system safe and to preserve economy's functioning. From the viewpoint of stability, a theme much discussed in these pages, the Commission's document has enriched debate underway at the international level, by proposing an innovative hypothesis of splitting banking activities according to their nature, target customers, consequences the crisis could have inside each of these areas. First of all, the Commission points out how the British banking system ensues as being highly concentrated around a low number of leading banks, structured according to the 'universal bank' model,[62] which internally incorporates all traditional activity, so-called 'retail banking', including purely financial activities, typical of investment banking. Growth of leverage over a long period of time applied by British banks,[63] and subsequent risk leading to bankruptcy involving significant State intervention, is ascribable to investment banking. Retail business refers to domestic clients, substantially unable to choose other bank services than those offered by the bank where the client lives. On one hand, private citizens and, on the other, small to medium-sized companies therefore have an objective need for conditions of efficiency and stability and this need must be protected as a 'public good' by regulators, by guaranteeing that institutions operating with the public at large always meet with their commitments towards the community. Behind this worry, obviously there is the memory of Northern Rock's dramatic bankruptcy. Moreover, at the same time, many leading English banks play a starring role on the international scene in the areas of 'wholesale banking' and investment banking. These activities are substantially different from retail business carried out on the domestic market; clients are different, as regards geographical position, type and dimensions, as well as different products negotiated, different production functions and, finally, different returns and risks. The Commission believes that these types of activity are worth being floated by leading English banks, so that they can maintain their important position in the international arena of competition within these market segments. The proposal's innovative feature lies in the fact that the Commission anticipates the contingency of proceeding with a separation of these completely different business areas. Retail business carried out by English banks mainly on the domestic market must, from this point of

[61] Independent Commission on Banking (2011, page 22).
[62] By the term 'universal bank', the Commission refers to a business model by virtue of which banks offer all types of banking and financial services, independently from an organisational solution adopted for this purpose (divisional model and/or group structure).
[63] According to data published by the Commission, average leverage practiced by British banks stands at a near-on 20 level for the period going from 1960 to 2000, to then increase up to a value near-on 50 during the years immediately prior to the crisis. According to the Commission, this dramatic increase in English banks' leverage came about owing to investment banking performed by these banks on an international scale. See Independent Commission on Banking (2011, page 18).

view, be separated ('ring fenced') and managed within a perspective ascribing pre-eminence of service towards British clients, efficiency in offer and stability of the banks ensuring these vital services. For this purpose, the Commission anticipates perhaps requesting banks to comply with a capital coefficient of 10% for risk-weighted assets ensuing from retail business. Inside leading banks operating as 'global' intermediaries, retail business, defined in this way, should be separated, according to different organisational solutions under current discussion, from other activities, which are intrinsically different and have different risks, such as wholesale and investment banking. The latter shall be carried out by British banks in the international arena on the basis of regulations, in particular capital and liquidity requirements, established at the international level. Reference is made to the new Basel Agreement and to the body of regulations in the process of being defined on the subject of G-SIFIs. Strict separation between the two areas of activity would enable, in the anticipations outlined by the Commission, to tackle a bank's eventual default as regards international business, without affecting retail business units on the domestic market, made safe by means of imposing a capital coefficient of 10%, believed sufficient to face risks deriving from this kind of activity. After having concluded consultation, the Commission will state its recommendations to the English government in September 2011. The proposal is undoubtedly innovative[64] if introduced into the current reform process, insofar as it brings to the fore a regulatory option based on the separation of activities considered structurally different, owing to type of intrinsic risk.[65] Whereas at the international level choice is for protection of risk based on capital, proposals debated in Great Britain express the will to take a further step in the direction of stability, by preserving the traditional banking system from risks inherent to the more risky business areas in which banks operate simultaneously. The proposal represents a local declension of the reform process, calibrated on the English banking system's features. On further examination, the rationality of these interventions is not far away from those proposed in the United States by means of specific measures, which have not been put forward at the international level, such as the Volcker Rule and the 'push out' of derivatives trading from banks covered by the system of deposits insurance. In both cases, two deeply crisis affected systems have autonomously expressed the will to add, as regards shared regulations at the interna-

[64] Opposing, even heavily opposing, points of view were not lacking, to the proposals debated. Bob Diamond, Barclays CEO, one of the leading British and international banks, active both on the retail and, more prominently, on the investment banking markets, has declared great doubt about their taking future root in the United Kingdom, owing to the contents of the proposed regulations being discussed. See *Financial Times* (2011).

[65] The history of banking systems' regulation is full of this kind of example, going from the Glass Stegall Act in the United States, which remained in force for over sixty years and which was abandoned only at the end of the last century, to Italian banking law, renewed in 1993. On the basis of the first case, launched in the wake of bank insolvencies following the 1929 crisis, the United States banking system provided for clear separation between 'commercial banking' and the more risky activity of 'investment banking' so as to guarantee stability. Italian banking law, issued in 1936, following crisis of the universal banks in the Thirties, provided for different types of functional specialisation between intermediaries, in particular maturity specialisation, including strict separation between banks and companies. In both cases, reduction in the complexity of activities carried out and separation between different-type of activities was aimed at containing overall risks which banks could take on.

tional level, specific disciplines, aimed at tackling potential risk which leading market participants of these systems might have to shoulder by virtue of activity type.

Another initiative worth mentioning is promoted by Swiss supervisory authorities and was made public in an official document in Autumn 2010.[66] In this case too, we are dealing with intervention proposing to make leading Swiss financial institutions safer which, owing to their size[67] and importance at the international level, must, as anticipated by authorities, be submitted to a discipline making them perceivable as immune from the insolvency risk, likewise avoiding the hypothesis of future rescue by the State. Recommendations contained in the report drafted by the Commission of Experts appointed by the Federal Council concerned two major Swiss banks, Crédit Suisse and UBS, and established, according to what is called the 'Swiss finish',[68] much higher capital requirements as compared to those provided for in the new Basel Agreement. The two banks at issue will have to have capital structured on three levels:

- a minimum capital formed by common equity for a total equivalent to 4.5% of risk weighted assets;
- a capital buffer equivalent to 8.5% of risk weighted assets, formed by 5.5% common equity and 3% hybrid instruments, defined as CoCos ('contingent convertible bonds'), liabilities which can be automatically converted into capital when so needed, especially in the case of common equity going below 7% of risk weighted assets;
- a further capital buffer, called a 'progressive component' which is determined according to the bank's systemic importance: the higher this last attribute, the higher the request for integration of base capital by authorities. Commission recommendations indicate a 6% level of risk weighted assets, to be formed by means of the above-mentioned CoCos. This third capital component represents an explicit incentive for banks to abandon developments which could further brand them as having systemic importance (overall size, interconnectedness, etc.). On the whole, the two banks taken into consideration should operate with a base capital equivalent to 19% of risk weighted assets, of which over half (10%) is formed by common equity.[69]

The inspiring principles of new capital requirements, to be implemented over the same period of time as provided for by Basel 3, would seem to be decidedly prudential. According to the contents of the report drafted by the Commission of Experts, measures at

[66] Commission of Experts (2010).
[67] We recall that, in Switzerland's case too, as in the United Kingdom, bank dimensions are very big in relation to the overall economic system. According to data made available by the above mentioned report by the Independent Commission on Banking, in Switzerland the ratio between bank total assets and gross domestic product stands at over 4 at the end of 2009, close to values in the United Kingdom.
[68] By this term, reference is made to 'refinishing' action, usually drawing inspiration from greater prudential criteria, as carried out by Swiss authorities and as compared to discipline shared within international frameworks.
[69] According to the contents of the Commission of Experts' report, measurements at issue could lead the two major Swiss banks to operate, as compared to provisions in Basel 3, with a total capital ratio over 80% and common equity over 40%.

issue could lead the two leading Swiss banks to operate, as compared to provisions in Basel 3, with an 80% higher total capital ratio and 40% higher common equity. Capital requirements integrate with measures of an organizational nature, aiming at preserving the functioning of basic services (payments, deposits, loans) even in the face of crisis, and to enable facilitated and orderly 'resolution' should restoring bank activity prove unfeasible.[70]

[70] Further points put forward by the Commission of Experts concern liquidity requirements and those connected to risk diversification, as regards which the recommendation is to reduce the degree of interconnection between banks, in the aim of avoiding spreading of crisis phenomena.

Chapter 5

Regulation of Derivatives Trading

The market for derivatives contracts was clearly one of the issues at the heart of the crisis, helping to spread many of the problems. The opening chapter examined, to some degree, how the development of this market segment in the years leading up to 2007 was characterised by three specific factors. First, trading volumes were enormous and grew continually, turning derivatives into one of the key financial innovation tools used across the world. Secondly, trader's reasons for dealing in such instruments changed, as speculation tended to replace their original use as risk-hedging instruments. Thirdly, and most importantly, empirical evidence has shown that the market developed in such a way that the clear majority of transactions were 'over the counter' (OTC) and not in regulated markets, resulting in consequences that should not be underestimated.

Tables 5.1 to 5.3 below not only show how this market segment developed, but also support the observations above and provide food-for-thought when trying to understand the extent and importance of the matter under the spotlight here.

- From the end of 2001 up to late 2010, the OTC derivatives market grew from US$111 trillion to over 600 trillion, which is roughly 10 times global GDP. Much of this staggering growth occurred between the start of the decade and the outbreak of the crisis, with average annual growth in this market between 2001 and 2007 in excess of 32%, meaning it doubled in size every 2.5 years.
- Such growth was driven by interest-rate derivatives, which are also the heaviest fraction in OTC derivatives (70% at the beginning of the period and nearly 80% by the end of the decade). Forex derivatives dropped, in percentage terms in the same period, from 15% to 10% and notably, in the years leading up to the explosion of the crisis, credit default swaps came to prominence.
- Grouping interest rate derivatives by maturity shows that a large proportion have maturities beyond one year and beyond five years, indicating that the ties between parties that enter into such agreements will remain in place in the medium-long term. Although those counterparties that enter into such contracts can transfer the contract to a third party, the highly concentrated structure of the market means that the contracts tend to remain in the hands of a relatively limited number of international financial

institutions. For forex derivatives, the percentage maturing beyond one year increased in the period in question.

- Examination of market structure shows that most counterparties involved in such contracts are financial institutions. Transactions are carried out among dealers, the parties that, as will be shown later on, ensure the market functions, and between these and financial counterparties. The importance of non-financial players (largely companies) is limited for forex derivatives and negligible for interest-rate derivatives. Companies tend to use these contracts – and this opinion is supported by the regulators – because they need to manage and hedge risk. Hence, most contracts tend to be between financial counterparties. Although it is perfectly feasible that such counterparties use these instruments to hedge risk, it is equally likely that there is also widespread speculation.
- During the period in question, the official derivatives market – contracts traded on regulated markets – also grew, although proportionally much less. At the start of the period, the OTC segment was worth 4.7 times the value of the official market, while by the end of 2010 this ratio had soared to 8.8 times, having even reached 10.36 in late 2008.
- The official market can be divided, on the basis of products, into futures (30/40% of the total) and options (60/70% of the total). However, in both cases, most contracts relate to interest rates. If one looks at the geography of these, then one sees that the North American and European markets continue to account for over 90% of trades in such contracts. This is why reforms in Europe and the United States have such radical effects on this market.

OTC derivatives	2001	2003	2005	2006	2007	2008	2009	2010	**CAGR 2007/2001**
Total contracts	111,178	197,177	297,666	414,845	596,004	598,147	603,900	601,048	32%
Forex	16,748	24,484	31,360	40,271	56,238	50,042	49,181	57,798	22%
Interest rate	77,568	141,991	211,970	291,582	393,138	432,667	449,875	465,260	31%
Equity linked	1,881	3,787	5,793	7,488	8,509	6,471	5,937	5,635	29%
Commodity	598	1,406	5,434	7,115	9,000	4,427	2,944	2,922	57%
Cds			13,908	28,650	57,894	41,883	32,693	29,898	
Others	14,384	25,510	29,199	39,740	71,225	62,667	63,270	39,536	31%

Table 5.1. OTC derivatives market: growth broken down by contract type. Notional amounts in US$ billion

Source: BIS Quarterly Review (various years)

OTC derivatives	2001	2003	2005	2006	2007	2008	2009	2010
Forex	**16,748**	**24,484**	**31,360**	**40,271**	**56,238**	**50,042**	**49,181**	**57,798**
< 1 year	13,427	14,533	23,907	30,260	40,316	32,711	30,614	37,987
1-5 years	2,340	3,128	5,164	6,702	8,553	9,557	9,712	10,137
> 5 years	981	1,399	2,289	3,299	7,370	7,774	8,855	9,674
% < 1 year	20%	18%	24%	25%	28%	35%	38%	34%
reporting dealers	5,912	8,663	12,165	15,532	21,334	19,665	18,896	21,955
%	35%	35%	39%	39%	38%	39%	38%	38%
other financial institutions	6,755	9,455	12,721	16,023	24,154	21,300	21,445	25,626
%	40%	39%	41%	40%	43%	43%	44%	44%
non financial customers	4,081	6,366	6,474	8,716	10,751	9,077	8,840	10,216
%	24%	26%	21%	22%	19%	18%	18%	18%
interest rate	**77,568**	**141,991**	**211,970**	**291,582**	**393,138**	**432,667**	**449,875**	**465,260**
< 1 year	27,886	46,474	69,378	104,098	127,601	155,581	180,007	190,487
1-5 years	30,566	58,914	86,550	110,314	134,713	127,511	134,312	138,206
> 5 years	19,115	36,603	56,042	77,170	130,824	149,565	135,556	136,567
% < 1 year	64%	67%	67%	64%	68%	64%	60%	59%
reporting dealers	35,472	63,579	91,541	127,432	157,245	165,741	138,580	134,483
%	46%	45%	43%	44%	40%	38%	31%	29%
other financial institutions	32,510	57,564	95,320	125,708	184,396	228,003	275,688	293,478
%	42%	41%	45%	43%	47%	53%	61%	63%
non financial customers	9,586	20,847	25,109	38,441	51,497	38,914	35,607	37,299
%	12%	15%	12%	13%	13%	9%	8%	8%

Table 5.2. Forex and interest rate OTC derivatives: composition by maturity and nature of counterparty
Source: BIS Quarterly Review (various years)

Exchange traded derivatives	2001	2003	2005	2006	2007	2008	2009	2010	CAGR 2001/2007
Futures	**9,669**	**13,705**	**21,600**	**25,683**	**28,060**	**19,508**	**21,738**	**22,312**	19%
Interest rate	9,269	13,123	20,709	24,476	26,770	187,332	20,628	21,013	19%
Currency	66	80	108	161	158	125	144	170	16%
Equity	334	502	784	1.045	1.132	651	966	1,128	23%
Options	**14,095**	**23,028**	**36,188**	**44,761**	**52,521**	**38,236**	**51,380**	**45,635**	25%
Interest rate	12,493	20,794	31,588	38,116	44,282	33,979	46,429	40,930	23%
Currency	27	38	66	79	133	129	147	144	30%
Equity	1,575	2,197	4,534	6,565	8,107	4,128	4,804	4,560	31%
Total exchange traded derivatives	**23,764**	**36,733**	**57,788**	**70,444**	**80,581**	**57,744**	**73,118**	**67,947**	23%
North America	16,203	19,504	36,384	42,551	43,991	29,672	34,596	36,217	18%
Europe	6,141	15,405	17,973	23,217	30,658	24,622	34,376	25,592	31%
Asia/Pacific	1,309	1,608	3,004	4,050	4,971	2,686	2,719	3,552	25%
Others	111	217	426	626	1.051	774	1.427	2.586	45%
OTC/ exchange traded	**4,68**	**5,37**	**5,15**	**5,89**	**7,40**	**10,36**	**8,26**	**8,85**	8%

Table 5.3. Exchange-traded derivatives: changes in size, types of products and geographic concentration of the market, ratio comparing the size of the OTC and exchange-traded markets
Source: BIS Quarterly Review (various years)

Returning to the two different types of trading – OTC and regulated markets – it is notable how these influence the conduct of the parties involved, market stability and the efficacy of regulatory supervision.

Transactions on regulated markets benefit from a structured market with clear rules and mechanisms to reduce risk and ensure transparent transactions. Moreover, such transactions are constantly monitored by the relevant authorities.

In terms of mitigating risk, regulated markets normally have elements designed to ensure market stability: a centralised clearing house and a system of margin deposits.

The clearing house stands between two parties involved in a transaction, guaranteeing the execution of the contract for both seller and buyer.[1] This removes, for each market participant, the risk of counterparty default (normally called 'counterparty risk'). This ensures the flow of transactions and avoids any insolvency crises, thus also removing the chance of any problem becoming contagious. For this to be true, the clearing house must meet the necessary requirements and operate in such a way that it actually manages and controls the risk. This is an issue that will be examined later, when the laws passed to reform this market segment are discussed.

[1] Primarily, a clearing house regulates transactions, matching the payments made by buyers with the securities delivered by sellers. In the text, the reference is to entities that not only provide a settlement service, but also guarantee the successful conclusion of transactions because this is the implied spirit of the reform, which is essentially designed to reduce – down to zero – counterparty risk.

The margin deposits are used by the clearing houses themselves to ensure that traders can always meet their obligations. By requiring participants that deal on the market to provide such margins, the clearing house constantly monitors the solvency of such participants and thus reduces the burden it faces to guarantee the correct execution of transactions.[2]

The second feature of regulated markets is transparency in trading conditions. Information about prices, trading volumes, terms conditions and the roles played by the different parties is collected on an ongoing basis, building up an information base that is then available to the supervisory authorities, traders and so on.

By contrast, since OTC transactions are outside the regulatory and structural framework of regulated markets, they are not bound by the aforementioned rules. The OTC derivatives market has historically centred on a relatively small number of dealers, who undertook to make public the prices at which they were prepared to enter into contracts. Direct contract between dealers, potentially via phone or email, led to bilateral trading where, when a contract was entered into, only the parties involved knew all the details of the transaction. The market then developed further with the introduction of electronic trading platforms where dealers would publish, for the benefit off all players in the market, the prices for the various contracts. This resulted in a more defined and transparent model for transactions, at least as far as price terms were concerned, with dealers publishing their proposals to the benefit all the counterparties who intended to take them up. However, the increasing degree of organisation of this market did not remove the structural problems related to a lack of control, the transparency of the positions of individual dealers and the accumulation of counterparty risk (Deutsche Bank 2010).

Entering into a medium-long term OTC derivatives contract binds two counterparties for long periods of time and, in such situations, the question of counterparty risk tends to take on increased significance. The OTC derivatives market is clearly aware of this problem, although empirical evidence does suggest it is dealt with less stringently and efficiently than in regulated markets.[3]

Furthermore, the market is concentrated on a small number of major players, meaning a lack of real options for diversifying and reducing risk. The dealers at the heart of this market do require guarantees from their counterparties (collateralisation), but these collateral security margins are not calculated constantly (weekly and sometimes even monthly calculations are still used) and the guarantee is estimated to be 66% of the net credit exposure. Dealers can be driven by business reasons – to develop these activities and the revenues they produce – to accept lower guarantees or lower quality collateral.

This market has another structural problem in that the supervisory authorities lack a clear picture of what is going on in this market. Information about transaction trends, prices and the roles of the different players is only partially made available and with a

[2] The system of margins generally involves, as is examined in more detail later, initial margins paid by members of the exchange system governed by the clearing house, and daily margins that are intended to align the deposit paid with the changes in the market prices of traded contracts (using the mark-to-market principle). One also finds cases of additional guarantees – over and above the aforementioned ones – where market participants create, through payments, a default fund that is established to provide the necessary resources to deal with any member (or members) of the trading system defaulting.

[3] European Commission (2009a; 2009b; 2009d). ISDA (2010).

delay. The telling consequence of this is that the absence of direct checks on market functioning means that all checks on dealers in this market are done ‘after the fact’ by the relevant national regulators as part of their supervisory duties. If there are any gaps in this supervision, the supervisory authorities run the risk of completely losing control of this specific sector. It is also extremely evident that, given the interconnected nature of this international market, the failure of the supervisory system in any country can lead to a dramatic domino effect. There are two good examples of this. The first relates to the aforementioned supervisory frailties of the US investment banks, which are key players in the international OTC derivatives market. The weak supervision of the activities in this market prevents global control of the market. The second example is the case of one of the world’s leading insurance companies, the US-based AIG. This multinational was on the verge of defaulting because of the risks it had taken on in the OTC derivatives market without the relevant supervisory authorities being aware of the level of risk AIG was facing.

The regulatory reform starts from the knowledge of the criticalities uncovered during the crisis and proposes actions designed to mitigate the risk implicit in this market. The chosen regulatory solution is to ensure ‘upstream’ supervision of insolvency risk, forcing transactions to move from the OTC market to the regulated one. The proposed European legislation and the adoption of the Dodd-Frank Act in the United States show that the commitments made by the G-20 nations at the Pittsburgh meeting in September 2009 have been taken into account. In the statement made at the end of that summit, the participant countries outlined the following principles to regulate international markets for derivative products:

- Central clearing. By the end of 2012, all standardised OTC derivatives contracts should be traded on exchanges or electronic trading platforms and cleared through central counterparties.
- Reporting. OTC derivatives contracts should be reported to trade repositories to ensure greater market transparency (contract types, volumes, prices, positions of individual players).
- Capital requirements. Non-centrally cleared contracts should be subject to higher capital requirements as the parties that make such trades must cover the risks linked to such deals with higher levels of capital.

5.1. Regulation in Europe

In September 2010, the European Commission formally presented its proposal for regulating OTC derivatives (European Commission 2010c) following a process, begun at the height of the crisis, to fully understand the best paths for action. The proposal follows on from the commitments made at the G-20 summit in Pittsburgh, adopting the criteria of central clearing houses, transparency and greater capital requirements for contracts excluded from central clearing.

Contracts and parties subject to mandatory central clearing

The first of these principles ensures the majority of OTC derivatives contracts are traded on markets with a central counterparty (CCP)[4] tasked with eliminating counterparty risk. Pursuant to Article 3, financial counterparties[5] are obliged to clear, through central counterparties, all OTC derivatives contracts subject to mandatory clearing. In economic terms, such contracts are identified on the basis of standardisation and liquidity. Clearly, highly standardised contracts that are traded in significant volumes are the first type of contract subject to mandatory central clearing. By contrast, those contracts containing specific clauses that are likely to reduce their diffusion and, consequently, their liquidity, are almost certain to remain outside of such markets.

Two methods are used to identify which types of contracts are subject to these mandatory clearing mechanisms.[6] The first is a 'bottom-up' approach, where the CCPs make requests to the competent national regulator[7] to receive the authority to clear specific types of contracts centrally. National regulators, after having consulted with ESMA, the a newly created European authority to regulate financial markets and to aid coordination between the various national authorities, decide whether to release said authorisation.

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[4] According to Article 2, "'central counterparty (CCP)' means an entity that legally interposes itself between the counterparties to the contracts traded within one or more financial markets, becoming the buyer to every seller and the seller to every buyer and which is responsible for the operation of a clearing system".

[5] "'Financial counterparty' means investment firms as set out in Directive 2004/39/EC, credit institutions as defined in Directive 2006/48/EC, insurance undertakings as defined in Directive 73/239/EEC, assurance undertakings as defined in Directive 2002/83/EC, reinsurance undertakings as defined in Directive 2005/68/EC, undertakings for collective investments in transferable securities (UCITS) as defined in Directive 2009/65/EC, institutions for occupational retirement provision as defined in Directive 2003/41/EC and alternative investment funds managers as defined in Directive 2010/…/EU".

[6] "Article 4: Eligibility for the clearing obligation. 1. Where a competent authority has authorised a CCP to clear a class of derivatives under Article 10 or 11, it shall immediately notify ESMA of that authorisation and request a decision on the eligibility for the clearing obligation referred to in Article 3. 2. ESMA, after receiving the notification and request referred to in paragraph 1, shall, within six months, address a decision to the requesting competent authority stating the following: (a) whether that class of derivatives is eligible for the clearing obligation pursuant to Article 3; (b) the date from which the clearing obligation takes effect. 3. ESMA shall base its decision on the following criteria: (a) reduction of systemic risk in the financial system; (b) the liquidity of contracts; (c) availability of pricing information; (d) ability of the CCP to handle the volume of contracts; (e) level of client protection provided by the CCP. Before taking a decision, ESMA shall conduct a public consultation and, where appropriate, consult with the competent authorities of third countries. 4. ESMA shall promptly publish any decision under paragraph 2 in a register. That register shall contain the eligible classes of derivatives and the CCPs authorised to clear them. ESMA shall regularly update that register. ESMA shall regularly review its decisions and shall amend them where necessary. 5. ESMA shall, on its own initiative and in consultation with the European Systemic Risk Board (ESRB), identify and notify to the Commission the classes of derivatives contracts that should be included in its public register, but for which no CCP has yet received authorisation. 6. Powers are delegated to the Commission to adopt regulatory technical standards specifying the following: (a) the details to be included in the notification referred to in paragraph 1; (b) the criteria referred to in paragraph 3; (c) the details to be included in the register referred to in paragraph 4. The details in paragraph 4 shall at minimum correctly and unequivocally identify the class of derivatives subject to the clearing obligation. The draft regulatory standards referred to in the first subparagraph shall be adopted in accordance with Articles [7 to 7d] of Regulation …/… [ESMA Regulation]. ESMA shall submit drafts for those regulatory standards to the Commission by 30 June 2012".

[7] Each Member State shall identify the authority responsible for derivatives contracts and inform ESMA.

The second approach is 'top down' and it requires ESMA to identify those contracts subject to mandatory central clearing after having consulted with ESRB. This second approach complements the first since the European supervisory authorities can require that certain types of contract that present a systemic risk be cleared centrally, even if the 'market' has not requested centralised clearing on its own initiative.

The cross-over between parties and contracts, on the one side, and the synergy between the two identification approaches, on the other, should result in a substantial number of OTC derivatives migrating onto markets operating according to the principle of centralised clearing, thus profoundly changing the current market structure.

For those contracts that, because of their very nature, are not subject to mandatory clearing, the proposed regulation identifies the risk reduction methods that the parties that enter into such contracts must use in order to ensure they do not compromise the stability of the system.[8] For this, the key principles are the control of risk through the implementation of suitable risk management procedures and the capital requirements, which will be based on quantitative terms to be defined by the European Commission.

The measures covered thus far apply to financial institutions and it is assumed, as was indicated above, that such institutions tend to use such markets not only to hedge risk but also – and increasingly – to speculate.

Non-financial institutions are, as a general rule, exempt from these obligations, at least until they cross set size thresholds. By adopting such a measure, the European authorities chose to accept non-financial institutions' requests on the basis of the assumption that they access such markets in order to hedge the risk inherent in their day-to-day business or financial management. Making such parties subject to mandatory central clearing, with the consequent obligations to post collateral, would have placed a burden on their use of financial resources. This is why, under the directive, the obligation for non-financial institutions only comes into effect if their derivatives positions exceed

[8] "Article 8: Risk mitigation techniques for OTC derivative contracts not cleared by a CCP. 1. Financial counterparties or the non-financial counterparties referred to in Article 7(2), that enter into an OTC derivative contract not cleared by a CCP, shall ensure that appropriate procedures and arrangements are in place to measure, monitor and mitigate operational and credit risk, including at least: (a) where possible, electronic means ensuring the timely confirmation of the terms of the OTC derivative contract; (b) robust, resilient and auditable processes in order to reconcile portfolios, to manage the associated risk and to identify disputes between parties early and resolve them, and to monitor the value of outstanding contracts. For the purposes of point (b), the value of outstanding contracts shall be marked-to-market on a daily basis and risk management procedures shall require the timely, accurate and appropriately segregated exchange of collateral or the appropriate and proportionate holding of capital. 2. Powers are delegated to the Commission to adopt regulatory technical standards specifying the maximum time lag between the conclusion of an OTC derivative contract and the confirmation referred to in paragraph 1(a). The regulatory technical standards referred to in the first subparagraph shall be adopted in accordance with Articles [7 to 7d] of Regulation …/… [ESMA Regulation]. ESMA shall submit a draft to the Commission for those regulatory technical standards by 30 June 2012. 3. Powers are delegated to the Commission to adopt regulatory technical standards specifying the arrangements and levels of collateral and capital required for compliance with paragraph 1(b) and the second subparagraph of paragraph 1. Depending on the legal nature of the counterparty, the regulatory technical standards referred to in the first subparagraph shall be adopted in accordance with either Articles [7 to 7d] of Regulation EU …/… [EBA], Articles [7 to 7d] of Regulation EU …/… [ESMA] or Articles [7 to 7d] of Regulation EU …/… [EIOPA]. EBA, ESMA and EIOPA shall submit, jointly, a common draft to the Commission for those regulatory technical standards by 30 June 2012".

certain thresholds.[9] In such cases, the transactions of a non-financial institution would be relevant for the system, given the volumes traded, and in general terms for the overall stability of the market.

Central counterparties

Central counterparties, the cornerstone of the new derivatives market infrastructure, must meet a range of requirements in line with their role as the body guaranteeing an operational, stable market.

Pursuant to the directive, CCPs are legal entities in the EU with sufficient liquidity to provide clearing services. They operate on the basis of authorisation received from the relevant authorities[10] in their Member State that is valid across the Union.[11] The proposed regulation sets a minimum initial capital requirement[12] and then leaves the Commission to decide, through future provisions, the amount of capital required once fully up and running.

The requirements that CCPs must meet are governed by Title IV, which sets out the organisational, business conduct and prudential requirements.

In terms of the first requirement, emphasis is placed on the CCP's ability to ensure business continuity, that is, the seamless management of how the market functions. Furthermore, CCPs must have clear governance rules, a management team meeting the necessary requirements, risk management and monitoring procedures, effective administrative and organisational procedures, and clear criteria identifying what contracts can be cleared and who can use the CCP.

The business conduct rules establish the principles that CCPs must comply with in their operations: transparency, non-discrimination, professionalism and fairness, and price disclosure.

In terms of prudential requirements, Chapter 3 of Title IV indicates the mechanisms to be used to ensure central counterparties act in a way that guarantees market stability. It is here that the actual differences between OTC derivatives and those traded on regulated markets manifest themselves most clearly. The latter have mechanisms designed to prevent market participants from failing or, if one does default, then these mechanisms ensure that this does not jeopardise market stability and continuity.

Such mechanisms are primarily based on the margins paid by members:

[9] Two thresholds are established for non-financial institutions. The first is a reporting threshold, above which non-financial institutions are required to inform the regulator about the reasons why they have taken on derivatives positions. The second is a genuine clearing threshold. If a non-financial institution exceeds this limit, the company is deemed to be of systemic importance and so it is treated the same as a financial counterparty, with the consequent mandatory clearing. The proposal gives the Commission the power to set the technical standards for identifying the limits for these thresholds, taking into account the total net exposure of the non-financial companies per derivatives class.

[10] These authorities, designated by the Member State, are also responsible for the supervision of the CCPs.

[11] Article 10, subsections 1 and 2.

[12] Article 12.

- when entering into a contract;
- daily, in relation to the mark-to-market value of the contract.[13]

The margins can be seen as the first line of defence, while the second line of defence is the default fund established by Article 40. This fund consists of contributions paid by clearing members and its purpose is precisely to cover any losses related to one or more members defaulting. If a member does default, then the seniority system requires the CCP to first use the amounts in the fund collected from the defaulting party. Should such funds prove to be insufficient to cover the losses, then the CCP makes use of its own financial resources. If this still results in a shortfall, then the CCP can use the additional resources in the default fund that came from contributions from members who have not defaulted.

The CCP requirements concretely show the difference between the OTC market and a market regulated pursuant to the new rules. The series of measures that define how the latter market functions should minimise instability risks. Article 46 requires CCPs to regularly review their risk control mechanisms, potentially using stress tests to forecast what resources would be needed to manage one or more clearing members defaulting.

Finally, Title V governs interoperability between central counterparties, that is, the arrangements entered into with other CCPs in order to help create a more integrated European derivatives contracts market.

Trade repositories

Trade repositories, designed to ensure the utmost transparency in OTC trading, are another key element in the future structure of the derivatives markets.[14] In the proposed regulation, a trade repository is an entity operating in the European Union that has registered with ESMA after submitting a specific application and after the European authorities have verified that it meets the necessary requirements.[15]

The requirements can be seen as those functional and essential attributes needed to perform the role assigned to such entities in the new market infrastructure. More specifically, these are organisational, corporate governance, reliability and business continuity requirements. Their basic role is to promptly record details of trades performed by market participants, which are in turn required to promptly inform the repositories pursuant to Article 6 of the proposed directive.[16]

The data collected, filed and stored by repositories shall be published in aggregate form and made available to those governing bodies for European financial markets that

[13] The system whereby margins are adjusted requires that clearing members pay additional margins if the market price of the acquired contract moves unfavourably or are reimbursed (margins paid) if the market price moves favourably.
[14] Defined by Title VI (Registration and surveillance of trade repositories) of the proposal for regulation drafted by the Commission.
[15] Chapter 1 of Title VI: "Conditions and Procedures for Registration of a Trade Repository".
[16] See Article 6, subsection 1: "Financial counterparties shall report to a trade repository registered in accordance with Article 51 the details of any OTC derivative contract they have entered into and any modification or termination. The details shall be reported no later than the working day following the execution, clearing, or modification of the contract".

require it: ESMA and the national authorities responsible for supervising undertakings that deal in such contracts and are subject to the central bank reporting obligations. The European Commission will define, on the basis of a proposal to be submitted by ESMA by the middle of 2012, the regulatory technical standards for the information provided by repositories.[17]

5.2. Regulation in the United States

The governance of derivatives contracts is one of the cornerstones of the wide-ranging reform of the United States' financial system. Included in Title VII of the Dodd-Frank Act (DFA)[18], it draws on the same principles examined in the section on the proposed European regulation. The European and US authorities, by their own admission, worked closely on these regulations since they realised that any significant differences between the two sets of rules might have created a risk of dangerous regulatory arbitrages between the two centres, which account for roughly 80% of the global derivatives market.

Thus, the similarities between the regulations outweigh the differences, especially since both systems tend to consistently implement the principles established in the final declaration from the Pittsburgh G-20 summit. The US regulations also implement the general principle of mandatory clearing, the principle of transparency in trading and the capital requirements for non-centralised contracts. Even though these notions were introduced in July 2010 as part of a broader act to reform financial markets, in the coming months they too will be subject to a rulemaking process conducted by the competent authorities. The DFA established that the process for issuing these rules must be completed within 360 days from the Act coming into force, meaning July 2011. Later in this chapter it will be shown how the implementation deadline has effectively been extended for many of these rules and that it is likely that the reform will be fully in place at the end of 2011 or the start of 2012.

The supervisory authorities and the areas they are responsible for

The reform assigns the responsibility for presiding over the derivatives market to two oversight bodies – the Commodity Futures Trading Commission (CFTC) and the Security and Exchange Commission (SEC) – thus maintaining the organisational structure in place when the crisis exploded.[19] During the debate sparked by the crisis it was suggested that these two oversight bodies merge, but they are responsible for different market segments and they are obliged to coordinate their actions, as far as is possible,

[17] See Article 67.

[18] Title VII, "Wall Street Transparency and Accountability", sections 711 to 774.

[19] Up until the crisis, the CFTC's remit covered futures contracts, options on futures and commodities, and other types of equity index derivatives. The SEC oversaw individual equity and index options as well as listed options in foreign currencies.

to increase the efficacy of what they do. The CFCT is the watchdog for swaps, while the SEC is responsible for overseeing securities-based swaps.[20]

Concentration obligation and clearing mechanisms

The Dodd-Frank Act establishes the general principle that derivatives contracts currently negotiated over-the-counter are, as far as is possible, cleared through a clearing organisation registered in accordance with the requirements set out in Section 723h (1) of the reform act.

Once again, identifying those contracts subject to clearing is done using two approaches. The 'top-down' approach requires the two oversight bodies to identify, each for their own remit, the contracts that must be cleared and then make this information public. To determine what classes of contracts shall be subject to mandatory clearing, these authorities look at trading volumes, the positions taken on by dealers and the liquidity of the contracts.[21]

The 'bottom-up' approach allows the clearing organisations to propose contracts that should be subject to mandatory clearing. When clearing organisations identify contracts that are not yet subject to mandatory clearing, they can send a request to the authorities that such contracts be subjected to central clearing. In turn, the authorities must reply, within 90 days, indicating whether such authorisation has been granted or not. Once mandatory clearing has been imposed on a specific contract class, dealers are required to trade such contracts using the clearing system since any contracts entered into outside of this circuit are invalid.[22]

The division for clearing follows that for contracts. Thus, contracts falling into the swap category, as defined above, have to be cleared through Derivative Clearing Organizations (DCOs) registered with the CFTC, while those in the securities-based swaps category are cleared through those clearing agencies defined by the Securities Exchange Act of 1934.[23]

Mandatory clearing is obviously followed by the implementation of the system of guarantees, which is the element that differentiates regulated markets from OTC ones. These guarantees are, in practice, the margins paid – both initial and variation margins – by clearing members[24] and the payment made into the clearing organisation's default fund.

[20] The SEC is responsible for all derivatives contracts related to a single security or to an index for a limited number of securities, while the CFCT is responsible for all the other categories of derivatives.

[21] If the authorities require central clearing for specific contract classes but there are no clearing bodies able to provide such clearing, then the authorities are required to explore the reasons for this and find a solution.

[22] Unless the contract is exempt from mandatory clearing. See Section 723h(1): "It shall be unlawful for any person to engage in a swap unless that person submits such swap for clearing to a derivatives clearing organization that is registered under the Act".

[23] For organisations to clear both swaps and securities-based swaps, they must be registered with both the SEC and the CFCT. In such cases, the registration process still involves submitting an application to the competent authority and the subsequent verification that the necessary requirements are met (clearly, these requirements must continue to be met while the organisation operates).

[24] Since market participants subject to mandatory clearing can legitimately operate through multiple clearing organisations – because of the different contracts cleared by the various organisations – it is possible

The regulations seem to be substantially reorganising the derivatives market. Aside from the aforementioned migration of contracts from the murky OTC markets, there are also the bases for creating competition in the execution and clearing[25] activities, with financial institutions potentially able to offer such services on a competitive basis in a market regulated by the supervisory authorities.

As with the proposed European reform, the requirements for central clearing organisations tend to ensure that these organisations are able to govern transactions on an ongoing basis and to provide market stability.

In order to ensure these organisations play a guarantor role, the DFA requires them to have sufficient financial resources, managerial expertise and technical skills. To be allowed to act as clearing houses, they have to define objective, public standards that prevent discrimination. The clearing organisations must, in the light of the normal flow of transactions, put in place procedures to constantly monitor the major elements of risk that their business is structurally exposed to.[26]

Mandatory central clearing should result in derivatives contracts migrating to official markets or to other trading systems.[27] The latter, registered with the competent oversight body given the derivatives class being traded, are required to organise transactions in an effective, orderly way, to supervise the execution of these transactions and to collaborate with the supervisory authorities to ensure market stability.

The obligation does not include OTC contracts already in place at the time the reform comes into effect, meaning these are not expected to migrate to clearing organisations. This will cause, with the entry into law of the DFA, the same types of contracts to be either subject to or exempt from mandatory clearing. Consequently, the payment of the margins required for the clearing systems will be staggered because of this overlap between the two categories. The size of the market, as was noted earlier, makes it clear that the effects of the reform will tend to become clear gradually. As only new contracts will be subject to the concentration obligation and since these new contracts will be divided into two categories, that is, those subject to clearing (standardised contracts) and those not subject to it (non-standardised), it will take a few years before one can be sure the international derivatives market is operating according to the logic and rules of the reforms currently being put into place.

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that the margins paid are in excess compared to the position of the single participant. Thus, clearing organisations have the option of netting the margin positions held by a single participant.

[25] See below in the conclusions to this chapter.

[26] It is expressly stated that clearing organisations have to perform daily checks on their overall exposure to the market and individual participants. Likewise, they are also required to check the consistency of the margins and other risk management mechanisms so as to avoid a default by one party having repercussions for other solvent parties. Finally, they also have to put in place clear and orderly default management procedures that minimise the spread of any problems. The responsibility for ensuring the clearing organisation complies with all these requirements falls to the chief compliance officer designated by the clearing organisation.

[27] The Swap Execution Facility (SEF) is a computerised trading platform where multiple players can execute derivatives contracts. "Section 721 (50) Swap Execution Facility. – The term 'swap execution facility' means a trading system or platform in which multiple participants have the ability to execute or trade swaps by accepting bids and offers made by multiple participants in the facility or system, through any means of interstate commerce, including any trading facility, that – (A) facilitates the execution of swaps between persons; and (B) is not a designated contract market".

Regulations for companies operating in the market

End users. The DFA has provisions to allow end users who enter into derivatives contracts to hedge financial risks linked to their business operations to be exempt from mandatory central clearing for derivatives transactions. The DFA sets forth that such parties must inform the competent authorities about the reasons why they need such contracts and then, if their reasons are accepted, they are exempt from the obligation.[28] Thus, in this area, the law in the United States is the same as that being discussed in Europe. While both regulatory systems place obligations on financial institutions, the legislation on the table in Europe does not apply to non-financial institutions unless the trading volumes of these institutions exceed certain quantitative thresholds to be set by the European Commission. In the regulations approved in the United States, mandatory clearing is required of all parties who enter into an eligible contract, while the possibility of an exemption for end users – companies – only arises when a series of conditions are met clearly showing that the contract is intended to hedge risk.

Following the spirit of the DFA, once a contract not subject to central clearing has been entered into, it should then lead to security margins being paid, but draft laws are currently being discussed to eliminate this requirement for end users. In early May 2011, the House Financial Services Committee approved the Business Risk Mitigation and Price Stabilization Act, which sets forth that end users do not have to pay the security margins.

Banks and the Lincoln Amendment. Bank dealing in derivatives is governed by the so called ‘Lincoln Amendment’, which was included in the DFA to prevent banks taking on excessive level of risk and thus, in the case of default, activating the rescue funds that make up the deposit-insurance system.[29] This issue was widely debated in the lead up to the financial markets reform act. The safeguards for depository institutions are designed to ensure stability and maintain public faith in banks. The latter, when they trade in derivatives, can take on excessive risk that could lead to them defaulting, meaning the rescue funds (safeguards) would end up guaranteeing – and thus paying for – transactions that are not deemed worthy of protection. Therefore, the reform seeks to separate these activities from the banks ‘ordinary activities’, entrenching the principle of protection only for the latter. This is what the Lincoln Amendment does.

The original version of the amendment, proposed by Senator Lincoln, prevented institutions that traded derivatives from accessing the Deposit Insurance Fund (DIF) and emergency lending from the Federal Reserve. The plan was to force banks to carve out their derivatives trading activities since these were seen as too risky and since it was felt that the deposit safeguards, designed to protect those who deposited their capital in

[28] “Section T23(7) Exceptions. – (A) In general. – The requirements of paragraph (1)(A) shall not apply to a swap if 1 of the counterparties to the swap – (I) is not a financial entity; (II) is using swaps to hedge or mitigate commercial risk; and (III) notifies the Commission, in a manner set forth by the Commission, how it generally meets its financial obligations associated with entering into noncleared swaps”.

[29] Section 716 expressly bans bailouts for ‘swap entities’ (dealers and major participants). “Section 716 (Prohibition Against Federal Government Bailouts of Swap Entities): (a) Prohibition on Federal Assistance – Notwithstanding any other provision of law (including regulations), no Federal assistance may be provided to any swaps entity with respect to any swap, security-based swap, or other activity of the swaps entity”.

banks, should not be used to save banks that had suffered losses because of derivatives trading. In the initial format of the amendment, the idea was that banks would 'push out' their derivatives trading activities and thus the safeguards would be maintained.[30] The Lincoln Amendment effectively sought the same goals as the Volcker Rule, but sticking almost exclusively to derivatives transactions. Like with the Volcker Rule, the original version was revised to find a compromise that gave some ground to the staunch opposition of the financial industry. The promulgated version of the law gave the FDIC insured banks (i.e. with deposit insurance) the option to:[31]

- enter into derivatives transactions to hedge risk and, more generally, to mitigate other risk linked to ordinary bank activities;
- perform derivatives transactions involving interest rates, currencies, some types of commodities and any other assets that are permissible for investment by a national bank;
- perform derivatives transactions involving credit default swaps that are cleared centrally and that are related to 'investment grade' assets.

The same Article sets forth that this prohibition on banks only applies to contracts entered into after the law comes into force[32] and establishes a lengthy transition period for banks to divest any non-conforming derivatives trading.[33]

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[30] The Lincoln Amendment not only sought to prevent the rescue funds from covering derivatives losses, but also to stop banks using the funds from the FDIC – obtained at a lower cost for the guarantee implicit in the deposit insurance system – to finance risky activities. See Fowler (2011).

[31] "Section 716 (d) (Only Bona Fide Hedging and Traditional Bank Activities Permitted). – The prohibition in subsection (a) shall apply to any insured depository institution unless the insured depository institution limits its swap or security-based swap activities to: (1) Hedging and other similar risk mitigating activities directly related to the insured depository institution's activities. (2) Acting as a swaps entity for swaps or security-based swaps involving rates or reference assets that are permissible for investment by a national bank under the paragraph designated as 'Seventh' of section 5136 of the Revised Statutes of the United States (12 U.S.C. 24), other than as described in paragraph (3). (3) Limitation on Credit Default Swaps. – Acting as a swaps entity for credit default swaps, including swaps or security-based swaps referencing the credit risk of asset-backed securities as defined in section 3(a)(77) of the Securities Exchange Act of 1934 (15 U.S.C. 78c(a)(77)) (as amended by this Act) shall not be considered a bank permissible activity for purposes of subsection (d)(2) unless such swaps or security based swaps are cleared by a derivatives clearing organization (as such term is defined in section la of the Commodity Exchange Act (7 U.S.C. la)) or a clearing agency (as such term is defined in section 3 of the Securities Exchange Act (15 U.S.C. 78c)) that is registered, or exempt from registration, as a derivatives clearing organization under the Commodity Exchange Act or as a clearing agency under the Securities Exchange Act, respectively".

[32] "Section 716 (e) – Existing Swaps and Security-Based Swaps. – The prohibition in subsection (a) shall only apply to swaps or security-based swaps entered into by an insured depository institution after the end of the transition period described in subsection (f)".

[33] "Section 716 (f) Transition Period. – To the extent an insured depository institution qualifies as a 'swaps entity' and would be subject to the Federal assistance prohibition in subsection (a), the appropriate Federal banking agency, after consulting with and considering the views of the Commodity Futures Trading Commission or the Securities Exchange Commission, as appropriate, shall permit the insured depository institution up to 24 months to divest the swaps entity or cease the activities that require registration as a swaps entity. In establishing the appropriate transition period to effect such divestiture or cessation of activities, which may include making the swaps entity an affiliate of the insured depository institution, the appropriate Federal banking agency shall take into account and make written findings regarding the potential impact of such divestiture or cessation of activities on the insured depository institution's (1) mortgage lending, (2) small business lending, (3) job creation, and (4) capital formation versus the potential negative im-

Estimates by academics and sector professionals suggest that this 'ban' on derivatives trading for FDIC insured banks will only have an impact on a small percentage of the derivatives trading actually performed by the major US banks.[34]

The activities covered by the ban – equity derivatives, high-yield debt derivatives and debt derivatives that are not cleared centrally, emerging market CDSs and some commodity derivatives – will be pushed out of the bank and allocated to legally independent companies with adequate capital and financing.

There is a widely held feeling that the DFA conceded too much to the financial sector and that the Lincoln Amendment will have a relatively limited impact on the derivatives trading of major banks.[35] However, it is notable that banks are being quite active about organising and streamlining their derivatives trading activities.[36] At the time of writing, it seems numerous major financial institutions, especially those active in trading such contracts, are assessing whether to incorporate these activities in special companies that are legally separate from the rest of the banking group.

Swap dealers, securities based swap dealers, major swap participants, major securities based swap participants. The DFA includes a proposal for categorising players in the OTC derivatives market – that is, those not subject to centralised clearing – into two types: swap dealers and major swap participants.[37]

The former are those dealers that trade such contracts as an ordinary part of their business. Such dealers operate on their own account, and can even, in specific conditions, become market makers.[38]

Given the rather succinct nature of the definition in the reform law, the competent authorities have to define the criteria to be used to more precisely identify such par-

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pact on insured depositors and the Deposit Insurance Fund of the Federal Deposit Insurance Corporation. The appropriate Federal banking agency may consider such other factors as may be appropriate. The appropriate Federal banking agency may place such conditions on the insured depository institution's divestiture or ceasing of activities of the swaps entity as it deems necessary and appropriate. The transition period under this subsection may be extended by the appropriate Federal banking agency, after consultation with the Commodity Futures Trading Commission and the Securities and Exchange Commission, for a period of up to 1 additional year".

[34] Wilmarth estimates the percentage will be between 10% and 20%, while a recent report from J.P. Morgan Cazenove forecast that Section 716 would hit about 10% of the derivatives activities of the major banks operating in the US. See also Fowler (2011).

[35] Wilmarth (2011).

[36] Some major US banks have indicated their intention to carve out their proprietary trading activities because of the financial reform. Analysts argue that this is due to the effects of the Volcker Rule and the Lincoln Amendment.

[37] They become swap dealers or securities based swap dealers and major swap participants or major securities based swap participants in relation to the type of contract traded.

[38] Section 721 ("Definitions") contains the following definition of Swap Dealer (49): "(A) In general. – The term 'swap dealer' means any person who – (I) holds itself out as a dealer in swaps; (II) makes a market in swaps; (III) regularly enters into swaps with counterparties as an ordinary course of business for its own account; or (IV) engages in any activity causing the person to be commonly known in the trade as a dealer or market maker in swaps, provided however, in no event shall an insured depository institution be considered to be a swap dealer to the extent it offers to enter into a swap with a customer in connection with originating a loan with that customer".

ties.[39] Once it has been determined that a party is a dealer, then that party is required to register. This ensures the authorities learn about the dealer and can impose prudential requirements, which form the basis for controlling contracts not subject to mandatory central clearing.

The major participants are those parties that, given the volume of their trading in derivatives not subject to central clearing, can be of importance for systemic stability. The DFA identifies these on the basis of three criteria:

- holds a substantial position in swaps;[40]
- the swap position held constitutes a counterparty risk that could create instability for the United States financial system;
- the financial participant is highly leveraged, not subject to the control of any regulatory authority and holds a significant position in swaps.

The SEC and CFTC are also in the process of defining rules able to identify such parties on the basis of the quantitative thresholds currently being discussed.[41] Once identified, major swap participants must comply with the following obligations:

- register with the relevant authorities;
- comply with specific capital requirements and security margins;
- reporting and storage of data about transactions performed;
- comply with the general rules of conduct for their business;
- designate a chief compliance officer charged with guaranteeing that derivatives transactions comply with the said regulations.

Mandatory reporting and market transparency. In the USA, lawmakers have sought to increase transparency for the derivatives contracts market by establishing reporting and data storage obligations for any derivatives contracts entered into, regardless of whether these are subject to central clearing.

The recipients of this information are the swap data repositories,[42] which are entities that are authorised and registered by the two oversight authorities and that are required to store transaction data such that this information is available to the authorities if needed. These entities are also required to provide real-time data, for the market, about OTC derivative transactions and prices, thus helping to shed light on the trading terms for a section of the market still shrouded in obscurity.

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[39] In December 2010, the CFTC and SEC issued a proposed regulation defining the above mentioned categories.
[40] Excluding those positions to hedge commercial risk and the risk in managing employee benefit plans.
[41] See Commodity Futures Trading Commission (2010a).
[42] "(48) Swap Data Repository. – The term 'swap data repository' means any person that collects and maintains information or records with respect to transactions or positions in, or the terms and conditions of, swaps entered into by third parties for the purpose of providing a centralized recordkeeping facility for swaps".

The rulemaking process. Following the law being adopted, the rulemaking process commenced, being complex and multi-faceted for a number of key reasons. First, the subject matter is vast and the DFA set forth the basic principles for regulation, but it left the creation of the actual regulations to the various regulatory agencies. This inevitably leads one back to the structurally fragmented organisation of these agencies in the United States. The SEC and the CFTC might be the main agencies involved here, but it is also important to take into account that they must coordinate between themselves and there are similar needs on both the home[43] and international fronts. The second reason for the complicated nature of the rulemaking process is the timeframe allowed for its completion and the way in which the process is structured. The DFA established quite a limited period – 360 days from the Act being signed into law – for the rulemaking stage to be completed. Moreover, the process is divided into various stages in which the regulatory agencies have to work quite closely with the companies active in the market. The rulemaking process involves the regulators issuing proposed rules[44] that the market then has to comment on by a set deadline. These comments are then examined and assessed by the regulators prior to issuing the final versions of the rules. The sheer size and complexity of the matters subject to rulemaking, the relatively short timeframe and the structure of the process for producing the rules meant the new regulations for derivatives have been progressively fleshed out, leading to various outcomes discussed later on.

First, the products[45] and the market participants subject to the jurisdiction of the two agencies were defined. This includes:

- the definition of swap, security based swap, swap dealer and major swap participants,[46] created in conjunction by the two regulatory agencies;
- the codes of conduct that these parties must comply with both internally and with third parties[47];
- the capital requirements[48] and margins designed to ensure the stability of the parties themselves;
- the obligation to segregate contracts entered into on behalf of third parties.

In terms of specifying the clearing obligations, the rules for Derivatives Clearing Organisations (DCOs)[49] were defined along with the possible limits on the oversight of market participants, specific provisions for DCOs of systemic importance, the terms for the periodic review of contracts subject to clearing and the principle of exemption for

[43] For example, defining the capital requirements for contracts not subject to mandatory central clearing involves not only the SEC and the CFTC, for the subjects under their respective jurisdictions, but also other authorities (Treasury Department, FED, FDIC, OCC, Farm Credit Administration and Federal Housing Finance Agency), each for their respective remits.
[44] In some cases, a consultation stage is required prior to the proposed rules being issued.
[45] Commodity Futures Trading Commission (2011f).
[46] Commodity Futures Trading Commission (2010a).
[47] Commodity Futures Trading Commission (2010c).
[48] Commodity Futures Trading Commission (2011e).
[49] Commodity Futures Trading Commission (2011b).

end users.[50] For the contracts not subject to clearing – and thus remaining in the OTC system – the margins to be applied as guarantees were defined.[51]

For the trading platforms, the principles to be complied with by the markets where derivatives are traded were defined (Designated Contract Markets – DCMs and Swap Execution Facilities – SEFs).[52]

The rules for collecting, managing and communicating data about trades were defined and the rules for Swap Data Repositories were set (recording, operational principles, data storage, reporting) along with the obligations of contracting parties to send, in real time, trading data.[53]

The Chairmen of the CFTC and the FED testified before the Senate about the status of the rulemaking process,[54] confirming that, in May 2011, the regulatory jigsaw puzzle was largely complete, as per what the reform law required. The drafting of the final versions of the rules would commence once the agencies had carefully assessed the comments from market participants.

The creation of regulations through the rulemaking process has sparked an array of reactions from people in the financial sector who are clearly worried about the effects of such changes on a business that was previously unregulated. The new rules introduce restrictions on activities, compliance costs, capital requirements, financial costs to post the security margins, procedural requirements, a need to comply with codes of conduct, the consequent liability and so on. At present, the largest companies are assessing the impact of the new law and how profitable, overall, developing a derivatives business would be.

The comments stage saw many operators and trade associations table criticisms and request changes to a large portion of the regulatory proposals. In the past few months, the number of requests for the implementation deadlines to be extended has multiplied. The House Financial Services Committee recently approved[55] a measure that effectively moves the deadlines for implementing the new rules to September 2012, although the rules governing the definition of contracts and participants, clearing, record keeping and reporting remained tied to the original deadline.[56]

5.3. Conclusions

The new regulations governing derivatives, enjoying the support of regulators across the world, will force an era-changing shift in the structure of this market. The progres-

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[50] Commodity Futures Trading Commission (2010d); Securities and Exchange Commission (2010b).
[51] Commodity Futures Trading Commission (2011d).
[52] Commodity Futures Trading Commission (2011a; 2010c); Securities and Exchange Commission (2011b).
[53] Commodity Futures Trading Commission (2011c; 2010e); Securities and Exchange Commission (2010a).
[54] See Shapiro (2011); Gensler (2011).
[55] See H.R. 1573, May 24th, 2011.
[56] The Commodity Futures Trading Commission and the Securities Exchange Commission's websites provide an indication of the status of rulemaking for the DFA. More specifically, it is possible to see the set of final rules – in truth, quite a small number and not for the major aspects – and the proposed rules, where the regulatory agencies must decide on whether or not to make changes following the consultations with market players.

sive migration of contracts from the opaque OTC world to regulated markets will result in a proportional reversal of the amount of trading in the two possible trading venues. Today, the vast majority of trading might be done away from regulated markets (see Table 5.1), but in the future the latter will account for the majority of trades, forcing the OTC circuit to deal in more complex, less liquid and less standardised contracts.[57]

However, this is a medium-term development that will take a number of years to fully achieve.

The first supporting reason for this is clearly that the rulemaking process is still underway. In the United States, as was mentioned previously, the agencies have indicated the need for more time than was originally allowed in the DFA to define the rules that will actually implement the reforms. In Europe, the draft regulations set forth a deadline of the end of 2012, which fits in with the international commitments in this sphere (G-20). It is evident that synchronisation between the world's two major financial areas is crucial in many aspects in order to avoid regulatory arbitrage. To ensure the new rules are implemented effectively, it is important to ensure there is no 'first mover disadvantage'. It is perhaps easiest to understand this question by taking the example of the initial margins required, under the new rules, of counterparties entering into OTC derivatives contracts. If the planned regulations for the United States, as per the DFA, and the subsequent rules issued by the regulatory agencies come into force before their European equivalents, then American banks and financial institutions operating abroad will be required to ensure their counterparties pay the initial margins. This would clearly result in a loss of business for American banks to the benefit of other financial institutions, such as European or Asian banks, that are not yet subject to such requirements. The opposition of American financial institutions is already materialising to prevent a situation that is detrimental to them and seeking an implementation timeframe consistent across both areas.[58]

Secondly, the market will transform gradually because the new rules will only apply to new contracts, meaning those currently traded on the OTC market will remain there until they mature. In terms of the contracts that will not be subject to central clearing (estimated by market experts to be 30% to 40%)[59] and the current stock of OTC derivatives (worth in excess of US$ 600 trillion), a gradual substitution process will occur that will mean the new market will start operating at full speed, so to speak, sometime in the next five or ten years.

Despite the importance of stating these premises, the outlook is that the market will be transformed in the medium term and, as such, it is worth reflecting now in order to understand the consequences.

First, the rules in the process of being adopted will change the costs related to using derivatives. The forced migration towards regulated markets will result in fees,

[57] See Greenberger (2010).
[58] See Zubrow (2011).
[59] Such estimates do not take into account unusual reactions from traders who, in the eyes of some experts, might fight mandatory central clearing by increasing the volumes of 'non-standardised' contracts. See Gibson (2010).

trading and clearing costs, and the payment of initial[60] and variation margins, and of the amounts required by the clearing house for the fund it establishes to deal with defaulting members. For those financial institutions that enter into contracts in the OTC market, the increase in costs will come from the obligation to pay initial margins – not required at present – and the increase in the variation margins, which are only partially required in today's OTC transactions.[61] In the medium-long term, the transformation of the market will also bring benefits that, to some degree, will offset the initial increase in trading, position management and clearing costs. In place of the bilateral transactions in place today, a market will grow that involves broader involvement of market participants, with more competitive pressure that will cause a reduction in the spreads. Once this happens, further benefits will accrue from the increased liquidity of positions, the greater transparency and the reduction in counterparty risk. In the world of mandatory clearing, in other words, one finds structural benefits coming to the fore. These help to mitigate the increased costs faced by market participants, although the costs still appear before the benefits and cause consequent worries.

The question of costs underlies the exemption for end users and the requests made by other market participants to benefit from the same regime. This is a further point where differences are discernible between the regulations being adopted in the United States and in Europe. In Europe, following a request from trade associations, it was decided to allow pension funds to benefit from exemptions since they systematically use OTC derivatives to manage the interest rate risk derived from the contractual commitments to pension scheme members. For now, at least, no such concession has been granted in the United States.

The second consideration relates to the role of the clearing houses, that is the central counterparties, that are the fulcrum of the new market under the reform. The economic rationale of the reform process is to push OTC contracts towards regulated mar-

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[60] See Bank of America Merrill Lynch (2011). In the study referred to, the margins used are those applied today by stock exchanges that trade instruments similar to those OTC derivatives that will be subject to mandatory clearing in the future. The margins are variable, related to the complexity and maturity of the underlying contract, starting from a minimum of about one percentage point and rising to as much as ten percentage points, with many contracts having initial margins of 4-5 percentage points. It is clear that, given the size of the OTC market, the expected migration of a substantial number of contracts to regulated markets will result in a substantial increase in the margins required of market participants. It is worth seeing Culp (2010) on the same theme.

[61] See Bank of America Merrill Lynch (2011). The study shows that, at the end of 2010, many participants in the OTC market accept guarantees on the exposure from variation margins that are less than the net credit exposure deriving from the change in market prices. Estimates place the percentage guaranteed by collateral at about 72%, while with mandatory clearing this percentage rises, by definition, to 100%. This change will require traders to have additional assets to meet the required guarantees for their position. Moreover, under the proposed rules, the group of eligible assets is very limited (money or very liquid and reasonably stable government securities). Current practices require collateral to be posted on the basis of bilateral contracts between the parties that are normally drafted using the International Swap Dealers Association's model (ISDA collateral agreement). In contrast to what happens in a market with a central clearing house, such contracts are subject to risk since, if there is a default, the liquidator could require the collateral to be withdrawn and included in the insolvent intermediary's assets, thus jeopardising the position of the party that received the collateral guarantee. In a regulated market with a central counterparty, such a danger clearly does not exist. It is worth seeing Deutsche Bank (2010) and European Central Bank (2009) for these matters.

kets (stock exchanges or specific trading platforms) where the clearing houses should effectively remove counterparty risk.

History has numerous cases of financial institutions going bankrupt, but only very few of clearing houses.[62] Yet, it is vital to understand the role and the likely development of such entities given the risk they now face. It is evident that the risk from derivatives contracts can be reduced, but not eliminated with the new rules. In truth, this risk is transferred from individual parties, which currently trade bilaterally in the OTC market, to regulated markets and thus, to the clearing houses.

To understand the current and future risk profile of these entities, it is necessary to comprehend how they work and the role they play in the market.

As was noted, the new laws seek to push derivatives contracts onto regulated, organised markets. On such markets, it is possible to break down any financial transaction into its constituent parts, verifying the roles played by each party, the markets and the clearing houses that enable the proper completion of each transaction. The first stage is the trading, which involves matching buy and sell orders on regulated markets. The latter are either physical markets (although these are ever rarer) or electronic trading platforms. The exchange between a buyer and a seller is then subjected – in a stage called post trading – to the clearing and netting stages. During clearing, the clearing house checks that there is perfect coherence of price, quantity and execution deadline (payment of the amount and any physical delivery of the asset traded) between the buy and sell orders. The clearing house checks that the order parameters correspond exactly and that there is no price risk, with an exception for one of the parties defaulting. Normally, the orders match up perfectly, so they can be settled.[63] Those orders that do not match up perfectly are rejected and sent back to market participants involved and the market. In netting, the clearing houses reduce the number of transactions subject to settlement, only carrying out this stage for the net balance of transactions (typically, the balance of purchases and/or sales for each participant).[64] If the clearing houses start acting also as central counterparties, as planned under the reform in question, their role gains a further function, namely coming between the seller and buyer to ensure the transaction is successful for both parties. It is clear that in such a situation the clearing house takes on the insolvency risk of one of the two counterparties: the buyer unable to make the payment and the seller unable to deliver the sold financial instruments. To reduce the effect of this risk, the clearing house has two fundamental options available: the aforementioned system of initial and variation margins and the default fund, held by the clearing house, made up of contributions from clearing members.

Historically, clearing houses, like markets, could be seen as public 'market infrastructure' charged with, under the supervision of the regulator, ensuring the sound func-

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[62] Cases include: Caisse de Liquidation, in France, in 1974, the Kuala Lumpur Commodities Clearing House, in February 1984, and the Hong Kong Futures Guarantee Corp. in October 1987 following the market crash that hit stock markets across the world. See Standard & Poors (2010).

[63] Debiting the cash account and crediting the securities account of the buyer; and crediting the cash account and debiting the securities account of the seller.

[64] See Standard & Poors (2010). The study in question relates the case of the National Securities Clearing Corp., which processed 315 trillion transactions in 2008, reducing settlement, through the multilateral netting of its members, to 1% of processed transactions (2.9 trillion transactions).

tioning of the market. The public nature of these coincided with the goals of these entities to achieve 'systemic' order. In the final decade of the 20th century, a general drive towards privatising such entities radically changed their nature, turning them into private entities that were often listed and had explicit economic purposes. In some cases, markets and clearing houses were integrated vertically using the logic of 'silos', while in other cases, clearing houses and markets became independent entities where the former would provide settlement services for multiple markets. In recent years, there has been significant growth in the competition between markets and clearing houses, with such competition being the logical development of the transformation of such entities and the rise of their economic purposes. Despite the transformations, these entities have, thus far, been very stable because they adopted an essentially very simple business model with relatively clear short/medium-term revenues, fees for their core activities (exchange and settlement) and costs determined by the functioning of their operating structures. The derivatives reform opens up a new competitive scenario because of all the implications it contains. In terms of the clearing houses, it is possible to make some considerations about their role in these new competitive dynamics, especially if one bears in mind that their task is to reduce, to the point of eliminating, the counterparty risk in OTC derivatives. The first consideration is that mandatory clearing for OTC derivatives opens the way for the business to develop substantially, broadening the perimeter to include elements that had never been considered before now. On the other hand, this process also seems likely to increase competition, sparked off by the behaviour of the existing market participants and by the new ones who enter this market because of its growth opportunities. It is hard to predict exactly how the market structure will develop, how many new players will enter it and how concentrated the sector will be in the future. Nonetheless, it is possible to table various considerations regarding the future dynamics of the sector and the potential consequences for the risk profile that these institutions might face in the new scenario that is being built.

First, it is reasonable to expect notable price competition, with the clearing houses seeking to increase business volumes by offering market participants favourable prices. Price competition has consequences for clearing house profitability margins, potentially questioning their equilibrium in the medium term, but it seems unlikely to cause sudden defaults and consequent market disruption.

The danger surrounding the collateral to be posted by clearing members for settling transactions at clearing houses is a whole new kettle of fish. This aspect has two parts. The first involves the nature of the assets used to guarantee transactions and paid into the default fund. If clearing houses solely accept highly liquid and low risk securities, then they will be better placed to liquidate the positions of any members that default. However, if competition forces them to accept lower quality assets, the process for managing member insolvency will become more complicated, causing the clearing houses to face greater risk. For example, the DFA does not precisely establish the eligibility criteria for assets used to guarantee transactions. The CFTC's proposed rules set forth a "minimum credit, market and liquidity risk" criterion, making it clear that those clearing houses falling under its jurisdiction must adhere to risk minimisation principles. It is necessary to understand how these rules will ultimately be implemented internationally, although it is already clear that the less stringent the rules are, the more discretion clearing houses will enjoy in setting the criteria for guarantees.

The second aspect relates to the risk management systems adopted by clearing houses to determine the size of the guarantees. Here, it is evident that the methods for calculating margins need to take a prudential approach to ensure they do not produce results that underestimate the size of the guarantees needed to manage risk.[65]

There is another element – although this is quite hard to assess at present – that might influence the risk profile for clearing houses: the future structure of the sector in terms of numbers of participants and degree of concentration. On the one side, a structure with a concentration of major companies would bring, through economies of scale that participants could benefit from, increased operating efficiency made possible by the investments that can be done on the back of the sheer sizes involved. On the other side, the large clearing houses would be better placed to deal effectively with the major institutions that are its members. On the one side, large clearing houses might enjoy increased contractual power in the face of the major institutions that settle transactions through them. On the other side, they would be better placed to have a comprehensive picture of the positions held by members, making it possible to take preventative action in cases where the level of risk taken on seems excessive.

The disadvantage of a structure focused on only a few companies is, clearly, that it would become hard to manage a crisis because of the systemic implications it would take on. The pros and cons of a structure that is more fragmented with a greater number of participants seem to be the opposite.

To ensure the spirit of the reforms is achieved fully, it is necessary to ensure that the future clearing houses operate in a context of stability. If such entities were to face a crisis, it would cause serious problems because it is understandably very difficult to move the transactions to another clearing house to ensure market continuity. The problem of supporting clearing houses in crisis also seems complex. If the clearing houses are owned by the clearing members themselves, then it might be possible for these members to take action, but in a listed company such an option appears far less realistic. In order to prevent market disruption, one could see public action being required. However, public action is precisely what the reform is seeking to avoid in the future and it is also important to note that in such a case there would be serious problems trying to determine which country is competent to intervene.[66]

In summary, the reform being approved is designed to ensure stability for derivatives markets by centralising and settling transactions through central counterparties (clearing houses) charged with ensuring the successful outcome of transactions and eliminating, for the buyer and seller, counterparty risk. Thus, the effectiveness of the reform depends on these entities ability, because of the central role attributed to them, to manage the risk assigned to them. The clearing services sector, like that of exchanges,

[65] See Standard & Poors (2010, p. 7). See also Standard & Poors (2011).

[66] On the one side, there is the country where the clearing house is based; but on the other, it is necessary to bear in mind that these entities conduct business that clearly crosses the national borders of the country where the clearing house is located, providing clearing services for financial institutions that operate internationally.

has changed substantially in recent years, with private profit-based companies arising to replace the older infrastructure that tended to be public in nature and purpose. Financial supervision must ensure that the competitive dynamics that are created in this sector – through mandatory clearing for OTC derivatives – do not result in such entities losing that element of stability that they have shown thus far.

Chapter 6

Regulation of Rating Agencies

6.1. Some features of the ratings industry

As was examined in the opening chapter, rating agencies were right at the centre of the crisis, sparking a major debate about how they operated. The credit ratings for the securities linked to the securitisation of subprime mortgages proved to be largely unreliable and played a major part in the growth of the crisis. The hasty revision, commencing in the autumn of 2007, of the ratings of circulating securities provided empirical evidence that this 'market mechanism' was not functioning properly. In a seeming paradox, the question of regulating rating agencies foregrounds two correlated aspects: first, the effects of the crisis on regulation strategies, with the move from self-regulation to regulation imposed by authorities; and secondly, the troubles inherent in dealing with and governing the business of agencies that, despite originating in a country, actually perform activities that influence the overall functioning of the international financial system.

In order to understand how regulatory strategies and the reform process are developing through intense international debate, it is useful to explore some of the specific features of the rating industry.

The first consideration covers the structure of the sector, which is extremely focused on two global players, namely Standard & Poor's and Moody's Investors Services, private companies that originated in the United States.[1] By also taking into account Fitch Investors Services,[2] the third largest player in the market although notably smaller than the first two, it is estimated that over 90% of the total income derived from global-scale credit rating services goes to these three companies.[3] In 2008, at the height

[1] The major shareholders in Moody's Investors Services include Berkshire Hathaway (the financial firm controlled by Warren Buffet) and a long list of large investment funds, mainly US (Capital World Investors, T. Rowe Price Associates, Capital Research Global Investors, Valueact Holdings, Vanguard and State Street); small shareholders account for little more than 50%. Standard & Poor's is controlled by McGraw-Hill Companies, whose shareholders include, once again, largely US investment funds (Capital World Investors, State Street, Vanguard, Harold III McGraw, Oppenheimer and T. Rowe Price Associates). Thus, the ownership structure of these companies is similar to that of the biggest American public companies. See Cotta Ramusino (2007).

[2] Founded in the United States and grown by taking over major market players (Duff & Phelps Credit Rating and Thomson Financial Bankwatch), Fitch falls under the umbrella of Fimalac, which currently is the majority shareholder.

[3] On the issues of the structure, functioning and proposed reform for the rating industry, it is worth seeing: Deb *et al.* (2011); Bai (2010); Camanho, Deb, Liu (2010); Dittrich (2007); European Commission (2010f); Cavallo (2008); Herring, Kane (2008); Hill (2010); Council of Institutional Investors (2009); Portes (2008); Mulligan (2009); White (2010a); and Esme (2008).

of the crisis, the income for these player reached its height, at around US$ 9 billion, with gross profit in excess of 5 billion (Deb *et al.* 2011, p. 8). The size and profitability of this business grew substantially in the first decade of this century, finding a major driver in the development of structured finance products that, as was seen in the first chapter, were issued in increasingly large quantities, requiring the agencies to produce credit ratings. It is estimated that between 40% and 50% of the revenues generated by the big three in the years leading up to the crisis came from this specific business line (Deb *et al.* 2011, p. 8). The growth in size and profitability of these three companies is mirrored in their stock prices, which rose, until the crisis exploded, at above the American stock-exchange average and that of the specific financial securities index.[4] The correlation between the development of the structured financial products market on the basis of the securitisation of subprime mortgages and the profitability of the rating agencies added to the criticism, after-the-fact, of these companies. It became clear how these agencies maximised their revenues by undertaking activities that played a determining role in the spread of the risk that led to the crisis.

The second aspect that needs to be highlighted is the use of ratings. Since the very beginnings of the rating agencies right up to now, where they cover all the major international financial markets, agencies have specialised in assessing the risk inherent in both new and circulating financial instruments. The ratings of these agencies were crucial to the success of new security placements and the price performance of those already in circulation. Indeed, changes in ratings influenced the yields that investors were prepared to accept for different types of financial assets. This role grew progressively and became a key part of their business in response to a clear market need: the agencies undertook analyses and produced public information about risk, overcoming the information asymmetry in place between the issuer of the securities and the investors to which the securities were being offered. Such a system clearly increased efficiency. The absence of a rating would mean each investor would have to undertake its own assessment, thus multiplying analysis and assessment costs. By entrusting this role to the agencies, the 'market' accepted that they played a fundamental, necessary role and, over time, the use of ratings became ever more widespread as a means of governing the conduct and strategies of market participants. The rating a security received was a determining factor in a number of ways, including the allocation choices made by major institutional investors, inclusion in the indexes representing specific asset segments, and the eligibility of the instrument in question to guarantee certain financial transactions. Over time another particularly critical development occurred. The growing importance of ratings in the psychology of financial markets meant the regulators, when drafting the rules and regulations for the sector, also came to use the ratings issued by the credit rating agencies as a way to define obligations, bans and even methods for implementing the rules and regulations themselves.[5] The most obvious case, although far

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[4] Deb *et al.* (2011, p. 8). The estimate involves using McGraw-Hill as a proxy for the stock exchange performance of Standard & Poor's and that of Fimalac as a proxy for Fitch.

[5] Here are two examples. The first relates to the prudential supervision of financial intermediaries, where the ratings are used as a parameter in determining the capital absorption of different types of assets held by these same intermediaries. The second relates to the undertakings for collective investment, where limits

from the only one,[6] is the reference to an external rating to define the capital absorption of specific categories of financial assets. This is an especially good example of the importance regulators have placed on ratings, since the banks can calculate their own capital requirements (fundamental to systemic stability) by referring to the ratings of private undertakings that produce these ratings as part of business activities undertaken for evident financial gain. The development of this role left rating agencies as almost an 'institution between' the regulators and the markets, where the former acknowledged their essential role for the proper functioning of the latter.

The third observation relates to the business model of these companies, which is based on the so-called 'issuer pay' approach – that became almost universally accepted over time without any substantial objections until the financial crisis exploded – where the party being rated pays the agency for the rating service. In the rating market, one found a myriad of issuers that required such services, but only a very small number of companies that could provide them. Furthermore, the former were interested in a positive rating, while the latter sought the assignments on which their revenue streams depended. Issuers needed ratings to support their issuing of securities and the agencies assessed the credit worthiness of these by producing an overall evaluation that was used by players in the financial market as a reliable proxy for the risk profile of the financial instruments in question. Since the party requesting the service (the issuer) was the one that paid the service provider (the agency), the potential for conflicts of interest was born from the combination of two elements. Basically, since the rated party clearly desired the best possible evaluation, it might put pressure on the rating agency, which sought the assignment as it generated income, in order to receive what was conceivably the best possible rating. Expressed differently, the 'customer relationship' that came to exist between the party assessing and the party assessed might result in a less rigorous evaluation that would be to the general detriment of the market.

This potential conflict of interest was often discussed, but this never resulted in any substantial changes to the type of relationship underlying the rating market. The faith that investors and regulators had in ratings being correct was based on a very simple notion called the 'reputation hypothesis'. Since these private undertakings operated and prospered on the basis of the quality of their work, it was in their interests to issue professional and independent evaluations. Only by doing this would their prestige be maintained and thus their ability to keep operating.[7] Thus, at one stage, professionalism and independence seemed to provide a guarantee for investors and to be essential for the agencies. This belief made it seem not only acceptable, but desirable to opt for self-regulation based on market trust and not touched by regulatory intervention. However, the crisis resulted in a global move towards the need for government regulation.

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are often defined using, as a parameter, the ratings of the financial assets being invested in. For more on this matter, see Enriques (2010).

[6] For example, among others, the reference to the rating to calculate the credit risk for securisations or, in another sphere, the reference to the rating to determine the assets to be invested in by specific types of funds.

[7] In the specific case of ratings for structured finance products, the validity of the reputation hypothesis was called into serious question by the extremely high percentage that the agencies earned, during the years when securitisation was at its peak, from this line of business. See Hunt (2009).

The fourth aspect that needs to be highlighted is the degree of dependence of the regulators and market operators on the evaluations from the rating agencies. The events of the crisis showed how market operators tended to accept ratings automatically, without any autonomous risk assessment of products, which were acquired solely on the basis of the assigned rating. Furthermore, there was never any interest on the part of operators or regulators to examine the methodologies used by the agencies for their evaluations in greater depth. Ratings came out of a 'black box' that only the agencies were privy to. The end users of ratings merely accepted the end results, without knowledge of the reliability of an instrument on which a large part of the risk in their portfolios depended.

The crisis marked a radical change in the outlook for how rating activities were viewed, resulting in a call for reform that has led to concrete, international action. To understand the developments underway and to gain some understanding of the possible results, it is necessary to first examine the problems facing effective regulation of this industry.

The starting point for this is the hugely concentrated structure of this sector. This is viewed with increasing impatience, especially by the governing authorities in countries outside of the United States, which see the assets in their markets influenced significantly by the ratings of agencies over which they have little or no control. The enormous power that rating agencies have in this situation has been attacked by regulators and politicians, especially in Europe, and it is felt that the entrance of new agencies could help keep the importance of the main agencies in check. While this argument might seem to be sound on an abstract level, it is important to not overlook certain specific features of the sector that explain why it is so concentrated and why new players find it so hard to enter. Large rating companies benefit from major and clear economies of scale and scope. The ability to provide a quality assessment is dependent on having available qualified human resources and on accumulating information that, over time, becomes the real strategic asset of these agencies. Their in-depth knowledge of sectors and business models of firms in said sectors operating forms an information repository that can be drawn on repeatedly, that tends to become more refined over time and that can be maintained in direct proportion to the size of the activities undertaken. Moreover, the prestige of the rating agencies generally grows over time in relation to the extent of their activities, creating a formidable barrier for the entrance of new potential agencies. These factors explain the 'natural' tendency of this sector towards concentration. Potential new players are faced with seemingly insurmountable obstacles. Their ratings do not enjoy the same reputation as those of the major players and issuers do not see the benefit of entrusting them with the evaluation of their securities. These problems in getting business ensure the reputations of new entrants do not take off and guarantee dominance for the existing players. In addition, it needs to be born in mind that the existing companies can issue 'unsolicited' ratings, without an issuer so requesting. This costs the incumbents relatively little because of their economies of scale and scope, but it raises the bar for entry as it reduces the overall demand for credit rating services. Thus, it is no accident that the sector is highly concentrated. In the United

States, there are currently ten registered rating companies,[8] but as has been shown, the business is concentrated around the leading three. Europe is currently in the process of registering its first rating agencies, as the related regulations are fleshed out, but the size of their business remains limited and offers no threat to the leadership of the three major players.[9] While the concentration of this market seems to be a given and it seems a hard structure to change, it is also important to highlight that an alternative market structure would not be without its critical issues. If the nature of the offer were fragmented, one might see two types of problems: (i) issuers could adopt a policy of 'rating shopping', forcing the (numerous) rating agencies into competition and selecting the company prepared to provide the best rating; or (ii) it could cause an imbalance in bargaining power between large issuers and small rating agencies, with the former able to influence the activities of the latter.

The second aspect mentioned previously concerns the value of ratings for regulatory purposes. This is an area in which the authorities that govern the financial markets have the most room for intervention. As will be shown below, initiatives have been taken in this sphere internationally, under the coordination of the Financial Stability Board (FSB), in Europe and in the United States. The purpose is two-fold: first, the goal is to avoid rating agencies receiving income from a position they received 'freely' from the authorities through the numerous references to ratings now present in sector regulations; and secondly, the target is to make financial market players develop their own autonomous ability to assess risk. However, it is important not to overestimate the effectiveness of the activities taking shape on this front. Even by removing the references to ratings from rules and regulations, one certainly will not substantially reduce the importance of the work done by the agencies. In this light, it is worth recalling the aforementioned calculation of bank capital requirements. If it were decided to eliminate all references to ratings, then banks would be required to develop internal methodologies to assess risk in order to calculate the capital absorption from holding specific financial assets. This would not, though, do away with the need that end investors have for ratings, which is a crucial issue since such investors create the demand for the development of rating services. The same security assessed independently by a bank for its own investment purposes would also have to be evaluated by the rating agencies for end investors.

The third aspect noted previously – namely conflicts of interest – has also been subject to regulatory revision. The crisis showed that faith in the reputation hypothesis was not repaid in many cases and the governing authorities had to formulate precise regulatory guidelines.

In this sphere, at least in theory, there are various alternatives that would have differing impacts on the market and that could be implemented to some degree in the short term. Here, one can draw a distinction between radical action designed to substantially

[8] In addition to the three major players, there are a further seven companies that are much smaller and specialise in product types or the markets they analyse. See Deb *et al.* (2011).

[9] In June 2011, there were seven companies registered with the relevant national authorities as rating companies pursuant to the new European legislation.

reorganise how the market operates and action intended to correct the critical issues of the current organisation, without upturning the structure.

In terms of the first type of action, a first step could have been to move from the current 'issuer-pay' model (where the issuer pays for the rating services) to a 'buyer-pay model'[10], where the cost is covered by the investors that benefit from the rating. The clear problems with this can be grouped into two types. First, it is certainly not an effortless task to amend a market structure that has been built up, layer by layer, over time. Achieving such a transition would necessitate defining the mechanisms that would make it in the interests of investors to obtain and pay for an evaluation. Free riding in such a context would be possible and understandable since investors would seek to avoid the costs of an evaluation, while simultaneously trying to benefit from information – that is by definition public – produced by an agency but paid for by others. Secondly, even if one assumes that such a transition is feasible, this does not mean the conflict of interest problem is eliminated, merely shifted. Should ratings be paid for by investors, then they might pressure the agencies to provide a less favourable rating for the issuer so as to benefit from greater yields on the securities being issued. Other options that would radically alter the existing market structure have been tabled, although it is clear these would face major implementation problems. During the Dodd-Frank Act (DFA) approval process, Senator Al Franken put forward the idea that an issuer would send its rating request to the SEC, which would then decide on which rating agency to assign the evaluation to. While such a system – known as a 'rating clearing house' – would still be paid for by the party being assessed, it would interpose a third party between the rating agency and the rated entity, creating a breach in relationships with customers. The agency would effectively undertake a job commissioned by a third party and would have no interest in producing a less-than-thorough evaluation to receive further work since such a decision would no longer be in the hands of the party being rated. The third party that receives rating requests and distributes the jobs – on the basis of clear and transparent criteria – would gain significant power in this market and could face moral hazard. The proposal was eventually removed during the process of creating the reform law. One other radical option that merits attention is the idea of creating a public rating agency. Supporters of this notion argue that it would ensure increased impartiality of judgement since evaluations would not be created for the purpose of profit. The agency would be charged with acting in the interests of the public (the market), without seeking monetary gain. An area of worry for such an alternative is the potential influence of politics, especially when it comes to securities "of national interest".

[10] Among rating agencies registered in the United States, there is one – Egan-Jones – that provides ratings on request from institutional investors that pay for the service. It is a form of the 'buyer-pay model', although its scope is limited by the size of the company providing the service. As can be seen, the cost of the rating falls to the institutional investors that turn to the rating company because they need evaluations and comparisons with the ratings issued by the leading agencies. Empirical evidence has shown that Egan-Jones' ratings are structurally lower than those from S&P and Moody's. Aside from raising an interesting case, there are still all of the problems, as cited in the text, arising from the widespread application of this practice in most market evaluations.

After this brief summary of the key proposals that would upturn the current market structure and having touched on the objective problems with implementing any of these solutions rapidly, it is no surprise that, despite the odd reference to these alternatives, the road to regulatory reform has sought options where results can be achieved with greater haste.

The proposals designed to radically alter how the various parties in the rating market interact have been tabled during the debate and some have even found their way into official documents as possible long-term options requiring study, but no concrete steps have been taken in this direction.

Thus, the conflict of interest question has been tackled by regulating the agencies 'within the current market structure'. In the coming pages, it will become clear that the reform laws have focused on internal agency aspects, such as organisation, control mechanisms and disclosure obligations. Put differently, the agencies must show that they are capable of controlling and managing the conflict of interest.

In relation to the fourth point above – regarding the often uncritical dependence of rating users on the work of the agencies – some major steps have been taken. The new regulations are based on transparency and the verifiability of the results of the rating process. Agencies are required to make public information about ratings issued, methods used, parameters assumed for estimates and so on. The goal is to guarantee that third parties can use the same data to produce independent estimates that effectively 'check' the work done by an agency. The numerous doubts that were expressed in the lead up to the crisis about how sound the working methodologies adopted by agencies were have become entwined with the conflict of interest question. Specifically for structured finance products, the relationships that the agencies had with the originators of the loans (especially for real estate loans) to be securitised came into the firing line (Conti 2010). Some people argued that the agencies were forced to issue ratings that proved – after-the-fact – to be overly generous because the issued securities had to achieve a desired credit rating otherwise the potential issuer would not issue them. This caused agencies and clients (the originator banks for the loans to be securitised) to work too closely together, with the former effectively providing the latter with advisory services that were incompatible with their role as an independent assessor. Agencies and originators shared the statistical models used to issue the rating and, starting with the desired credit rating (that which minimised the cost of funding for the securities to be issued), worked backwards to define the tranches for the issue. Doubts even arose about the parameter estimates used for the models. The crisis left many people suspecting that these parameters were defined in a manner that was overly favourable to the issuer's goals.

In short, the reform plans – as discussed below – must be implemented in a context that, because of the features highlighted above, is complex, consists of multiple layers built up over the years and often has operational mechanisms that are hard to question.

Two elements appear to be clear. First, there is widespread and international political will to make a real difference to how this particular, major market operates, especially by questioning the real power gained by the major rating agencies in recent years. Secondly, it is hard to intervene in a way that is effective and can realistically bring reform in the short term. The proposed legislation touches on all the aspects mentioned thus far, although the scope differs for the varying aspects. The analysis in this chapter will start by looking at some pre-crisis initiatives since they show that increasing attention was already being placed on this sector and that there was a growing understanding of the need for regulation. These examples show why the ‘light’ legislation that was imposed did not prevent the agencies from playing the role described above right up until the crisis.

6.2. The beginnings of regulation: pre-crisis stage

Although the reputation hypothesis was seen, until recently, as an adequate guarantee of service quality, initiatives were put in place, internationally, well before the crisis exploded in order to alter how the sector operated.

In 2004, IOSCO[11] played a leading role in the cases brought by investors that had suffered from financial scandals that had hit the American and other markets. These clearly highlighted the delay in the rating agencies realising that the situation at the companies being assessed had deteriorated, resulting in the ratings remaining untouched possibly until immediately prior to the problem exploding.

The Code of Conduct Fundamentals for Credit Rating Agencies, published that year, established guidelines that the agencies had to comply with in order to remove the criticalities previously uncovered and to prevent, as far as was possible, new cases of market failure. This code touched on numerous aspects, including the internal procedures agencies had to comply with to ensure the soundness of ratings, the need for the analysts producing ratings to be independent to ensure any conflicts of interest were overcome, the adequacy of the methodologies used, the control and rapid revision of ratings, the handling of confidential information, and the accountability of the rating agencies to the code itself.

This code was general, without precise technical specifications. The agencies were left to determine how the principles would be implemented, within a context where self-regulation still prevailed and in the absence of the code setting forth any penalties. The code’s goal was to create a general framework that the agencies would draw from by instituting the code’s principles in the internal codes of conduct adopted by the individual agencies. Predictably, the biggest agencies all adopted the code itself.

Two years after IOSCO issued its first code of conduct, the Credit Rating Reform Act was passed in the United States, being signed into law on December 29th, 2006 by President Bush and amending the 1934 Securities Exchange Act. The need for reform had two main drivers. First, the ratings had become important to the functioning of the American market. Secondly, like in the case of the IOSCO code, there was widespread dissatisfaction among market players and in the political/institutional sphere about the inability of rating agencies to detect, in their assessments, signs of the problems that generated the major scandals of the early 21st century.

[11] International Organization of Securities Commissions (2004).

The 2006 law set down some of the key axes for regulation in the sector, defining the entry criteria for the business, supervisory jurisdiction and rules capable of ensuring the transparency of what the agencies did.

The new law set forth that the existing rating agencies could register with the SEC to become NRSROs,[12] providing substantial information about their business, the methodologies used, their organisation and the procedures deployed to ensure the quality and integrity of ratings, the existence of any conflicts of interest and the list of their main clients.

Conflicts of interest were specifically governed through each NRSRO having to establish, maintain and implement written policies and rationally coherent procedures for the management of any conflict of interest. The SEC was also granted the power to issue rules to identify cases of conflict and the consequent requirements for registered NRSROs.

The SEC was entrusted with supervising the agencies and had to report, annually, to Congress about the sector.

These first actions marked the beginning of the period of regulatory transition. Internationally, the IOSCO code established some general principles on the basis of which the concept of self-regulation had to be fleshed out. In the United States, the 2006 law was the first example of public governance of a sector that had traditionally been regulated by market logic (the aforementioned reputation hypothesis).

6.3. Response to the crisis

The crisis laid bare the failings of the rating agencies, especially in terms of assessing structured finance products (the securities issued following the securitisation of subprime mortgages), and resulted in pressure for more stringent regulation. The regulatory response can be broken down into different levels.

Internationally, in 2008, a new IOSCO code[13] was issued, manifesting a far more rigid concept of regulation than the general principles of the first code. The document focused on three essential aspects: the principles that would guarantee the quality and integrity of ratings; the provisions that would ensure the independence of agencies; and a precursor for the responsibilities of the agencies towards the 'market'.[14] Moreover, given the way the crisis came about and the centrality of structured finance products, the new code contained certain specific provisions for such products.

[12] The effects of NRSRO status are discussed in Shin, Moore (2008).
[13] International Organization of Securities Commissions (2008).
[14] This category includes the publication of past data about the performance of agency ratings, the call to clearly differentiate for investors the ratings for structured finance products, the recommendations to publish the characteristics and limits of each rating opinion, the request to provide investors with information that allows them to understand the bases for the rating, and the call for disclosures regarding the methodologies used.

6.3.1. Regulation in Europe

In Europe, the debate about moving forward with regulation for the rating agencies intensified after the crisis exploded. The De Larosière Report not only formed the basis for the reform of the supervision of the European financial system, but also contained a number of recommendations on the matter in hand, including a number of quite incisive points.

Some of these recommendations meet the need to create the first rules for this sector. It clearly sets out that the agencies must be regulated to ensure rating quality and that they must be independent as well as identifying a body charged with their supervision.[15] The effects of the crisis meant that special relevance was placed on ratings for structured finance products.

Some of the other recommendations raised more substantial issues.

First, the option of regulators examining a move away from an issuer-pay approach to a buyer-pay one was posited. Such a change would radically alter how the market for rating services operated.[16] This idea indicates a couple of key beliefs. First, it is evident that there was real dissatisfaction with how the rating agencies worked, with them having a lot of responsibility for the crisis. Secondly, the idea also betrayed a feeling that it would not be possible to put in place rules to effectively regulate the agencies with the buyer-pay principle in place.

Secondly, it expressed a number of vital considerations about the approach that regulators should take to ratings. The first recommendation was to reduce, over time, the ‘dependence on ratings’. This meant that banking and financial regulations should make increasingly fewer references to ratings when, for example, defining the capital absorption criteria for certain financial assets or their ‘eligibility’ as forms of investment for specific categories of investors. The second was for ratings to be ‘verified’, meaning that an analysis of the past ratings by agencies should lead to distinguishing between those agencies that had been shown, *ex post*, to issue accurate ratings and those that had issued opinions that proved to be incorrect.

The third recommendation called on regulators to ensure that financial intermediaries developed their own methods to evaluate credit risk, without relying solely on external assessments (i.e. those from rating agencies).

The subsequent decisions by European legislators adopted many of the principles in the De Larosière Report along with many of those underlying the IOSCO Code and the additional reforms undertaken in the United States. European regulations took the form of Regulation (EC) no. 1060/2009[17], the proposed amendment from the European Commission of June 2nd, 2010[18] and the subsequent Regulation (EU) no. 513/2011, which amended the earlier measures to take into account the new structure for European financial supervision, where ESMA was responsible for rating agencies.[19]

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[15] The approval of the regulations creating the new European Supervisory Authorities, as has been shown, resulted in ESMA becoming responsible for the supervision of rating agencies.
[16] So far, the proposal has had no concrete follow up.
[17] (EC) Regulation (2009).
[18] European Commission (2009).
[19] Regulation (EU) (2011).

These regulations take a 'substantive' approach designed to ensure, as far as is possible, that the criticalities that arose during the crisis are overcome (de Haan, Amtenbrink 2011). The following part of this chapter uses these three sources to present arguably the key points to understanding the direction reform is going in and the effects on the dynamics of the sector.

In order to regulate the operations of the agencies and thus guarantee rating quality, the regulations focused on independence, quality and professionalism of opinion and market disclosure.[20] The tools deployed to govern the structure of this sector, to monitor the conduct of the players involved and to intervene if any infringements occurred were obligations, registration, supervision and a system of penalties.

The next few paragraphs examine the major elements of the first aspect, namely the 'soundness' of the rating (independence, quality and transparency of opinion).

Article 6 sets forth the independence requirement for rating agencies and governs how conflicts of interest are to be prevented.[21] An annex (Annex I, Sections A and B) provides details of the organisational and operational obligations that agencies must comply with in order to ensure the independence requirement is met.

Article 7[22] expressly states that the people responsible for producing ratings (rating analysts, employees and other persons involved in the issuing of credit ratings) must have the appropriate knowledge and experience for the duties assigned as well as the following:

- they shall not participate in negotiations regarding fees or payments with any rated entity;[23]
- they must be subject to an adequate rotation mechanism;
- they shall have no compensation that is contingent on the amount of revenue generated through their activities.

[20] Title II, articles 6 to 14.
[21] "*Article 6*. Independence and avoidance of conflicts of interest. 1. A credit rating agency shall take all necessary steps to ensure that the issuing of a credit rating is not affected by any existing or potential conflict of interest or business relationship involving the credit rating agency issuing the credit rating, its managers, rating analysts, employees, any other natural person whose services are placed at the disposal or under the control of the credit rating agency, or any person directly or indirectly linked to it by control. 2. In order to ensure compliance with paragraph 1, a credit rating agency shall comply with the requirements set out in Sections A and B of Annex I".
[22] "*Article 7*. Rating analysts, employees and other persons involved in the issuing of credit ratings. 1. A credit rating agency shall ensure that rating analysts, its employees and any other natural person whose services are placed at its disposal or under its control and who are directly involved in credit rating activities have appropriate knowledge and experience for the duties assigned. 2. A credit rating agency shall ensure that persons referred to in paragraph 1 shall not be allowed to initiate or participate in negotiations regarding fees or payments with any rated entity, related third party or any person directly or indirectly linked to the rated entity by control. 3. A credit rating agency shall ensure that persons referred to in paragraph 1 meet the requirements set out in Section C of Annex I. 4. A credit rating agency shall establish an appropriate gradual rotation mechanism with regard to the rating analysts and persons approving credit ratings as defined in Section C of Annex I. That rotation mechanism shall be undertaken in phases on the basis of individuals rather than of a complete team. 5. Compensation and performance evaluation of rating analysts and persons approving the credit ratings shall not be contingent on the amount of revenue that the credit rating agency derives from the rated entities or related third parties".
[23] Annex I to Section C sets forth the provisions for people involved in the rating process.

Article 8 looks at the methodologies, models and key rating assumptions[24] used by agencies. This was an area that received much critical attention following the crisis. The regulation not only sets out what must be disclosed to the public,[25] but also lists a series of provisions designed to ensure optimal quality for the output – i.e. the rating – of the methodology.[26]

The first proposed amendment (2010) introduced two articles concerning ratings for structured products[27] (article 8a) and access to rating information (article 8b).[28]

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[24] "*Article 8*. Methodologies, models and key rating assumptions. 1. A credit rating agency shall disclose to the public the methodologies, models and key rating assumptions it uses in its credit rating activities as defined in point 5 of Part I of Section E of Annex I. 2. A credit rating agency shall adopt, implement and enforce adequate measures to ensure that the credit ratings it issues are based on a thorough analysis of all the information that is available to it and that is relevant to its analysis according to its rating methodologies. It shall adopt all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from reliable sources. 3. A credit rating agency shall use rating methodologies that are rigorous, systematic, continuous and subject to validation based on historical experience, including back-testing. 4. Where a credit rating agency is using an existing credit rating prepared by another credit rating agency with respect to underlying assets or structured finance instruments, it shall not refuse to issue a credit rating of an entity or a financial instrument because a portion of the entity or the financial instrument had been previously rated by another credit rating agency. A credit rating agency shall record all instances where in its credit rating process it departs from existing credit ratings prepared by another credit rating agency with respect to underlying assets or structured finance instruments providing a justification for the differing assessment. 5. A credit rating agency shall monitor credit ratings and review its credit ratings and methodologies on an ongoing basis and at least annually, in particular where material changes occur that could have an impact on a credit rating. A credit rating agency shall establish internal arrangements to monitor the impact of changes in macroeconomic or financial market conditions on credit ratings. 6. When methodologies, models or key rating assumptions used in credit rating activities are changed, a credit rating agency shall: (a) immediately, using the same means of communication as used for the distribution of the affected credit ratings, disclose the likely scope of credit ratings to be affected; (b) review the affected credit ratings as soon as possible and no later than six months after the change, in the meantime placing those ratings under observation; and (c) re-rate all credit ratings that have been based on those methodologies, models or key rating assumptions if, following the review, the overall combined effect of the changes affects those credit ratings".

[25] Annex I, Section E, part 1, point 5.

[26] Remaining on the question of the quality of the rating, article 9 sets forth that any decision, by a rating agency, to outsource specific, important operational tasks must in no way impair the final quality of the product or obstruct regulatory supervision by ESMA.

[27] "*Article 8a*. Information on structured finance instruments. 1. The issuer of a structured finance instrument or a related third party shall provide to the credit rating agency it appoints, on a password-protected website that it shall manage, all information necessary for the credit rating agency to initially determine or monitor a credit rating of a structured finance instrument according to the methodology set out in Article 8(1). 2. Where other credit rating agencies registered or certified according to this Regulation request access to the information referred to in paragraph 1, they shall be granted access without delay provided that they meet all of the following conditions: (a) they have the systems and organisational structure in place to ensure the confidentiality of this information; (b) they provide ratings on a yearly basis for at least 10% of the structured finance instruments for which they request access to information referred to in paragraph 1. 3. In order to ensure a coherent application of this Article, the Commission shall adopt in accordance with the regulatory procedure referred to in Article 38(2) detailed rules specifying in particular the conditions of access and the requirements of the website in order to ensure the accuracy and the confidentiality of data and the protection of personal data in accordance with Directive 95/46/EC".

[28] "*Article 8b*. Access to rating information. 1. A credit rating agency registered in the Union shall maintain a password-protected website containing: (a) a list of the structured finance instruments for which it is in the process of providing a credit rating, identifying the type of the structured finance instrument, the name of the issuer and the date when the rating process was initiated; (b) a link to the password protected website on which the issuer of the structured finance instrument or a related third party provides the information required under Article 8a(1), as soon as it is in possession of this link. 2. A credit rating agency

The underlying idea for these two articles is to create an information store that is available 'to the market', which should help ensure sound rating procedures and results. The process begins with the issuer of a structured product which must provide the rating agency, on a password-protected website, with the information needed to determine and check the rating. The information above is made available to other rating agencies on request, provided they agree to comply with the two conditions established in point 2 of article 8a: (i) they can guarantee the confidentiality of the information received and (ii) they commit to providing ratings on a yearly basis for at least 10% of the instruments for which they request information. The second requirement is designed to ensure that any third-party agencies that request access to information use it effectively, providing the control mechanism desired by the authorities.

In turn, the agencies (as per article 8b) must manage a password-protected website where all the information related to the structured products they are in the process of rating is contained as well as a link to the site where the issuer has supplied the information required pursuant to the previous article. In essence, the provisions in these articles – potentially – allow all the other players in the market to verify the information provided by the issuer in relation to the structured products being issued and the work done by the agency issuing the rating. This creates a type of 'market check' on the soundness of the work done by the agencies. The rationale behind these European provisions seems clear and laudable, but their actual effectiveness needs to be assessed along the way, especially given the oligopolistic nature of the market for rating services.

The communication links with the market are a key element of what a rating agency does given the role of ratings in determining prices and returns from rated financial assets. Article 10 governs the disclosure and presentation of credit rating.[29] The regulation and the measures in Annex I, Section D, aim to ensure prompt, uniform disclosure and transparency.

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shall grant access without delay to the password protected website referred to in paragraph 1 to any credit rating agency registered or certified under this Regulation provided that the credit rating agency requesting access complies with the requirements set out in Article 8a (2)".

[29] "*Article 10*. Disclosure and presentation of credit ratings. 1. A credit rating agency shall disclose any credit rating, as well as any decision to discontinue a credit rating, on a non-selective basis and in a timely manner. In the event of a decision to discontinue a credit rating, the information disclosed shall include full reasons for the decision. The first subparagraph shall also apply to credit ratings that are distributed by subscription. 2. Credit rating agencies shall ensure that credit ratings are presented and processed in accordance with the requirements set out in Section D of Annex I. 3. When a credit rating agency issues credit ratings for structured finance instruments, it shall ensure that rating categories that are attributed to structured finance instruments are clearly differentiated using an additional symbol which distinguishes them from rating categories used for any other entities, financial instruments or financial obligations. 4. A credit rating agency shall disclose its policies and procedures regarding unsolicited credit ratings. 5. When a credit rating agency issues an unsolicited credit rating, it shall state prominently in the credit rating whether or not the rated entity or related third party participated in the credit rating process and whether the credit rating agency had access to the accounts and other relevant internal documents of the rated entity or a related third party. Unsolicited credit ratings shall be identified as such. 6. A credit rating agency shall not use the name of ESMA or any competent authority in such a way that would indicate or suggest endorsement or approval by ESMA or any competent authority of the credit ratings or any credit rating activities of the credit rating agency".

Article 11 governs the general and periodic disclosures that an agency must make to the public.[30] The general disclosures relate to any actual or potential conflicts of interest, a list of ancillary services offered, the policy adopted for publishing credit ratings, the compensation arrangements, the methodologies and information used in issuing ratings and any codes of conduct adhered to. The periodic ones cover the historical default rates of its ratings, a list of its major customers and, from these, details about those that have generated the most growth in business and revenue for the agency.

Article 12 sets out the concept of a transparency report, outlining the contents in combination with Section E, part III of Annex I. The required information covers the legal structure, ownership, holdings, internal control mechanisms, allocation of staff to new or reviewed credit ratings, documentation storage, the internal compliance review, management rotation, governance and financial figures.[31]

Title III of the regulation governs supervision of rating agencies. It establishes that the agencies operating in the European Union must be registered with ESMA, which was assigned responsibility, during the revision of European financial supervision, for these agencies. Articles 14 to 20 set forth how registration is to be done, the requirements that must be met and maintained, and how registration can be revoked. Registration will allow ESMA to constantly monitor the structure of the sector and will give it the power to control the players that operate in it. The supervisory powers enjoyed by the European regulator over the rating agencies are objectively broad (Chapter II of Title III).

Above all, article 21 of the new Regulation no. 513/2011 creates the key role played by ESMA in guaranteeing compliance with the rules in question.[32] By January 2012,

[30] "*Article 11*. General and periodic disclosures. 1. A credit rating agency shall fully disclose to the public and update immediately information relating to the matters set out in Part I of Section E of Annex I. 2. A credit rating agency shall make available in a central repository established by ESMA information on its historical performance data including the ratings transition frequency and information about credit ratings issued in the past and on their changes. A credit rating agency shall provide information to that repository on a standard form as provided for by ESMA. ESMA shall make that information accessible to the public and shall publish summary information on the main developments observed on an annual basis. 3. A credit rating agency shall provide annually, by 31 March, to ESMA information relating to matters set out in point 2 of Part II of Section E of Annex I".

[31] "*Article 12*. Transparency report. A credit rating agency shall publish annually a transparency report which includes information on matters set out in Part III of Section E of Annex I. The credit rating agency shall publish its transparency report at the latest three months after the end of each financial year and shall ensure that it remains available on the website of the agency for at least five years".

[32] "*Article 21*. ESMA. 1. Without prejudice to Article 25a, ESMA shall ensure that this Regulation is applied. 2. In accordance with Article 16 of Regulation (EU) No 1095/2010, ESMA shall issue and update guidelines on the cooperation between ESMA, the competent authorities and the sectoral competent authorities for the purposes of this Regulation and for those of the relevant sectoral legislation, including the procedures and detailed conditions relating to the delegation of tasks. 3. In accordance with Article 16 of Regulation (EU) No 1095/2010, ESMA shall, in cooperation with EBA and EIOPA, issue and update guidelines on the application of the endorsement regime under Article 4(3) of this Regulation by 7 June 2011. 4. By 2 January 2012 ESMA shall submit draft regulatory technical standards for endorsement by the Commission in accordance with Article 10 of Regulation (EU) No 1095/2010 on: (a) the information to be provided by a credit rating agency in its application for registration as set out in Annex II; (b) information that the credit rating agency must provide for the application for certification and for the assessment of its systemic importance to the financial stability or integrity of financial markets referred to in Article 5; (c) the presentation of the information, including structure, format, method and period of reporting, that

ESMA shall formulate proposals for the regulatory technical standards to implement the new regulations that will be submitted to the Commission for approval. Aside from defining all the technical aspects ruled by the preceding articles, ESMA will publish, starting in 2012, an annual report about the application of the regulation and will report to Parliament, the Council and the Commission about its supervisory activities and penalties imposed.

The new article 22a of Regulation no. 513/2011 empowers ESMA to verify that the rating agencies perform back testing on the quality of their ratings as per article 8(3).[33]

Articles 23a to 23e define the operational powers for supervision, including information requests, inquiries, onsite inspections, and procedural rules for the adoption of supervisory measures and the imposition of penalties.

Article 24 expressly governs the supervisory measures that ESMA can take.[34] European regulations include a detailed list of infringements, set out in Annex III of Regula-

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credit rating agencies shall disclose in accordance with Article 11(2) and point 1 of Part II of Section E of Annex I; (d) the assessment of compliance of credit rating methodologies with the requirements set out in Article 8(3); (e) the content and format of ratings data periodic reporting to be requested from the credit rating agencies for the purpose of ongoing supervision by ESMA. 5. ESMA shall publish, annually and for the first time by 1 January 2012, a report on the application of this Regulation. That report shall contain, in particular, an assessment of the implementation of Annex I by the credit rating agencies registered under this Regulation. 6. ESMA shall present annually to the European Parliament, the Council and the Commission a report on supervisory measures taken and penalties imposed by ESMA under this Regulation, including fines and periodic penalty payments. 7. ESMA shall cooperate with EBA and EIOPA in performing its tasks and shall consult EBA and EIOPA before issuing and updating guidelines and submitting draft regulatory technical standards referred to in paragraphs 2, 3 and 4".

[33] All of this without interfering, as set forth by article 23, with the methodologies used by agencies or with the content of ratings.

[34] "*Article 24*. Supervisory measures by ESMA. 1. Where, in accordance with Article 23e(5), ESMA's Board of Supervisors finds that a credit rating agency has committed one of the infringements listed in Annex III, it shall take one or more of the following decisions: (a) withdraw the registration of the credit rating agency; (b) temporarily prohibit the credit rating agency from issuing credit ratings with effect throughout the Union, until the infringement has been brought to an end; (c) suspend the use, for regulatory purposes, of the credit ratings issued by the credit rating agency with effect throughout the Union, until the infringement has been brought to an end; (d) require the credit rating agency to bring the infringement to an end; (e) issue public notices. 2. When taking the decisions referred to in paragraph 1, ESMA's Board of Supervisors shall take into account the nature and seriousness of the infringement, having regard to the following criteria: (a) the duration and frequency of the infringement; (b) whether the infringement has revealed serious or systemic weaknesses in the undertaking's procedures or in its management systems or internal controls; (c) whether financial crime was facilitated, occasioned or otherwise attributable to the infringement; (d) whether the infringement has been committed intentionally or negligently. 3. Before taking the decisions referred to in points (a), (b) and (c) of paragraph 1, ESMA's Board of Supervisors shall inform EBA and EIOPA thereof. 4. Credit ratings may continue to be used for regulatory purposes following the adoption of the decisions referred to in points (a) and (c) of paragraph 1 during a period not exceeding: (a) 10 working days from the date ESMA's decision is made public under paragraph 5 if there are credit ratings of the same financial instrument or entity issued by other credit rating agencies registered under this Regulation; or (b) three months from the date ESMA's decision is made public under paragraph 5 if there are no credit ratings of the same financial instrument or entity issued by other credit rating agencies registered under this Regulation. ESMA's Board of Supervisors may extend, including following a request by EBA or EIOPA, the period referred to in point (b) of the first subparagraph by three months in exceptional circumstances relating to the potential for market disruption or financial instability. 5. Without undue delay, ESMA's Board of Supervisors shall notify any decision adopted pursuant to paragraph 1 to the credit rating agency concerned and shall communicate any such decision to the competent authorities and the sectoral competent authorities, the Commission, EBA and EIOPA. It shall make public any such decision on its website within 10 working days from the date when

tion no. 513/2011, that identified some main categories (infringements related to conflicts of interest or organisational and operational requirements; infringements related to obstacles to supervisory activities; infringements related to disclosure provisions) and a range of sub-categories within these.

Once an infringement has been noted, ESMA's Supervisory Board can impose some major penalties, including revoking registration, prohibiting the agency from issuing ratings in the European Union, suspending the use of a rating, for regulatory purposes, issued by an agency, requiring an agency to bring an infringement to an end and issuing public notices.[35] In such cases, ESMA shall act in coordination with the other two European supervisory authorities.

ESMA, like the other European supervisory authorities, commenced operations at the start of 2011. The major activities undertaken relate to consulting with market participants in order to gather information and opinions. These will then be used to draft the regulatory technical standards to be submitted to the European Commission by January 2012.

6.3.2. Reform in the United States

In parallel with the reforms introduced in the European Union, the United States also revised the law it had passed in 2006.[36] In 2009, the SEC adopted amendments that introduced the principle, also evident in European legislation, that NRSROs issuing ratings for structured finance products make available to the other agencies not involved in the operation the data for the rated securities. The rationale for this was once again that it would stimulate competition in this sector, ensuring the other agencies were in a position to formulate their own assessments of the rating from the agency appointed to produce the initial rating. The information made available to the other NRSROs, which can access this under set conditions, allows them to issue unsolicited ratings, thus encouraging rating comparisons.

The introduction of the Dodd-Frank Act provided another opportunity to introduce changes and finalise the regulatory framework thus far. Once again the legislative process was based on dialectic, with the bill containing the fundamental principles and the rulemaking process responsible for implementing the technical rules.

Section 931, the start of Subtitle C, "Improvements to the Regulations of Credit Rating Agencies", opens by recognising the importance of what rating agencies do, seeing them as "matters of national public interest", and by accepting the failings that

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it was adopted. When making public its decision as referred to in the first subparagraph, ESMA's Board of Supervisors shall also make public the right for the credit rating agency concerned to appeal the decision, the fact, where relevant, that such an appeal has been lodged, specifying that such an appeal does not have suspensive effect, and the fact that it is possible for the Board of Appeal to suspend the application of the contested decision in accordance with Article 60(3) of Regulation (EU) No 1095/2010".

[35] Pecuniary sanctions are expressly governed by article 36a.

[36] See U.S. Senate *et al.* (2009); White (2009).

manifest themselves during the crisis.[37] These two aspects form the basis of a law designed to improve the quality of credit ratings, while also increasing the accountability of the agencies responsible for the ratings.

Consequently, Section 932 introduces many detailed amendments to the version of the 1934 Securities Exchange Act in force at the time of the DFA being introduced. The new provisions relate to a number of quite varied aspects, including:

- internal control systems[38] that the agencies must establish, maintain and document for the SEC (the regulator assigned responsibility for supervising this area). Agencies are required to report annually to the SEC. Particular attention is placed on monitoring the work done by agency staff, who might find themselves facing a conflict of interest;[39]

[37] "*Section 931*. Findings. Congress finds the following: (1) Because of the systemic importance of credit ratings and the reliance placed on credit ratings by individual and institutional investors and financial regulators, the activities and performances of credit rating agencies, including nationally recognized statistical rating organizations, are matters of national public interest, as credit rating agencies are central to capital formation, investor confidence, and the efficient performance of the United States economy. (2) Credit rating agencies, including nationally recognized statistical rating organizations, play a critical 'gatekeeper' role in the debt market that is functionally similar to that of securities analysts, who evaluate the quality of securities in the equity market, and auditors, who review the financial statements of firms. Such role justifies a similar level of public oversight and accountability. (3) Because credit rating agencies perform evaluative and analytical services on behalf of clients, much as other financial 'gatekeepers' do, the activities of credit rating agencies are fundamentally commercial in character and should be subject to the same standards of liability and oversight as apply to auditors, securities analysts, and investment bankers. (4) In certain activities, particularly in advising arrangers of structured financial products on potential ratings of such products, credit rating agencies face conflicts of interest that need to be carefully monitored and that therefore should be addressed explicitly in legislation in order to give clearer authority to the Securities and Exchange Commission. (5) In the recent financial crisis, the ratings on structured financial products have proven to be inaccurate. This inaccuracy contributed significantly to the mismanagement of risks by financial institutions and investors, which in turn adversely impacted the health of the economy in the United States and around the world. Such inaccuracy necessitates increased accountability on the part of credit rating agencies".

[38] "*Section 932(a)(2)(3)*. Internal Controls over Processes for Determining Credit Ratings. (A) In General. – Each nationally recognized statistical rating organization shall establish, maintain, enforce, and document an effective internal control structure governing the implementation of and adherence to policies, procedures, and methodologies for determining credit ratings, taking into consideration such factors as the Commission may prescribe, by rule. (B) Attestation Requirement. – The Commission shall prescribe rules requiring each nationally recognized statistical rating organization to submit to the Commission an annual internal controls report, which shall contain – (I) a description of the responsibility of the management of the nationally recognized statistical rating organization in establishing and maintaining an effective internal control structure under subparagraph (A); (II) an assessment of the effectiveness of the internal control structure of the nationally recognized statistical rating organization; and (III) the attestation of the chief executive officer, or equivalent individual, of the nationally recognized statistical rating organization".

[39] "*Section 932(a)(4)(4)*. Look-Back Requirement. (A) Review by the Nationally Recognized Statistical Rating Organization. – Each nationally recognized statistical rating organization shall establish, maintain, and enforce policies and procedures reasonably designed to ensure that, in any case in which an employee of a person subject to a credit rating of the nationally recognized statistical rating organization or the issuer, underwriter, or sponsor of a security or money market instrument subject to a credit rating of the nationally recognized statistical rating organization was employed by the nationally recognized statistical rating organization and participated in any capacity in determining credit ratings for the person or the securities or money market instruments during the 1-year period preceding the date an action was taken with respect to the credit rating, the nationally recognized statistical rating organization shall (I) conduct a review to determine whether any conflicts of interest of the employee influenced the credit rating; and (II) take action to revise the rating if appropriate, in accordance with such rules as the Commission shall pre-

- ratings are separated from the sales and marketing done by agencies in order to prevent conflicts of interest.[40] The Act refers to the rulemaking process by the SEC, establishing that the Commission must set forth the revocation of the registration of rating agencies if they infringe a rule;
- the identification of a compliance officer,[41] who cannot, while in this role, perform functions that might result in a conflict (produce ratings, develop methodologies, perform marketing or sales activities, establish compensation levels). The person holding this role must not receive any remuneration contingent on the agency's business and financial performance and

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scribe. (B) Review By Commission. (I) In General. – The Commission shall conduct periodic reviews of the policies described in subparagraph (A) and the implementation of the policies at each nationally recognized statistical rating organization to ensure they are reasonably designed and implemented to most effectively eliminate conflicts of interest. *Section 932(a)(4)(5).* Report to Commission on Certain Employment Transitions. (A) Report Required. – Each nationally recognized statistical rating organization shall report to the Commission any case such organization knows or can reasonably be expected to know where a person associated with such organization within the previous 5 years obtains employment with any obligor, issuer, underwriter, or sponsor of a security or money market instrument for which the organization issued a credit rating during the 12-month period prior to such employment, if such employee (I) was a senior officer of such organization; (II) participated in any capacity in determining credit ratings for such obligor, issuer, underwriter, or sponsor; or (III) supervised an employee described in clause (II). (B) Public Disclosure. – Upon receiving such a report, the Commission shall make such information publicly available".

[40] "*Section 932(a)(4)(3).* Separation of Ratings from Sales and Marketing. (A) Rules Required. – The Commission shall issue rules to prevent the sales and marketing considerations of a nationally recognized statistical rating organization from influencing the production of ratings by the nationally recognized statistical rating organization. (B) Contents of Rules. – The rules issued under subparagraph (A) shall provide for (I) exceptions for small nationally recognized statistical rating organizations with respect to which the Commission determines that the separation of the production of ratings and sales and marketing activities is not appropriate; and (II) suspension or revocation of the registration of a nationally recognized statistical rating organization, if the Commission finds, on the record, after notice and opportunity for a hearing, that (I) the nationally recognized statistical rating organization has committed a violation of a rule issued under this subsection; and (II) the violation of a rule issued under this subsection affected a rating".

[41] "*Section 932(a)(5).* (2) Limitations. – (A) In general. – Except as provided in subparagraph (B), an individual designated under paragraph (1) [the compliance officer] may not, while serving in the designated capacity (I) perform credit ratings; (II) participate in the development of ratings methodologies or models; (III) perform marketing or sales functions; or (IV) participate in establishing compensation levels, other than for employees working for that individual. (B) Exception. – The Commission may exempt a small nationally recognized statistical rating organization from the limitations under this paragraph, if the Commission finds that compliance with such limitations would impose an unreasonable burden on the nationally recognized statistical rating organization. (3) Other Duties. – Each individual designated under paragraph (1) shall establish procedures for the receipt, retention, and treatment of (A) complaints regarding credit ratings, models, methodologies, and compliance with the securities laws and the policies and procedures developed under this section; and (B) confidential, anonymous complaints by employees or users of credit ratings. (4) Compensation. – The compensation of each compliance officer appointed under paragraph (1) shall not be linked to the financial performance of the nationally recognized statistical rating organization and shall be arranged so as to ensure the independence of the officer's judgment. (5) Annual Reports Required. (A) Annual Reports Required. – Each individual designated under paragraph (1) shall submit to the nationally recognized statistical rating organization an annual report on the compliance of the nationally recognized statistical rating organization with the securities laws and the policies and procedures of the nationally recognized statistical rating organization that includes (I) a description of any material changes to the code of ethics and conflict of interest policies of the nationally recognized statistical rating organization; and (II) a certification that the report is accurate and complete. (B) Submission of Reports to the Commission. – Each nationally recognized statistical rating organization shall file the reports required under subparagraph (A) together with the financial report that is required to be submitted to the Commission under this section".

he/she must produce an annual report, to be sent to the SEC, on compliance at the agency;

- the establishment of an Office of Credit Ratings at the SEC,[42] which is entrusted with administering the rules issued by the SEC regarding the practices used by agencies to calculate ratings and the prevention of conflicts of interest. The Office of Credit Ratings must examine every registered agency at least once a year. The requirements to be checked in these examinations are very detailed and the SEC has the power to publish the results;
- the principle of the transparency of rating performance.[43] According to this,

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[42] "*Section 932(a)(8).* (1) Establishment of Office of Credit Ratings. (A) Office Established. – The Commission shall establish within the Commission an Office of Credit Ratings (referred to in this subsection as the 'Office') to administer the rules of the Commission (I) with respect to the practices of nationally recognized statistical rating organizations in determining ratings, for the protection of users of credit ratings and in the public interest; (II) to promote accuracy in credit ratings issued by nationally recognized statistical rating organizations; and (III) to ensure that such ratings are not unduly influenced by conflicts of interest. (B) Director of the Office. – The head of the Office shall be the Director, who shall report to the Chairman. (2) Staffing. – The Office established under this subsection shall be staffed sufficiently to carry out fully the requirements of this section. The staff shall include persons with knowledge of and expertise in corporate, municipal, and structured debt finance. (3) Commission Examinations. (A) Annual Examinations Required. – The Office shall conduct an examination of each nationally recognized statistical rating organization at least annually. (B) Conduct of Examinations. – Each examination under subparagraph (A) shall include a review of (I) whether the nationally recognized statistical rating organization conducts business in accordance with the policies, procedures, and rating methodologies of the nationally recognized statistical rating organization; (II) the management of conflicts of interest by the nationally recognized statistical rating organization; (III) implementation of ethics policies by the nationally recognized statistical rating organization; (IV) the internal supervisory controls of the nationally recognized statistical rating organization; (V) the governance of the nationally recognized statistical rating organization; (VI) the activities of the individual designated by the nationally recognized statistical rating organization under subsection (j)(1); (VII) the processing of complaints by the nationally recognized statistical rating organization; and (VIII) the policies of the nationally recognized statistical rating organization governing the postemployment activities of former staff of the nationally recognized statistical rating organization. (C) Inspection Reports. – The Commission shall make available to the public, in an easily understandable format, an annual report summarizing (I) the essential findings of all examinations conducted under subparagraph (A), as deemed appropriate by the Commission; (II) the responses by the nationally recognized statistical rating organizations to any material regulatory deficiencies identified by the Commission under clause (I); and (III) whether the nationally recognized statistical rating organizations have appropriately addressed the recommendations of the Commission contained in previous reports under this subparagraph. (4) Rulemaking Authority. – The Commission shall (A) establish, by rule, fines, and other penalties applicable to any nationally recognized statistical rating organization that violates the requirements of this section and the rules thereunder; and (B) issue such rules as may be necessary to carry out this section".

[43] "*Section 932(a)(8)(q).* Transparency of Ratings Performance. (1) Rulemaking Required. – The Commission shall, by rule, require that each nationally recognized statistical rating organization publicly disclose information on the initial credit ratings determined by the nationally recognized statistical rating organization for each type of obligor, security, and money market instrument, and any subsequent changes to such credit ratings, for the purpose of allowing users of credit ratings to evaluate the accuracy of ratings and compare the performance of ratings by different nationally recognized statistical rating organizations. (2) Content. – The rules of the Commission under this subsection shall require, at a minimum, disclosures that (A) are comparable among nationally recognized statistical rating organizations, to allow users of credit ratings to compare the performance of credit ratings across nationally recognized statistical rating organizations; (B) are clear and informative for investors having a wide range of sophistication who use or might use credit ratings; (C) include performance information over a range of years and for a variety of types of credit ratings, including for credit ratings withdrawn by the nationally recognized statistical rating organization; (D) are published and made freely available by the nationally recognized statistical rating organization, on an easily accessible portion of its website, and in writing, when requested; (E) are appropriate to the business model of a nationally recognized statistical rating organization; and (F) each nationally recog-

the agencies will have to, following the methods determined by the SEC, publish their initial ratings and then any amendments to these, thus allowing the public to ascertain the accuracy of the ratings;
- the principles of the robustness[44] and transparency[45] of the methodologies

nized statistical rating organization include an attestation with any credit rating it issues affirming that no part of the rating was influenced by any other business activities, that the rating was based solely on the merits of the instruments being rated, and that such rating was an independent evaluation of the risks and merits of the instrument".

[44] "*Section 932(a)(8)(r).* Credit Ratings Methodologies. – The Commission shall prescribe rules, for the protection of investors and in the public interest, with respect to the procedures and methodologies, including qualitative and quantitative data and models, used by nationally recognized statistical rating organizations that require each nationally recognized statistical rating organization (1) to ensure that credit ratings are determined using procedures and methodologies, including qualitative and quantitative data and models, that are (A) approved by the board of the nationally recognized statistical rating organization, a body performing a function similar to that of a board; and (B) in accordance with the policies and procedures of the nationally recognized statistical rating organization for the development and modification of credit rating procedures and methodologies; (2) to ensure that when material changes to credit rating procedures and methodologies (including changes to qualitative and quantitative data and models) are made, that (A) the changes are applied consistently to all credit ratings to which the changed procedures and methodologies apply; (B) to the extent that changes are made to credit rating surveillance procedures and methodologies, the changes are applied to then-current credit ratings by the nationally recognized statistical rating organization within a reasonable time period determined by the Commission, by rule; and (C) the nationally recognized statistical rating organization publicly discloses the reason for the change; and (3) to notify users of credit ratings (A) of the version of a procedure or methodology, including the qualitative methodology or quantitative inputs, used with respect to a particular credit rating; (B) when a material change is made to a procedure or methodology, including to a qualitative model or quantitative inputs; (C) when a significant error is identified in a procedure or methodology, including a qualitative or quantitative model, that may result in credit rating actions; and (D) of the likelihood of a material change described in subparagraph (B) resulting in a change in current credit ratings".

[45] "*Section 932(a)(8)(s).* Transparency of Credit Rating Methodologies and Information Reviewed. – (1) Form For Disclosures. – The Commission shall require, by rule, each nationally recognized statistical rating organization to prescribe a form to accompany the publication of each credit rating that discloses (A) information relating to (i) the assumptions underlying the credit rating procedures and methodologies; (ii) the data that was relied on to determine the credit rating; and (iii) if applicable, how the nationally recognized statistical rating organization used servicer or remittance reports, and with what frequency, to conduct surveillance of the credit rating; and (B) information that can be used by investors and other users of credit ratings to better understand credit ratings in each class of credit rating issued by the nationally recognized statistical rating organization. (2) Format. – The form developed under paragraph (1) shall (A) be easy to use and helpful for users of credit ratings to understand the information contained in the report; (B) require the nationally recognized statistical rating organization to provide the content described in paragraph (3)(B) in a manner that is directly comparable across types of securities; and (C) be made readily available to users of credit ratings, in electronic or paper form, as the Commission may, by rule, determine. (3) Content of Form. – (A) Qualitative Content. – Each nationally recognized statistical rating organization shall disclose on the form developed under paragraph (1) (i) the credit ratings produced by the nationally recognized statistical rating organization; (ii) the main assumptions and principles used in constructing procedures and methodologies, including qualitative methodologies and quantitative inputs and assumptions about the correlation of defaults across underlying assets used in rating structured products; (iii) the potential limitations of the credit ratings, and the types of risks excluded from the credit ratings that the nationally recognized statistical rating organization does not comment on, including liquidity, market, and other risks; (iv) information on the uncertainty of the credit rating, including (I) information on the reliability, accuracy, and quality of the data relied on in determining the credit rating; and (II) a statement relating to the extent to which data essential to the determination of the credit rating were reliable or limited, including (aa) any limits on the scope of historical data; and (bb) any limits in accessibility to certain documents or other types of information that would have better informed the credit rating; (v) whether and to what extent third party due diligence services have been used by the nationally recognized statistical rating organization, a description of the information that such third party reviewed in conducting due dili-

used by the agencies to produce ratings. The aim is to ensure that the rating produced is of a high quality and reliable and that the market knows the principles, assumptions and basic data the agencies use in producing their ratings. On the first front, the DFA establishes that these practices are defined according to prefigured quality standards and then correctly implemented. On the second, the main elements of the disclosure are defined (the method for the disclosure, the qualitative and quantitative elements to be included in the disclosure, specific due diligence disclosures for asset-back securities). In both cases, the SEC must produce the rules for the principles in the Act and set out the terms and conditions for the agencies to respect these rules;

- the fundamental corporate governance rules for the agencies.[46] The Act

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gence services, and a description of the findings or conclusions of such third party; (VI) a description of the data about any obligor, issuer, security, or money market instrument that were relied upon for the purpose of determining the credit rating; (VII) a statement containing an overall assessment of the quality of information available and considered in producing a rating for an obligor, security, or money market instrument, in relation to the quality of information available to the nationally recognized statistical rating organization in rating similar issuances; (VIII) information relating to conflicts of interest of the nationally recognized statistical rating organization; and (IX) such additional information as the Commission may require. (B) Quantitative Content. – Each nationally recognized statistical rating organization shall disclose on the form developed under this subsection (I) an explanation or measure of the potential volatility of the credit rating, including (I) any factors that might lead to a change in the credit ratings; and (II) the magnitude of the change that a user can expect under different market conditions; (II) information on the content of the rating, including (I) the historical performance of the rating; and (II) the expected probability of default and the expected loss in the event of default; (III) information on the sensitivity of the rating to assumptions made by the nationally recognized statistical rating organization, including (I) 5 assumptions made in the ratings process that, without accounting for any other factor, would have the greatest impact on a rating if the assumptions were proven false or inaccurate; and (II) an analysis, using specific examples, of how each of the 5 assumptions identified under subclause (I) impacts a rating; (IV) such additional information as may be required by the Commission. (4) Due Diligence Services for Asset-Backed Securities. (A) Findings. – The issuer or underwriter of any assetbacked security shall make publicly available the findings and conclusions of any third-party due diligence report obtained by the issuer or underwriter. (B) Certification Required. – In any case in which third-party due diligence services are employed by a nationally recognized statistical rating organization, an issuer, or an underwriter, the person providing the due diligence services shall provide to any nationally recognized statistical rating organization that produces a rating to which such services relate, written certification, as provided in subparagraph (C). (C) Format and Content. – The Commission shall establish the appropriate format and content for the written certifications required under subparagraph (B), to ensure that providers of due diligence services have conducted a thorough review of data, documentation, and other relevant information necessary for a nationally recognized statistical rating organization to provide an accurate rating. (D) Disclosure of Certification. – The Commission shall adopt rules requiring a nationally recognized statistical rating organization, at the time at which the nationally recognized statistical rating organization produces a rating, to disclose the certification described in subparagraph (B) to the public in a manner that allows the public to determine the adequacy and level of due diligence services provided by a third party".

[46] "*Section 932(a)(8)(t)*. Corporate Governance, Organization, and Management of Conflicts of Interest. – (1) Board of Directors. – Each nationally recognized statistical rating organization shall have a board of directors. (2) Independent Directors. (A) In general. – At least 1/2 of the board of directors, but not fewer than 2 of the members thereof, shall be independent of the nationally recognized statistical rating agency. A portion of the independent directors shall include users of ratings from a nationally recognized statistical rating organization. (B) Independence Determination. – In order to be considered independent for purposes of this subsection, a member of the board of directors of a nationally recognized statistical rating organization (I) may not, other than in his or her capacity as a member of the board of directors or any committee thereof (I) accept any consulting, advisory, or other compensatory fee from the nationally recognized statistical rating organization; or (II) be a person associated with the nationally recognized statistical rating

> expressly requires independent directors, indicating the criteria to determine their independence and stating that their compensation must not be contingent on the agency's business performance and it must be structured so as to ensure independence. Furthermore, in addition to their traditional responsibilities, the Boards of these agencies are responsible for implementing the rules related to the procedures used to calculate ratings, to managing conflicts of interest, to internal control procedures and to compensation policies.

Sections 939 and 939a require the removal of all existing statutory references that bestow on the ratings a 'regulatory' value in determining the credit rating of certain types of assets.[47] The underlying idea, echoing international trends, is to require financial in-

organization or with any affiliated company thereof; and (II) shall be disqualified from any deliberation involving a specific rating in which the independent board member has a financial interest in the outcome of the rating. (C) Compensation and Term. – The compensation of the independent members of the board of directors of a nationally recognized statistical rating organization shall not be linked to the business performance of the nationally recognized statistical rating organization, and shall be arranged so as to ensure the independence of their judgment. The term of office of the independent directors shall be for a pre-agreed fixed period, not to exceed 5 years, and shall not be renewable. (3) Duties of Board of Directors. – In addition to the overall responsibilities of the board of directors, the board shall oversee (A) the establishment, maintenance, and enforcement of policies and procedures for determining credit ratings; (B) the establishment, maintenance, and enforcement of policies and procedures to address, manage, and disclose any conflicts of interest; (C) the effectiveness of the internal control system with respect to policies and procedures for determining credit ratings; and (D) the compensation and promotion policies and practices of the nationally recognized statistical rating organization".

[47] "*Section 939*. Removal of Statutory References to Credit Ratings. (A) Federal Deposit Insurance Act. – The Federal Deposit Insurance Act (12 U.S.C. 1811 et seq.) is amended (1) in section 7(b)(1)(E)(i), by striking 'credit rating entities, and other private economic' and insert 'private economic, credit'; (2) in section 28(d) (A) in the subsection heading, by striking 'not of investment grade'; (B) in paragraph (1), by striking 'not of investment grade' and inserting 'that does not meet standards of credit-worthiness as established by the Corporation'; (C) in paragraph (2), by striking 'not of investment grade'; (D) by striking paragraph (3); (E) by redesignating paragraph (4) as paragraph (3); and (F) in paragraph (3), as so redesignated (I) by striking subparagraph (A); (II) by redesignating subparagraphs (B) and (C) as subparagraphs (A) and (B), respectively; and (III) in subparagraph (B), as so redesignated, by striking 'not of investment grade' and inserting 'that does not meet standards of credit-worthiness as established by the Corporation'; and (3) in section 28(e) (A) in the subsection heading, by striking 'not of investment grade'; (B) in paragraph (1), by striking 'not of investment grade' and inserting 'that does not meet standards of credit-worthiness as established by the Corporation'; and (C) in paragraphs (2) and (3), by striking 'not of investment grade' each place that it appears and inserting 'that does not meet standards of credit-worthiness established by the Corporation'. (b) Federal Housing Enterprises Financial Safety and Soundness Act of 1992. – Section 1319 of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (12 U.S.C. 4519) is amended by striking 'that is a nationally recognized statistical rating organization, as such term is defined in section 3(a) of the Securities Exchange Act of 1934'. (c) Investment Company Act of 1940. – Section 6(a)(5)(A)(iv)(I) Investment Company Act of 1940 (15 U.S.C. 80a – 6(a)(5)(A)(iv)(I)) is amended by striking 'is rated investment grade by not less than 1 nationally recognized statistical rating organization' and inserting 'meets such standards of credit-worthiness as the Commission shall adopt'. (d) Revised Statutes. – Section 5136A of title LXII of the Revised Statutes of the United States (12 U.S.C. 24a) is amended (1) in subsection (a)(2)(E), by striking 'any applicable rating' and inserting 'standards of credit-worthiness established by the Comptroller of the Currency'; (2) in the heading for subsection (a)(3) by striking 'rating or comparable requirement' and inserting 'requirement'; (3) subsection (a)(3), by amending subparagraph (A) to read as follows: '(A) In general. – A national bank meets the requirements of this paragraph if the bank is one of the 100 largest insured banks and has not fewer than 1 issue of outstanding debt that meets standards of credit-worthiness or other criteria as the Secretary of the Treasury and the Board of Governors of the Federal Reserve System may jointly establish'. (4) in the heading for

stitutions and government agencies to achieve greater independence in terms of ratings, developing alternative risk measurement systems. The regulatory agencies involved in the reform process must, within a year of the law coming into force, table proposals that provide concrete ways for ensuring less need to use the ratings for regulatory purposes.[48]

Other provisions included in the Act seem designed to spark a debate on the future development of the rating industry.

Section 939c empowers the SEC to study the independence of rating agencies and how this independence influences ratings. This study must, expressly, deal with the question of conflicts of interest and the impact of the new rules meant to avoid such problems. The study will have to lead to a report to be presented to the relevant commissions in the Senate and House of Representatives within three years of the adoption of the DFA.

Section 939d entrusts the Government Accountability Office (GAO) with examining and assessing the feasibility of adopting business models other than the current issuer-pay approach. The report from this evaluation has to be presented to the relevant

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subsection (f), by striking 'maintain public rating or' and inserting 'meet standards of creditworthiness'; and (5) in subsection (f)(1), by striking 'any applicable rating' and inserting 'standards of credit-worthiness established by the Comptroller of the Currency'. (e) Securities Exchange Act of 1934. – Section 3(a) Securities Exchange Act of 1934 (15 U.S.C. 78a(3)(a)) is amended – (1) in paragraph (41), by striking 'is rated in one of the two highest rating categories by at least one nationally recognized statistical rating organization' and inserting 'meets standards of credit-worthiness as established by the Commission'; and (2) in paragraph (53)(A), by striking 'is rated in 1 of the 4 highest rating categories by at least 1 nationally recognized statistical rating organization' and inserting 'meets standards of credit-worthiness as established by the Commission'. (f) World Bank Discussions. – Section 3(a)(6) of the amendment in the nature of a substitute to the text of H. R. 4645, as ordered reported from the Committee on Banking, Finance and Urban Affairs on September 22, 1988, as enacted into law by section 555 of Public Law 100–461, (22 U.S.C. 286hh(a)(6)), is amended by striking 'credit rating' and inserting 'credit-worthiness'. (g) Effective Date. – The amendments made by this section shall take effect 2 years after the date of enactment of this Act. (h) Study and Report. – (1) In general. – Commission shall undertake a study on the feasibility and desirability of (A) standardizing credit ratings terminology, so that all credit rating agencies issue credit ratings using identical terms; (B) standardizing the market stress conditions under which ratings are evaluated; (C) requiring a quantitative correspondence between credit ratings and a range of default probabilities and loss expectations under standardized conditions of economic stress; and (D) standardizing credit rating terminology across asset classes, so that named ratings correspond to a standard range of default probabilities and expected losses independent of asset class and issuing entity. (2) Report. Not later than 1 year after the date of enactment of this Act, the Commission shall submit to Congress a report containing the findings of the study under paragraph (1) and the recommendations, if any, of the Commission with respect to the study". On this issue see White (2009).

[48] "*Section 939A*. Review of Reliance on Ratings. (a) Agency Review. – Not later than 1 year after the date of the enactment of this subtitle, each Federal agency shall, to the extent applicable, review (1) any regulation issued by such agency that requires the use of an assessment of the credit-worthiness of a security or money market instrument; and (2) any references to or requirements in such regulations regarding credit ratings. (b) Modifications Required. – Each such agency shall modify any such regulations identified by the review conducted under subsection (a) to remove any reference to or requirement of reliance on credit ratings and to substitute in such regulations such standard of credit-worthiness as each respective agency shall determine as appropriate for such regulations. In making such determination, such agencies shall seek to establish, to the extent feasible, uniform standards of credit-worthiness for use by each such agency, taking into account the entities regulated by each such agency and the purposes for which such entities would rely on such standards of credit-worthiness. (c) Report. – Upon conclusion of the review required under subsection (a), each Federal agency shall transmit a report to Congress containing a description of any modification of any regulation such agency made pursuant to subsection (b)".

commissions in the Senate and House of Representatives within eighteen months of the DFA becoming law.

The approval of the DFA marked the commencement of the SEC rulemaking process, with the latter issuing rules designed to implement the DFA's fundamental principles. The proposed rules focused on two fundamental aspects: (i) reducing the existing regulatory references to ratings;[49] and (ii) producing the technical specifications for the provisions in Section 932,[50] as examined above.

6.4. FSB coordination

The Financial Stability Board's role is, first and foremost, related to the importance of ratings for regulatory purposes. On October 27th, 2010, the FSB returned to this issue and, reiterating what had been stated at an earlier G-20 meeting, issued a series of principles that both central banks and market players were meant to draw from.

The first principle ("Authorities and standard setters") is for regulators, calling on them to evaluate references to ratings and, where possible, to replace them with alternative procedures for measuring credit worthiness. The replacement of ratings with other valid risk measurement systems is highly recommended in cases where ratings are met with 'automated responses' by market players. From their side, market participants must develop new ways of measuring risk. On the other side, the authorities must produce a 'transition plan', with implementation deadlines, for the move from ratings to alternative practices.

The second principle covers the conduct of market players, calling on them to develop their own systems to assess risk, only using ratings as an input for their risk management processes and not using ratings as an external assessment tool. They must provide complete disclosure of the practices employed and the authorities should provide incentives for companies to move in this direction.

The third recommendation focuses on specific situations found in financial market operations:

- central banks are called on to avoid automatically using ratings to determine the requirements for the securities they are prepared to purchase, whether temporarily or definitively, as part of transactions to refinance the banking system;
- banks are asked to develop their own, alternative methods (i.e. not ratings) to assess the credit risk inherent in their business.[51] A distinction is drawn between the larger banks with greater resources and analysis tools (which are called on to make the transition promptly) and the smaller bankers, where there is an understanding that they might have problems developing

[49] Securities and Exchange Commission (2011a; 2011c; 2011d).
[50] Securities and Exchange Commission (2011e).
[51] For more on the doubts about the effectiveness of many risk management systems and how these were shown to be incapable of managing the problems that arose in the crisis, see J. Daníelsson (2008).

alternative practices, but they are still called on to undertake autonomous assessments in particularly complex and important cases;

- all types and sizes of institutional investors are required to develop internal practices to evaluate credit risk. These parties, like banks, must develop analyses commensurate with the complexity of the relevant investment products and the amount of capital invested therein. Once again, a recommendation has been made that full public disclosure be made of the practices adopted. The senior management and boards of such institutions are given direct responsibility for verifying compliance with these principles. Regulations must encourage the transition indicated in the principles and being to supervise their adoption;
- there has also been a call for clearing houses and other operators in the derivatives market to avoid the automated use of ratings. The supervisory authorities for these markets must ensure their supervision enforces this principle;
- issuers have to publically disclose information so that market players can make their own assessments independently of the ratings;
- finally, the regulators have to review the rules where reference is made to ratings, examining the option to amend provisions where there is an excessive incentive, for market players, to automatically use ratings.

The FSB has asked the relevant authorities (standard setters and regulators) to commence the transition, taking into due account the specific nature of the markets, operators and jurisdictions involved. The regulatory reform focusing on the references to ratings should commence in the near future and the actual transition should occur in the medium term. The FSB will make a disclosure to the G-20 in 2011.

6.5. Concluding remarks

The road taken to regulate rating agencies shows the desire to make a substantial change to the existing organisation, which had been built up over time through market practices unequivocally drawing on the principle of self-regulation.

While the political will to move towards regulations seems to have broad support,[52] the specific nature of the industry and the complexity of the problems outlined in the introduction continue to raise a degree of perplexity as to how effective the measures will be.

The market structure, with its concentration on three main agencies (and two of these accounting for much of the revenue), highlights two aspects. First, this situation is not, in the eyes of the governing authorities, desirable because of the major power that is given to the agencies. Secondly, it does not seem possible, in the short term, to mod-

[52] The position of those who, on the other side, feel that regulating rating agencies is not the best solution and one merely need to limit the use of ratings for regulatory purposes, is well presented in White (2010b). Coffee (2010b) contains an assessment of the reforms underway.

ify this situation since it is the result of specific features of this industry that favour a 'natural' process of concentration. It is no surprise that politicians and members of the financial sector in both Europe and Asia (Tsai, Liu 2010) are openly in favour of creating local rating agencies to counterbalance the market power of the three main agencies. These efforts seem to be based on a policy that, accepting the problems entailed in changing the current structure through normal market mechanisms, would create agencies that are either public or partly public to compete with the existing agencies. Once again, it is necessary to note that such a solution might result in other types of problems. It is evident that, for example, pushing the creation of a public European credit rating agency would be to the detriment of those private agencies that have, in recent months, registered and begun to develop their business.

The second aspect that characterises the reforms – reducing references to ratings in assessing risk and intermediaries developing independent assessment practices for the various instances – appears to provide the regulatory and supervisory authorities with more room to manoeuvre (Stolper 2009). As was stated in the introduction to this chapter and as is clear from the reforms, such action cannot reduce, in any way, the demand for ratings for all those financial assets that, meant for the general investment public, cannot be placed without an evaluation of their risk profile. In other words, the rating agencies provide an essential service and the demand for this service is here to stay. Thus, it is necessary to act to change how ratings are issued, without thinking that they can be eliminated.

The third aspect relates to the management of conflicts of interest. It seems clear that the laws passed accept these exist and the solution is to use rules and procedures to identify and manage them. There has been some debate about a radical transformation of how this market works – moving from the issuer-pay approach to other models with different relationships between the rating agency, rated entity and investors – but this has not yet made it onto the regulatory agenda.

Finally, the question of "how ratings are produced" has been tackled decisively. The regulatory authorities had ample options on this front and these have been widely adopted to ensure the accountability of agencies. The bases have been put in place to 'open the black box' out of which ratings came, forcing the agencies to make substantive disclosures about assessment practices and parameters. The ability of an agency to actually assess the rating issued by another agency is a tool that can genuinely encourage a rigorous approach to producing ratings. Once again, though, it would be remiss not to highlight that the efficacy of such a tool also depends on the market in which it is used. Thus, the more concentrated the industry is, the more the agencies will be able to act in collusion.

Chapter 7

Executive Compensation Discipline

7.1. Foreword

As has been widely described in Chapter 1, the issue of executive compensation in financial companies was brought to the attention of the political-institutional world, first of all in the United States, as from the very start of the crisis. While contagion spread, making State intervention necessary to avoid bankruptcy with potentially catastrophic consequences, the media began to inform the general public about the dimensions of compensation to top management in these companies; the evidence gradually made public about the asymmetry between bankruptcies on one hand and personal enrichment on the other, had the effect of creating a climate of contrast between public opinion and the financial industry and made the issue of executive compensation a significant and sensitive factor within political debate. We must also take note that the problem took on different dimensions in different areas of the world, assuming the maximum relevance in leading United States financial companies, where it is set against the background of evolutionary dynamics in the company governance model over the long term. Gradual redistribution of the bargaining power between management and shareholders, as illustrated in the first Chapter, generally encouraged an increase in compensation inside leading United States companies, and these dynamics of a general nature also affected the financial sector. Moreover, in the particular case of financial companies, we have seen how executive compensation's dimensions and composition were such as to stimulate excessive risk taking, putting at risk the stability of the company itself. Considering the profound interconnection that exists between financial companies at the international level, confirmed by the contagion effects spread by the crisis, the issue of compensation became dominant on the Reform's agenda as a common problem for all financial systems on a global scale. The crucial point around which the reform process revolves and which is described below, is to encourage financial companies to adopt compensation systems which effectively and efficiently align management and company interests, therefore of all other stakeholders and, on the other hand, however avoiding that compensation practices adopted become an incentive to behaviour which, by encouraging pursuit of individual interest, puts collective interest at risk, undermining the company's stability.

In the aim of efficiently achieving this target, we believe it would be useful to break up the compensation problem into its essential factors.

A first aspect concerns the decision-making process leading to definition of the compensation system adopted by the company; definition of parties involved in this decision must be made, also regarding their role and respective responsibilities. We can define this aspect as a 'compensation governance system' and point out that it can be structured in different ways, because of the different governance set-ups in companies in which this system is implemented. We have already seen how, in United States public companies, power for company governance gradually concentrated in the hands of management with few of no counterweights as regards other stakeholders' role.

A second aspect concerns compensation size and structure. These are formed by a fixed amount, a variable amount, additional benefits and an additional programmed amount in the case of early resolution of a contract. The variable amount, scheduled in the aim of stimulating management to maximise production of economic results, represent a traditional instrument to line up owners' and management interests. Going from general principles to specific declension of compensation policies, it is also necessary to make sure that this incentive, efficient in abstract terms, does not turn out to be perversely effective. A typical example of this incentive's malfunctioning can be observed when an executive wants to achieve profitability targets giving him the right to compensation's variable component, thereby undertaking excessively risky activities as they are expected to be more profitable. In this case the company achieves profit targets by assuming potentially very high risks which end up by prejudicing its own medium term stability. So as to avoid these situations, specific compensation aspects must be analysed and defined:

- performances entitled to payment of compensation's variable component must be 'risk-adjusted', using methodologies which take into account all types of risks assumed by the company as a consequence of strategies implemented in different business areas;
- ratio between fixed and variable components must be clearly defined, knowing that the higher the second, the greater the attitude towards risk taking;
- payment of the variable component must be decided, considering that payments in cash free management from any kind of involvement in company fate, whereas payments by means of financial instruments issued by the company (debt, capital or hybrid securities), tend to perpetuate involvement itself;
- period of time over which compensations are paid are relevant as well; immediate payment of the premium frees management from any responsibility on company's future performance (thereby encouraging an orientation towards short term results), whereas deferral of an important portion of compensation and its correlation with company's future results, tends to make management more responsible towards undertaking management strategies which take company medium term stability into account.

Summing up, building compensation systems can be differently addressed and oriented towards business sustainability criteria, with obvious repercussions on financial companies' risks and stability.

The third aspect concerns monitoring of financial institutions by supervisory authorities, in particular their *ex ante* steering powers through issue of more or less binding guidelines as regards definition of compensation policies and their *ex post* powers to verify whether indicated guidelines are or are not mirrored in concretely adopted policies by financial companies.

Last, but not least, is the issue of transparency in executive compensation, a factor which contributes towards giving stakeholders awareness, thereby encouraging their potential and active involvement.

All the aspects we have described above have been subject to reflection during the process leading to reform within this particular framework; international bodies have stated their guidelines on each of the aspects we have mentioned and domestic authorities subsequently proceeded, using different methods and different speeds, with their implementation into domestic jurisdictions.

7.2. Initiatives undertaken at the international level

Attention was paid to the issue of compensation as a priority during the London G-20 summit in April 2009 and in Pittsburgh the following September, at which leaders of countries attending gave their approval to the principles set forth by the FSF.[1] In its first statement, the FSF lists a series of points on which the governance authorities of financial systems must pay attention, in the aim of encouraging financial institutions to define a solid compensation structure as compared to the stability target.

The first problem to tackle was how to effectively govern the compensation system. On this point, boards of directors were called upon to play a more active role, by controlling the planning of these systems, the updating of its structure, as well as of verifying that systems be coherent with stability principles and not lead executives into assuming excessive risks. Moreover, it was decreed that personnel appointed to risk management functions must be independent and in their turn compensated, excluding correlation to performance of business units submitted to their control.

The second principle is the one which relates compensation structure to risk taken on by the beneficiaries of said compensation. The principle at issue is declined as follows:

- compensation must be adjusted in the aim of taking into account risk undertaken to produce the performance granting right to said compensation;
- compensation must be coherent with the risk related to the entire company's performance;

[1] The first document was issued in April 2009, when the international body was still called Financial Stability Forum; see Financial Stability Forum (2009c); the second document, further specifying details of the principles stated in the first, was issued in September 2009: Financial Stability Board (2009a).

- compensation must be paid over a period of time which is coherent with performance results and their potential inherent risks;
- composition of compensation (cash, shares, options, other forms of incentives), must also be coherent with the risk profile determined by compensation beneficiaries' behaviour.

Lastly, compensation policies must be submitted to examination by supervisory authorities and made public, in the aim of stakeholders having full knowledge for assessment.

In the document issued the following September, the FSB further specified the above principles, also calling upon the Basel Committee, the IOSCO and International Association of Insurance Supervisors (IAIS)[2] to intervene for each area under their jurisdiction.

As regards governance, confirmation was given that leading financial institutions must equip themselves with a compensation committee, formed by independent members appointed to define compensation structure together with the managers appointed for risk control functions, in the aim of defining a system taking risk itself into account when defining compensation.

Another principle stated in the above-mentioned document was to schedule priority in safeguarding capital as compared to compensation payment; payment of compensation should never be carried out by prejudicing company's capacity to form a solid capital base.

By taking more specific action as regards compensation structure, in particular the correlation between the latter and risk undertaken by the financial company, the FSB made the following principles clear:

- capital and liquidity requirements connected to performance from which compensation is triggered off must be taken into account;
- in the case of bad company performance, the right to recover paid incentives ('claw back') and suspension of those to pay must be scheduled;
- compensation must be paid taking into account business units' performance, but also overall company performance;
- a significant part[3] of incentives must be deferred to years subsequent to performance achievement. Two indications are given on this subject: the first is that the deferred percentage must be higher for top executives; the second, that the deferral period must be equivalent to at least three years;
- a substantial percentage of the variable component (indicated as a percentage equivalent to at least 50%), must be paid in shares or related securities and that these forms of payment must be subject to periods of 'retention';
- during the period of compensation deferral, 'claw back' must be explicitly provided for in proportion to performances achieved by the company;
- in the case of extraordinary State intervention, aimed at rescuing the financial company, supervisory authorities must be able to reshape compen-

[2] The aim in calling upon these bodies is to issue guidelines and recommendations oriented towards implementation of the principles established by the FSB.
[3] The document indicates a range between 40 and 60%.

sation structure and higher compensation to managers must be submitted to approval by independent subjects;

- guaranteed bonuses cannot be considered part of a compensation structure that is coherent with the principle of guaranteeing financial company stability;
- contracts providing for additional compensation payment in case of contract termination, must be re-examined and their validity confirmed only when concrete reasons confirm their coherence with medium to long term value creation principles and with cautious taking on of a risk; in perspective, this kind of compensation should be correlated to the achievement of performances sustainable over the medium term and should never compensate executive failures;
- leading financial institutions should rapidly align with the above-mentioned principles; moreover, they should request of their employees not to use personal hedging strategies which would have the effect of frustrating alignment between company performance and risk taken on.

Disclosure constraints already set forth in the April 2009 document, were declined in more detail and scheduled a yearly statement, making, among other aspects, the following public: compensation structure; duties and responsibilities of the compensation committee; compensation's subdivision for senior executives; performance correction logics to take into account risk assumed; deferral policies; choices regarding composition of compensation itself.

Supervisory authorities are bound to verify that compensation policies are coherent with FSB principles by also requesting of leading financial institutions proof that defined and adopted compensation structure takes into due account risk profiles, liquidity and capital absorption inherent to performance giving top management right to receive payment of said compensation. The same authorities are ascribed powers to take action in the case of failed compliance with the above-mentioned and recommended principles. Invitation for coordination on an international basis aims at ensuring that arbitrage between jurisdiction be avoided as much as possible.

Downstream from work carried out by the FSB, there is the document published by the Basel Committee in January 2010, goal-oriented at defining a methodology earmarked to be used by domestic supervisors in the aim of verifying whether 'compensation practices' of banks submitted to their monitoring are effectively in line with principles established by the FSB.[4] Substantially, the document is a technical support for practical declension of implementation technical principles and standards as set forth by the FSB. For each principle and standard, the Committee makes the following clear:

- objectives which supervisors must concretely pursue during their supervisory action;

[4] Basel Committee on Banking Supervision (2010a).

- additional guidelines as compared to principles and standards set forth by the FSB, goal-oriented towards directing supervisors during their monitoring action;
- action which supervisors can reasonably undertake on exerting their control function.

The document is structured on three main areas to which principles and standards set forth by the FSB refer: governance of compensation policies, compensation structure alignment as compared to compliance with the principle of cautious undertaking of risk, supervision, disclosure and subsequent aware involvement of stakeholders.

7.3. Reform in Europe

At the European level, where the issue has been at the centre of political debate, a great number of initiatives have been recorded, goal-oriented towards effective implementation of the principles shared internationally. On one hand, we must record intervention by the CEBS, the Committee now replaced by the European Banking Authority, which drew up a document published in April 2009, more or less at the same time as the first statement of principles drawn up by the FSB, containing principles from which inspiration should be drawn as regards financial institutions' compensation policy.[5] Principles made clear by the CEBS are substantially similar to those stated by the FSB and refer to the same areas for intervention;[6] they therefore mark the stand taken by European supervisors joined together in the Committee to encourage rapid implementation and coherent guidelines able to solve what is, in their opinion, an important problem.

Approximately a year later, in June 2010, the CEBS produced a report on effective implementation of the principles published in 2009.[7] The document highlighted widespread progress in compensation practices, even though discrepancies persisted between countries and institutions in the areas covered by the principles. The next step to fully achieve the hoped-for principles was singled out in approval of the directive, being discussed at the time the report was being published, called upon to amend two previous 2006 directives on the subject of capital requirements and 'supervisory review' of compensation policies.[8] This directive, which we shall discuss shortly, has been effectively approved on November 24th, 2010.

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5 Committee of European Banking Supervisors (2009a).

6 General principles are made clear (on the issues of medium term sustainability of compensation policies, cautious undertaking of risk, coherence with company strategies, internal and external transparency, etc.) and the more specific principles concerning governance of compensation policies, measurement of performances at the basis of the compensation system, compensation forms and composition.

7 Committee of European Banking Supervisors (2010b). The report was carried out by the CEBS by means of questionnaires sent to its members and to domestic supervisory authorities in European countries; a first questionnaire, sent in the last quarter of 2009, concerned regulatory intervention by supervisory authorities, whereas the second, sent in the first quarter of 2010, focused on results achieved by members of the financial industry and evaluation carried out by authorities.

8 See Directive of the European Parliament and of the Council (2006a; 2006b).

These considerations on the work carried out by the CEBS leads us to examine the active role performed by European Union technical and political institutions on this subject. As for the Commission, it took action with its own recommendation dated April 30th, 2009, specifically addressed to the issue of compensation policies adopted within companies participating in the financial sector.[9] The Commission starts with the consideration that compensation policies adopted by financial companies were among the core elements of the crisis, their having stimulated excessive undertaking of risk, having weakened control systems for said risks, having rewarded short term profitability targets and for having created crisis conditions for a great number of financial institutions in Europe and worldwide.

The recommendation provides that member States must ensure implementation of the principles it contains for all financial institutions with head offices in these member States.

The general principle is that compensation policies in financial institutions must be coherent with risk control and must not encourage taking on excessive risks; policies must be coherent with the financial institution's strategies and targets, as well as be compatible with its target of medium term stability.

Specific recommendations concern compensation structure and measurement of performances. As regards structure, the Commission's recommendations schedule the following requirements:

- should compensation provide for a variable component, i.e. payment of a bonus (a common practice in all financial institutions), equilibrium between these components and the fixed component must be maintained. Member States are called upon to verify that financial institutions under their jurisdiction establish a maximum ceiling for the variable component;
- the fixed component must represent a sufficiently important quota, so as to give the financial institution enough flexibility in establishing bonus policies; in particular, the financial institution must be in a position to avoid paying bonuses on objectives not being achieved, or in cases of deterioration of their own economic and financial situation;[10]
- should a bonus be very high, a great part of it must be deferred and the proportion of this component must be adapted to the performance's intrinsic risk leading to handing out of said bonus;[11]

[9] European Commission (2009c).

[10] See Section II. "4.2. Structure of the compensation policy. The fixed component of the compensation should represent a sufficiently high proportion of the total compensation allowing the financial undertaking to operate a fully flexible bonus policy. In particular, the financial undertaking should be able to withhold bonuses entirely or partly when performance criteria are not met by the individual concerned, the business unit concerned or the financial undertaking. The financial undertaking should also be able to withhold bonuses where its situation deteriorates significantly, in particular where it can no longer be presumed that it can or will continue to be able to carry out its business as a going concern".

[11] See Section II. "4.3. Where a significant bonus is awarded, the major part of the bonus should be deferred with a minimum deferment period. The amount of the deferred part of the bonus should be determined in relation to the total amount of the bonus as compared to the total amount of the compensation". "4.4. The deferred element of the bonus should take into account the outstanding risks associated with the

- member States must ensure that the governance bodies of financial institutions request restitution of bonuses paid on the basis of data which has turned out to be incorrect or false.

As regards measurement of performance, the following core principles have been defined:

- when compensation is compared to performance, its amount must be established taking into account both overall business unit performance in which the manager is active and the financial institution's overall performance;[12]
- performances on the basis of which bonuses are issued must be assessed over a multi-year period and payment of said bonuses must be made over a period of time which is coherent with the company's business cycle;
- measurement of performance must contain adjustment mechanisms for risk assumed and take into account capital and liquidity requirements ensuing from activities undertaken by the company so as to achieve results;
- individual performances must be evaluated, in terms of quality, by taking into account the financial institution's compliance with regulation and governance principles.

Recommendations include an important section dealing with governance of financial companies called upon to implement compensation principles as described above. Among these, we point out:

- adoption of procedures aimed at avoiding conflicts of interest, by making procedures to establish compensation clear and transparent;
- full board responsibility in establishing and implementing 'compensation policy';
- involvement by control functions, human resources and, where deemed advisable, external consultants as regards definition of compensation schemes;
- expertise and independence of persons appointed (members of the board and/or company representatives) in defining compensation policies;
- supervision and control, on at least a yearly basis, by internal control functions, as regards compensation policies and their coherence with principles established by the board;
- general principles of the compensation policy must be accessible and available to the people to which they apply.

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performance to which the bonus relates and may consist of equity, options, cash, or other funds the payment of which is postponed for the duration of the deferment period. The measures of future performance to which the deferred element is linked should be risk adjusted as set out in point 5".

[12] With this principle, the intention is to avoid that institutions facing difficulties pay huge bonuses to managers who have however reached the targets they have been ascribed. In this way, a general principle of solidarity prevails inside the financial institution, with company stability emerging as more important than individual rights.

Finally, two provisions are stated on the issue of disclosure and supervision.

As regards the first, provision is made that compensation policies should be made available to important stakeholders and information which should be communicated defined.[13] As for supervision, appeal is made to Member States to ensure that the authorities having jurisdiction supervise implementation of the aforesaid principles, taking into account size, complexity and business model of the supervised financial institutions. Moreover, States themselves must ensure that financial institutions see to periodically communicating their compensation policies to the authorities having jurisdiction, by way of a written and periodically updated document ('compensation policy statement'). The authorities having jurisdiction are empowered to request access to all required information, in the aim of verifying whether policies adopted and stated are coherent with the principles contained in the recommendation.

On June 2nd, 2010, the Commission published a report on progress, inside member countries, of the recommendations we have commented above.[14] Conclusions expressed by the Commission indicated the need for further initiatives on this point, in spite of the remarkable differences still to be noticed between countries, as regards implementation breadth and incisiveness. The need was made clear for further intervention, aimed at encouraging generalised implementation of the recommendations and the need to constantly monitor developments recorded in various countries.

On July 7th, the European Parliament adopted a resolution[15] having the intent to lead towards immediate implementation of the principles set forth by the Commission, also by recovering work carried out by other institutions at European and international levels.[16] The resolution's text established basic principles in four areas: compensation

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[13] See Section III. "8. The following information should be disclosed: (a) information concerning the decision-making process used for determining the compensation policy, including if applicable, information about the composition and the mandate of a compensation committee, the name of the external consultant whose services have been used for the determination of the compensation policy and the role of the relevant stakeholders; (b) information on linkage between pay and performance; (c) information on the criteria used for performance measurement and the risk adjustment; (d) information on the performance criteria on which the entitlement to shares, options or variable components of compensation is based; (e) the main parameters and rationale for any annual bonus scheme and any other non-cash benefits. 9. When determining the level of the information which should be disclosed, Member States should take into account the nature, the size as well as the specific scope of activities of the financial undertakings concerned".

[14] European Commission (2010a).

[15] See European Parliament (2010).

[16] The resolution's text quotes the Commission's 2009 recommendation quoted in these pages, but also previous Commission interventions on the more general issue of executive compensation in listed companies (European Commission 2009c). On the specific issue of compensation in the financial sector, the Parliament refers to principles expressed by the FSB, already mentioned above, as well as to work carried out by the Committee of European Banking Supervisors (CEBS) and their subsequent report on the state of implementation of aforesaid principles (CEBS, 'Report on National Implementation of CEBS High-level Principles for Remuneration Policies', dated June 11th, 2010). Other sources quoted in the European Parliament's resolution are the Basel Committee (Basel Committee on Banking Supervision, 2010a); the OECD (OECD's Paper of February 2010 on 'Corporate Governance and the Financial Crisis: Conclusions and Emerging Good Practices to Enhance Implementation of the Principles'), the Commission's green paper on governance and compensation policies in financial institutions (Commission's Green paper of June 2nd, 2010 on 'Corporate Governance in Financial Institutions and Remuneration Policies' – COM (2010) 284) and the Committee's on Economic and Monetary Affairs 2010 report (Report of the Committee on Economic and Monetary Affairs and the Opinion of the Committee on Employment and Social Affairs (A7-0208/2010).

governance; coherence between compensation and risk assumption in financial institutions (in the sense that the first should not be an incentive towards the second); compensation structure; supervision of institutions called upon to implement the regulations contained in the resolution's principles.

On the issue of governance, the Parliament provides that supervisory authorities should establish whether a specific financial institution should have a compensation committee and, should this be considered necessary, the Committee itself should become the essential reference point for this important aspect. The Committee defines compensation policies, by taking action with full powers[17] and in close coordination with risk control functions, acts according to principles of independence, without any conflict of interest[18] and within a framework of accountability towards stakeholders[19] and supervisory authorities.

The second issue tackled by the Parliament, regarding its resolution, is the relation between compensation and risk taking. The basic principles established by the European Parliament on this important aspect are the following:

- compensation must be adjusted to take into account every type of risk assumed by the financial company, symmetric to said risks and coherent with the period of time over which these risks can reasonably surface;[20] the compensation system must forecast variable component recall mechanisms for management responsible for deterioration in the financial institution's risk position;
- on managing the financial institution, directors must not pursue personal economic interests, as these could realistically be in conflict with company interests;

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[17] "The Parliament […] 4. Stresses that a remuneration committee must have access to the subject matter of contracts, with contracts under the scrutiny of this committee designed in a way that makes it possible to punish acts of gross negligence by payment deductions. Gross negligence occurs when due diligence in particular is not respected, in which case the remuneration committee must ensure that the deduction is not merely symbolic in nature, but contributes substantially to paying for the damage caused. Furthermore, financial institutions should be urged to make use of a malus, i.e. a return of performance-related compensation as a result of the discovery of poor performance".

[18] "The Parliament […] 5. Believes that the chair and the voting members of the remuneration committee must be members of the management body who do not perform any executive functions in the financial institution or the listed company concerned. Takes the view that directors and board members should avoid simultaneously sitting on the boards of other companies if there is a potential for any conflict of interest occurring". "7. Stresses that non-executive board members' compensation should only consist in fixed pay and should not include performance- or share-based pay; 8. Underlines that members engaged in risk control should be independent from the business units they control, have appropriate authority and be compensated independently of the performance of these business units".

[19] "The Parliament […] 6. Is of the opinion that, where appropriate, shareholders should be given the opportunity to contribute towards the determination of sustainable remuneration policies, and could for this purpose be given the opportunity to express their views on remuneration policies by means of a non-binding vote on the remuneration report at the company's general meeting".

[20] The dimensions of a variable compensation must be determined not only on the basis of quantitative parameters, but also on the basis of qualitative and 'human judgement' criteria. This provision is made to remind company bodies called upon to approve compensation schemes that they are responsible for their decisions.

- compensation systems must be in proportion to financial institution's size, structure and complexity, thereby also mirroring differences in type of business (banking, insurance, asset management);
- risk control systems must be submitted to review by supervisory authorities;
- compensation's variable component must be correlated to pre-established performances which are objectively measurable and coherent with the financial institution's long term sustainability. In all, the 'bonus pool' must be correlated to company size and capitalisation, whereas individual incentives must also be connected, further to personal performance, to business unit and overall company performances; guaranteed bonuses must not be included in compensation schemes;
- the ratio between highest and lowest compensation must be kept, not only for ethical reasons, but also for reasons of social justice and economic sustainability, within reasonable levels;
- conflicts arising, if any, between business lines and risk control functions must be solved by means of procedures approved by supervisory bodies;[21]
- the above principles must be applied to the compensation structure for all company employees whose decisions have an impact on the financial company's risk profile;[22]
- finally, Parliament recalls that insurance policies against risks ensuing from negligent decisions must not be included in a sustainable compensation system in line with the principles quoted above.

The resolution's third aspect establishes the principle of compensation featuring a well-balanced structure between compensation's fixed and variable components. In particular, the second component must only be paid if considered compatible with the company's financial standing and capitalisation and if it is coherent with company medium long term performance expectations; supervisory authorities must have the right to limit payment of the variable component when confronted with doubts as to its coherence with the above-quoted principles. As regards this specific aspect, Parliament goes as far as to define explicit declension criteria for these clearly stated principles:

- in terms of metrics, after having recalled general principles and reasons for deferring payment of compensation's variable component, the resolution further clarifies that the deferral must concern at least 40% of this part of compensation; as regards particularly high variable components, the deferred amount must be equivalent to at least 60% and period of time for deferral equivalent to at least five years;[23]

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[21] This principle tends to give transparency, according to methodology approved by supervisory authorities, to procedures through which a company decides to choose between business and risk control targets.

[22] This principle is obviously valid for senior management, but also for lower levels in company hierarchy which, owing to the nature of functions performed, can affect assuming, measuring and controlling risks.

[23] "The Parliament […] 24. Underlines that a substantial proportion of the variable remuneration component should be deferred over a sufficient period; the size of the proportion and the length of the deferral period should be established in accordance with the business cycle, the nature of the business, its risks and

- in terms of compensation composition, the resolution ratifies that a substantial amount of the variable compensation must not be paid in cash, but by financial instruments able to create alignment of management and company interests. These instruments are identified in subordinated debt, in the so-called 'contingent capital', in stocks and stock-related securities;[24]
- in terms of 'coverage' for compensation policies, enforcement of the principles, as stated above, is confirmed and also applies to wages and pension schemes, in the aim of avoiding regulatory arbitrage on payment of bonuses;
- moreover, advice is to set ceilings for so called 'golden parachutes' paid on early resolution of contract (a value equivalent to a maximum two years of fixed compensation is recommended) and it is established that these forms of compensation can be eliminated in the case of non performance or voluntary abandonment by management.[25]

The fourth and last aspect concerns control of supervisory bodies and stakeholders' involvement. An important instrument to achieve this objective is disclosure by financial institutions called upon to supply supervisors with all the information required to evaluate compensation policies. The Commission is urged to reinforce the principles contained in the April 30th, 2009 recommendation, through adoption of binding regulations and domestic regulators are invited to give execution to principles established by the Basel Committee; the Commission is requested to define, with Member States, disclosure standards for managers receiving compensation over 1 million Euro and to consider potential contribution by internal and external auditors, as well as by independent directors in guaranteeing implementation of concrete governance policies.

The European Parliament's resolution indicates a strong and determined political will to proceed with regulations on a point considered extremely important, also having repercussions on public opinion. The fact that Parliament went so far as to decline, in terms of numbers, earmarked to become binding, aspects such as compensation composition and period of time for deferral, was assessed as evidence of one of the strictest definitions on an international scale.[26] Parliament's express wish was then definitely

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the activities of the staff member in question; remuneration payable under deferred arrangements should become a vested right no faster than that payable on a pro-rata basis; at least 40% of the variable remuneration component should be deferred; in the case of a variable remuneration component of a particularly high amount, at least 60% of the amount should be deferred and the deferral period should be no less than 5 years".

[24] Subordinated debt instruments can be converted into cash after all other creditors are repaid, contingent capital bonds are instruments which can be converted into capital when company conditions makes it necessary, stocks and stock-related securities represent the traditional alignment mechanism between management and company interests.

[25] Moreover, principles on non-discrimination between employees are established, in particular as regards gender.

[26] Information published by international news agencies in the days immediately following the European Parliament's resolution, highlight a conflicting evaluation by, on one hand, political representatives and, on the other, by the financial industry. Among the first, we stress A. McCarthy's statement, a member of Parliament, as reported by Bloomberg: "The banks have had two years since the 2008 financial crisis to do this and have failed to act, so now we will do the job for them", revealing what, in her opinion, had been self-regulation's failure. On the other hand, financial industry analysts have also pointed out the danger

sealed on the following November 24th, by approval of EC Directive 2010/76/CE which assimilated the principles recommended by the Commission and stated in the European Parliament's resolution discussed above; coming into force of the new regulation is scheduled for 2011 and domestic authorities having jurisdiction are called upon to see to its implementation.[27]

7.4. Intervention foreseen in the Dodd-Frank Act

In the first Chapter we have highlighted how, among factors which have substantially contributed towards producing the crisis, behaviour by executives in leading United States banks must also be included. Excessive risk taking and ensuing defaults were no doubt also brought about by the fact that financial institutions' executives meant, by behaving in this way, to boost profitability performances at companies they worked for, in the aim of benefiting from personal economic incentives connected to said performances. We have also observed how significant anomalies regarding financial institutions are part of a much bigger problem, ascribable to the unsatisfactory functioning, pointed out by a great number of studies and confirmed by empirical evidence,[28] of 'corporate democracy' connected to the public company model, which, over the years, has seen gradual transfer of powers from shareholders to management and, according to many commentators, has reached the point of totally depriving ownership from having any powers.

First action by United States authorities, as regards executive compensation, was of a contingent nature, insofar as basically founded on measures directed at financial companies being rescued by the State. The 2008 Emergency Economic Stabilization Act includes a section devoted to this subject, determining that companies in which Treasury is creditor or shareholder must comply with adequate standards on the issue of executive compensation and corporate governance.[29] In the aim of reinforcing protection of

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that European regulations could encourage migration of talents and/or industrial relocation towards non-regulated areas (such as Switzerland, Dubai or Singapore).

[27] In Italy, the problem of executive compensation in financial institutions has never shown features remotely comparable to those which surfaced within the Anglo-Saxon context. No bank in this country, has ever declared default for having undertaken excessively risky activities, State aid has been extremely modest (actually close to zero) in comparison to aid issued in other countries and, as a rule, the governance structure of Italian financial companies is marked by strong presence of shareholders with control functions. Notwithstanding the above, the Bank of Italy had already made statements on the issue of executive compensation in financial institutions, well before approval of the European regulation, by issuing three documents anticipating many of the regulatory themes subsequently approved at the European level; see Banca d'Italia (2008; 2009a; 2009b). Following approval of the European Directive 2010/76/CE and consultation with market participants, the Bank of Italy issued a final version of the new regulation which assimilate the principles contained in the Directive; see Banca d'Italia (2011).

[28] See Chapter 1.

[29] In particular, provision is made that these companies place ceilings on compensation, avoid applying incentives which could lead to taking on excessive risks, revoke compensation ascribed on the basis of profitability results then proving to be incorrectly determined and prohibit payment of (golden) parachutes while Treasury aid is still in force. The provisions contained in the Emergency Economic Act have not prevented financial companies aided by the State to pay bonuses over the period at issue. On this aspect, quite a stir was caused by the case of the AIG insurance group.

the institutions being rescued, an *ad hoc* body was formed in 2009, called Office of the Special Master for TARP'[30] Executive Compensation', under the directorship of Kenneth Feinberg, with the specific objective of supervising executive compensation practices[31] in the institutions having benefited from the aid program and by making sure the compensation system was in line with long term value creation principles and United States taxpayers' interests.

Very obviously, the regulations we have just recalled have a contingent nature by way of being applicable to the particular aggregate represented by the institutions being aided and for the period the aid is in place. Once 'normal' conditions were restored and public aid repaid, the companies could consider themselves free from the constraint imposed by TARP.

A more organic and structural intervention on this theme was therefore introduced by the DFA. Reform law, as can be inferred, was approved in an environmental framework where pressure by public opinion was very strong as regards the need to more forcefully regulate shareholders' monitoring powers on management actions; the crisis and State rescues were observed and assessed in parallel with the huge compensations paid to executives in the institutions being rescued. Therefore, conditions to take action on this important issue existed and could have been exploited by introducing mechanism for redistribution of power between the two categories of stakeholders and by guaranteeing, insofar as possible, that cases like those highlighted during the crisis never be repeated.

The DFA took action on this issue, providing for a series of measures[32] which, as was reasonable to expect, raised conflicting reactions; on one hand, they were perceived as an unwelcome external intrusion in management independence; on the other, they were evaluated as not being sufficiently incisive as compared to the nature and size of the problems on the carpet (Bainbridge 2010a; 2010b).

Legal action sets itself the goal of removing main criticalities which surfaced during the crisis, by ascribing greater emphasis on shareholder protection and by requesting greater accountability and transparency on the issue of executive compensation. As regards protection of shareholders/investors, two types of intervention are pointed out, both aimed at and having the intention of restoring conditions enabling real control on the management team.

The first relates to assimilation of the so-called 'say on pay' principle, by virtue of which shareholders are ascribed the right to express their own opinion, by means of a purely consultative vote, as regards executive compensation schemes.[33] Consultative

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[30] TARP (Troubled Asset Relief Program) is a plan of action through which the United States Treasury has, on one hand, taken over so-called 'toxic' securities from financial institutions in difficulty and, on the other, provided capital for recapitalisation of these same institutions.

[31] The control perimeter was then extended to the one hundred most highly paid employees in each institution.

[32] These measures are contained in subtitle E ("Accountability and Executive Compensation", Section 951-957), under Title IX, dedicated to consumer protection and regulation of securities transactions.

[33] The same rules apply for so-called 'golden parachutes'.

vote by shareholders must be expressed at least once every three years, and shareholders can decide on this vote's frequency once every six years.[34]

The second intervention, as regards the issue of reinforcing shareholders' position, is contained in Section 971, by which the SEC is ascribed the faculty of issuing the rules about the so called 'proxy access', aimed at facilitating shareholders' representation within Boards in United States companies. This mechanism, of a purely technical nature, has considerable impact on the workings of corporate democracy in Anglo-Saxon capitalism. From a merely abstract point of view, it would seem that the right for shareholders to be represented on the Board by trusted directors they have elected is entirely taken for granted. In truth, over time, stratification of practices has put this basic principle under discussion, leading to the situation described in Chapter 1. The mechanism to appoint directors in leading listed companies takes place by obtaining shareholders' consent, in particular of the great majority not attending annual meetings, by means of lists prepared and sent by the company (in other words, by its top management) to these shareholders. The names shown on this list are obviously those currying favour with top management and, according to many researchers, the Board's selection mechanism thus carried out (chief executives decide on candidates to form the Board) would heavily affect management control. Dissatisfied shareholders could, in theory, oppose these decisions and attempt to find a way of appointing directors they trust and appreciate instead of those proposed by top management, but their battle would be very difficult and costly.

In fact, considering that shareholders' general meetings in leading companies are poorly attended shareholders dissatisfied with the list drawn by top managers should engage themselves in collecting proxies from other company shareholders, sending them an alternative list, containing their preferred candidates. As all the costs pertaining to this activity should be sustained by shareholders engaged in the battle to be represented, it is obvious that these battles are not, in fact, fought, and the process to appoint directors is perpetuated by Board members' co-optation by top management. Restitution to shareholders of the right to be represented and to choose directors they trust, could be achieved, as has been widely argued in literature and to which we have referred in the first Chapter, through the so called 'proxy access'. In synthesis, this is a rule providing for the shareholders' right to indicate – on the same list which the company sends to all shareholders, at its own expenses, for collection proxy statements – a certain percentage of candidates for the appointment of a director of the board. The DFA has adopted this principle, giving mandate to the SEC to produce specific regulations in this sense. Rule 14a-11, issued by the SEC on August 25th, 2010, concretely declined the principles contained in reform law, by providing that shareholders holding at least 3% of the company capital since at least 3 years, have the right to indicate, on the proxy statement sent by the company to shareholders, a number of candidates for the

[34] Shareholders, by means of this second type of consultation, can decide to express themselves every year as regards executive compensation (or each two years, or, as dictated by regulations as minimum frequency, every three years). Section 951 of the DFA does not specify if this second vote is or is not binding for the Board, whereas all other shareholders' voting results must be made public by the company.

role of directors equivalent to 25% of the total[35] number to be appointed. In this way, shareholders who receive the proxy statement are called upon to choose between a group of director candidates indicated by company management (three quarters of the total) and a group indicated by shareholders possessing the indicated requisites (one fourth).

The two reform interventions we have just described have been subject to criticism from two alternative points of view. Accusations have been made by companies of undue intrusion into aspects which should be left to autonomous decision by individual companies themselves. On the other hand, supporters of shareholders' rights have observed how the new rules are not sufficiently incisive and will not significantly alter governance equilibrium in United States public companies, substantially leaving distribution of power decidedly unbalanced in the favour of top management. In the first place, we point out that shareholders' vote on executive compensation schemes and 'golden parachutes' are merely consultative and that the Board can legitimately not take said voting into account. In a similar case, resolving the conflict is left up to the company's internal bodies. Proxy access, as defined by the SEC in last August's provision, the implementation of which is, what is more, deferred to the next season of General Meetings in 2012[36], represents a step in the direction formally hoped for by supporters of shareholders' rights, even if this innovation certainly does not have a revolutionary range. Conditions defining shareholder right to exert proxy access are judged to be fairly limiting, insofar as they presume that the shareholder is a big investor with a reduced portfolio turnover. Other consolidated practices in United States corporate governance, such as, for example, staggered boards, are not affected by reform and continue to be an obstacle to shareholders exerting their rights.

The second trend of action scheduled in the reform aims, as we have said, at increasing degree of company and management accountability as regards some of the governance aspects stressed by critics after the outbreak of the crisis.

The issue of executive compensation, subject to great debate and heated criticism during the days in which the State was proceeding with rescuing banks in crisis, was tackled by means of preparing structured mechanisms, aimed at definition of responsibilities and establishment of transparency requisites. This is the direction followed by provisions concerning 'compensation committees', responsible for evaluation and validation of executive compensation structures. They rise to the standing of an indispensable governance requisite for listed companies[37] and must by formed by independent directors;[38] they have the right to avail themselves, at the company's expense, of consult-

[35] Implementation of this procedure has been deferred for medium to small-sized companies, with market capitalisation below 75 million dollars.
[36] Rules issued by the SEC on proxy access have been subject to legal challenge by the U.S. Chamber of Commerce. Deferral of implementation is aimed at enabling a final judgement by authorities having jurisdiction on the issue.
[37] Stock exchanges and Nasdaq, 'self regulatory organizations', are requested not to enable listing by companies which do not comply with certain standards on the subject of compensation committees.
[38] The concept of independence is also subject to provisions in the reform, insofar as the SEC has been requested to proceed with its definition.

ants able to assist them in performing their functions. Other instruments to decline the concept of management accountability are:

- provisions regarding 'pay disclosure', through which information which must be given to shareholders as regards executive compensation is disciplined;
- drawing up Section 954, which requests that listed companies explain their policies regarding 'claw back', the right to obtain reimbursement from managers who have received economic benefits connected to company performances on the basis of financial reports which have then proven unreliable;
- the regulation providing that listed companies be called upon to refer on their structure of their Board, in particular should the roles of Chairman and CEO be held by the same person.[39]

Measures in Section 956 set the premises to construct a framework as regards executive compensation in the financial sector.[40] The text of reform law establishes the principle

[39] The rationality of this provision is to be sought in the fact that when these two roles are covered by different persons, in particular when the role of Chairman is held by an independent director, it is more likely to have appropriate dialectics in company governance and a greater level of control on management's performance.

[40] "*Section 956*. Enhanced Compensation Structure Reporting. (a) Enhanced Disclosure and Reporting of Compensation Arrangements. (1) In general. – Not later than 9 months after the date of enactment of this title, the appropriate Federal regulators jointly shall prescribe regulations or guidelines to require each covered financial institution to disclose to the appropriate Federal regulator the structures of all incentive-based compensation arrangements offered by such covered financial institutions sufficient to determine whether the compensation structure (A) provides an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive compensation, fees, or benefits; or (B) could lead to material financial loss to the covered financial institution. (2) Rules of Construction. – Nothing in this section shall be construed as requiring the reporting of the actual compensation of particular individuals. Nothing in this section shall be construed to require a covered financial institution that does not have an incentive-based payment arrangement to make the disclosures required under this subsection. (b) Prohibition on Certain Compensation Arrangements. – Not later than 9 months after the date of enactment of this title, the appropriate Federal regulators shall jointly prescribe regulations or guidelines that prohibit any types of incentive-based payment arrangement, or any feature of any such arrangement, that the regulators determine encourages inappropriate risks by covered financial institutions (1) by providing an executive officer, employee, director, or principal shareholder of the covered financial institution with excessive compensation, fees, or benefits; or (2) that could lead to material financial loss to the covered financial institution. (c) Standards. – The appropriate Federal regulators shall (1) ensure that any standards for compensation established under subsections (a) or (b) are comparable to the standards established under section of the Federal Deposit Insurance Act (12 U.S.C. 2 1831p-1) for insured depository institutions; and (2) in establishing such standards under such subsections, take into consideration the compensation standards described in section 39(c) of the Federal Deposit Insurance Act (12 U.S.C. 1831p-9 1(c)). (d) Enforcement. – The provisions of this section and the regulations issued under this section shall be enforced under section 505 of the Gramm-Leach-Bliley Act and, for purposes of such section, a violation of this section or such regulations shall be treated as a violation of subtitle A of title V of such Act. (e) Definitions. – As used in this section (1) the term 'appropriate Federal regulator' means the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Board of Directors of the Federal Deposit Insurance Corporation, the Director of the Office of Thrift Supervision, the National Credit Union Administration Board, the Securities and Exchange Commission, the Federal Housing Finance Agency; and (2) the term 'covered financial institution' means (A) a depository institution or depository institution holding company, as such terms are defined in section 3 of the Federal Deposit Insurance Act (12 U.S.C. 1813); (B) a broker-dealer registered under section 15 of the Securities Exchange Act of 1934 (15 U.S.C. 78o); (C) a credit union, as described in section 19(b)(1)(A)(iv) of the Federal Reserve Act; (D) an investment advisor, as such term is defined in section 202(a)(11) of the Investment Advisers

that incentive schemes must not lead financial institutions' management into taking on excessive risks, or into pursuing behaviour from which important losses could ensue for the financial institution. The text then refers to the subsequent process of rulemaking, to be established by agencies having jurisdiction within nine months of the law coming into force.

Last April, the above agencies made the jointly defined proposed rules public,[41] in the aim of complying with the constraint contained in the reform law; after the stage of consultation with representatives of the financial industry, called upon to express their comments by the end of May, said agencies will proceed with drawing up the final version of the new rules.

The proposed rules apply to all financial institutions considered important,[42] falling under the jurisdiction of the aforesaid regulating agencies, as regards compensation foreseen for 'covered persons',[43] in other words, individuals who, owing to the role they perform in financial institutions, are in the position to determine, by their behaviour, excessive risk taking, thereby producing consequent heavy losses. The proposed rules' objective are the 'incentive based' compensation schemes which have a variable nature and are foreseen in the aim of stimulating achievement by the regulated institution of economic and financial performances. These compensation schemes shall be subject to being reported by the regulated financial institutions to their own regulatory agency on a yearly basis.

Declension of the spirit in DFA's Section 956 is established in the section called "Prohibitions".

In the first place, the section defines criteria to single out the concept of 'excessive compensation', the incentive which could lead managers given decision-making powers to take on excessive risks. These parameters concern the total of compensation scheduled for a single person, the compensation's history, the standing of the financial institution committed to pay compensation, compensation paid by comparable institutions.[44]

Act of 1940 (15 U.S.C. 80b-2(a)(11)); (E) the Federal National Mortgage Association; (F) the Federal Home Loan Mortgage Corporation; and (G) any other financial institution that the appropriate Federal regulators, jointly, by rule, determine should be treated as a covered financial institution for purposes of this section. (f) Exemption for Certain Financial Institutions. – The requirements of this section shall not apply to covered financial institutions with assets of less than $ 1,000,000,000".

[41] Department of the Treasury *et al.* (2011a).

[42] Banks, savings institutions, credit unions, broker-dealers, having assets above one billion dollars.

[43] "*Covered Person*. Only incentive-based compensation paid to 'covered persons' would be subject to the requirements of this Proposed Rule. A 'covered person' would be any executive officer, employee, director, or principal shareholder of a covered financial institution. No specific categories of employees are excluded from the scope of the Proposed Rule, although it is the underlying purpose of this rulemaking to address those incentive-based compensation arrangements for covered persons or groups of covered persons that encourage inappropriate risk because they provide excessive compensation or pose a risk of material financial loss to a covered financial institution".

[44] "Specifically, under the Proposed Rule, incentive-based compensation for a covered person would be considered excessive when amounts paid are unreasonable or disproportionate to, among other things, the amount, nature, quality, and scope of services performed by the covered person. In making such a determination, the Agencies will consider: (1) The combined value of all cash and non-cash benefits provided to the covered person; (2) The compensation history of the covered person and other individuals with comparable expertise at the covered financial institution; (3) The financial condition of the covered financial institution; (4) Comparable compensation practices at comparable institutions, based upon such factors

The second basic principle ratified by the DFA and declined in the proposed rule is assuming an inappropriate risk level which could lead to significant losses. From this viewpoint, compensation practices are not considered compliant with the proposed rule, unless:

- they correctly balance risks and rewards, scheduling, for example, incentive payment deferrals, adjustment of performance to take risk into account, less sensitivity to short term results, longer periods for performance assessment;[45]

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as asset size, geographic location, and the complexity of the institution's operations and assets; (5) For post-employment benefits, the projected total cost and benefit to the covered financial institution; (6) Any connection between the individual and any fraudulent act or omission, breach of trust or fiduciary duty, or insider abuse with regard to the covered financial institution; and (7) Any other factors the Agency determines to be relevant".

[45] "*Balance of Risk and Financial Rewards*. Incentive-based compensation arrangements typically attempt to encourage actions that result in greater revenue or profit for the covered financial institution. However, short-run revenue or profit can often diverge sharply from actual long-run profit because risk outcomes may become clear only over time. Activities that carry higher risk typically yield higher short-term revenue, and a covered person who is given incentives to increase short-term revenue or profit, without regard to risk, will naturally be attracted to opportunities to expose the institution to more risk. Accordingly, to be consistent with section 956, incentive-based compensation arrangements at a covered financial institution should balance risk and financial rewards in a manner that does not provide covered persons with incentives to take inappropriate risks that could lead to material financial loss at the covered financial institution. The Agencies would deem an incentive-based compensation arrangement to be balanced when the amounts paid to a covered person appropriately take into account the risks, as well as the financial benefits, from the covered person's activities and the impact of those activities on the covered financial institution. In assessing whether incentive-based compensation arrangements are balanced, the Agencies will consider the full range of risks associated with a covered person's activities, as well as the time horizon over which those risks may be realized. The activities of a covered person may create a wide range of risks for a covered financial institution, including credit, market, liquidity, operational, legal, compliance, and reputational risks. Some of these risks may be realized in the short term, while others may become apparent only over the long term.

The Proposed Rule identifies four methods that currently are often used to make compensation more sensitive to risk. These methods are: *Risk Adjustment of Awards*: Under this method of making a covered person's incentive-based compensation appropriately risk-sensitive, the amount of the person's incentive-based compensation award is adjusted based on measures that take into account the risk the covered person's activities pose to the covered financial institution. Such measures may be quantitative, or the size of a risk adjustment may be set based on managerial judgment, subject to appropriate oversight. *Deferral of Payment*: Under this method, the actual payout of an award to a covered person is delayed significantly beyond the end of the performance period, and the amounts paid are adjusted for actual losses to the covered covered financial institution or other aspects of performance that become clear only during the deferral period. Deferred payouts may be altered according to risk outcomes either formulaically or based on managerial judgment, though extensive use of judgment might make it more difficult to execute deferral arrangements in a sufficiently predictable fashion to influence the risk-taking behavior of a covered person. To be most effective in ensuring balance, the deferral period should be sufficiently long to allow for the realization of a substantial portion of the risks from the covered person's activities, and the measures of loss should be clearly explained to covered persons and closely tied to their activities during the relevant performance period. *Longer Performance Periods*: Under this method of making incentive-based compensation risk sensitive, the time period covered by the performance measures used in determining a covered person's award is extended (for example, from one year to two years). Longer performance periods and deferral of payment are related in that both methods allow awards or payments to be made after some or all risk outcomes associated with a covered person's activities are realized or better known. *Reduced Sensitivity to Short-Term Performance*: A covered financial institution using this method reduces the rate at which awards increase as a covered person achieves higher levels of the relevant performance measure(s) used in the person's incentive-based compensation arrangement. Rather than offsetting risk-

- they are coherent with the internal control system and risk management practices;[46]
- they are backed by strong corporate governance.[47]

For bigger financial institutions, more specifically those with assets above 50 billions dollars and submitted to supervision by the central bank, the proposed rule establishes the principle that at least 50% of the compensation's variable component be deferred for a period of at least three years, in this way meeting with provisions expressed by the

taking incentives associated with the use of short-term performance measures, this method reduces the magnitude of such incentives. The Agencies recognize that these methods for achieving balance are not exclusive, and additional methods or variations of these approaches may exist or be developed. Methods and practices for making compensation sensitive to risk-taking are likely to evolve during the next few years. Moreover, each method has its own advantages and disadvantages that may differ depending upon the situation in which they are used. For example, where reliable risk measures exist, risk adjustment of awards may be more effective than deferral of payment in reducing incentives for inappropriate risk-taking. This is because risk adjustment potentially can take account of the full range and time horizon of risks, rather than just those risk outcomes that occur or become evident during the deferral period. On the other hand, deferral of payment may be more effective than risk adjustment in mitigating incentives to take hard-to-measure risks (such as the risks of new activities or products, or certain risks such as reputational or operational risk that may be difficult to measure with respect to particular activities), especially if such risks are likely to be realized during the deferral period. In some cases, two or more methods may be needed in combination for an incentive-based compensation arrangement to be balanced. The greater the potential incentives that an arrangement creates for a covered person to increase the risks borne by the covered financial institution, the stronger the effect should be of the methods applied to achieve balance".

[46] "*Compatibility With Effective Controls and Risk Management*. A covered financial institution's risk management processes and internal controls should reinforce and support the development and maintenance of balanced incentive-based compensation arrangements. In particular, under this proposed standard, the Agencies would expect a covered financial institution to have strong controls governing its processes for designing, implementing and monitoring incentive-based compensation arrangements, and for ensuring that risk-management personnel have an appropriate role in the institution's processes for designing incentive-based compensation arrangements, monitoring their use, and assessing whether they achieve balance. Covered financial institutions should have appropriate controls to ensure that their processes for achieving balanced compensation arrangements are followed and to maintain the integrity of their risk management and other functions. Such controls are important because covered persons may seek to evade or weaken an institution's processes to achieve balanced incentive-based compensation arrangements in order to increase their own compensation. For example, in order to increase his or her own incentive compensation, a covered person may seek to influence inappropriately the risk measures, information, or judgments used to balance the covered person's compensation. These activities can have additional damaging effects on the institution's financial health if they result in the weakening of the information or processes that the institution uses for other risk management, internal control, or financial purposes".

[47] "*Strong Corporate Governance*. Strong and effective corporate governance is critical to the establishment and maintenance of sound compensation practices. The board of directors of a covered financial institution, or committee thereof, should actively oversee incentive-based compensation arrangements and is ultimately responsible for ensuring that the covered financial institution's incentive compensation arrangements are appropriately balanced. Accordingly, the board of directors, or a committee thereof, should actively oversee the development and operation of a covered financial institution's incentive-based compensation systems and related control processes. For example, the board of directors, or a committee thereof, should review and approve the overall goals and purposes of the covered financial institution's incentive-based compensation system and ensure its consistency with the institution's overall risk tolerance. In addition, the board of directors, or committee thereof, should receive data and analysis to assess whether the overall design, as well as the performance, of the institution's incentive compensation arrangements are consistent with Section 956. The Agencies request comment on all aspects […] of the Proposed Rule. The Agencies also request comment on whether there are additional factors that should be considered in evaluating whether compensation is excessive or could lead to material financial loss and whether the Proposed Rule should include additional details about each of these standards".

FSB. Moreover, deferred payments must be carried out taking required adjustment into account to evaluate losses, if any, incurred by the financial institution during the deferral period owing to unknown factors at the time compensation's variable component was determined.

7.5. Final remarks

The first consideration which stands out as a comment to the evolution described is that the crisis produced a significant effect on the issue of executive compensation in financial institutions. Compensation is no longer an aspect left to free negotiation between involved stakeholders, shareholders and top management, and becomes subject to regulations and supervision by the authorities appointed to preserve stability in financial systems. As regards all the points we have expounded in the first Chapter, executive compensation in financial institutions represents part of a much bigger problem, which involves corporate democracy and, in particular, dialectics between ownership and corporate management. In an ideal situation, in which ownership is able to fully exert its role of control on management performance, there would be no need for regulatory action to discipline the latter's compensation. Experience gained in the United States has shown, over time, how balance of power in leading public companies substantially evolved, to the full advantage of management. Stratification of regulations and consolidation of corporate governance practices has gradually made ownership extremely weak, practically absent and, in parallel, management became very powerful and basically under no real control. As leading United States financial institutions are public companies, they have very effectively represented this decline in Anglo-Saxon corporate governance, at the origin of behaviours which have exasperated the crisis and its consequences. Behaviour of this kind gradually also extended, to a lesser degree, to financial companies not belonging to the Anglo-Saxon world, and has become a distinguishing feature for many important companies in this industry.

After the outbreak of the crisis, we have had two main passages: analysis of causes and definition of procedures to take action. As regards the first passage, there was co-sharing, at the international level, of the belief that existing compensation systems were structured in such a way as to stimulate excessive taking of risks by financial institutions' management. Declarations of this kind were made by the FSB, the European Commission and United States authorities. As regards procedures for intervention, different options opened up within different contexts. In Europe, as we have observed, corporate democracy problems distinguishing the Anglo-Saxon model, appear decidedly less important: more concentrated ownership structures and more sensitive legislation on the issue of shareholder protection grant priority to greater powers of control on management actions. Within this framework, intervention on executive compensation takes on the value of a specific rule, aimed at protecting the stability of financial institutions, those which, over time, have become public companies and could cause greater problems as regards balancing powers between shareholders and management. European regulators have assessed that efforts at self-regulation proposed by financial institutions are clearly insufficient and have deemed that principles ratified at the international level by the FSB should be strictly and severely implemented, by producing a regulations framework establishing explicit limits and imposing close supervision by authorities.

In the United States, starting with a different situation, the problem was tackled in a different way, according to an approach which we could define as being 'on two levels'. As the issue of executive compensation is a subject under discussion not only with reference to the boundaries of financial companies, reforms launched by the crisis have, on principle and generally speaking, faced it. Measures regarding corporate governance contained in the DFA, as commented above, have the declared intention of contributing towards rebalancing powers between shareholder and management within United States companies, whether financial or not. Evaluating these measures for the effects they could reasonably produce, we feel we could share the opinion of those who sustain that these changes would be modest, certainly unable to substantially change existing relationships. For this reason, decision was made to tackle the problem of executive compensation at financial institutions as a specific issue, subject to secondary rules by delegated authorities (Sharfman 2010). Measures issued during 2011 by regulating agencies having jurisdiction on the banking system in fact acknowledged that financial companies have a specific nature, which determines greater attention to issues which, in other companies, are left to negotiation between stakeholders, given the changes introduced by the DFA. The fact that financial companies deserve *ad hoc* regulations has grounds in the systemic nature of their activity and by the potential destabilisation that would be caused by their entering into a crisis. In this way, regulators governing the United States financial system were able to align directions shared within the international framework, without significantly affecting the existing governance equilibrium outside the financial system. Compared assessment of the specific measures adopted in Europe and the United States reveal how the first measures seem to be more strict and limiting as compared to the second and, according to some commentators, this circumstance could seem to be a disadvantage for European financial companies in recruiting best talents on the managerial market (J.P. Morgan Cazenove 2011). What is more, we point out that the more lenient measures launched in the United States, as compared to those in Europe, are part of a very different regulatory approach from many points of view and, as such, can be assessed in overall terms. United States authorities have launched specific measures which place clear limits for their financial institutions as regards 'permitted' activities. The above-quoted Volcker Rule and measures encouraging the 'push out' of derivatives trading aim at limiting risk assumption and preserving system stability. From this viewpoint, regulations for executive compensation can be tackled less severely if the purpose of system stability is pursued with reasonable efficiency by using other complementary measures, coherent with achievement of the final objective.

Chapter 8

Hedge Funds Regulation

8.1. Foreword: why should alternative investments be regulated?

Hedge funds (HFs) form, together with private equity funds (PEFs) and real estate funds (REFs), collective investment institutions proposing commonly defined 'alternative' investment solutions to investors, as compared to traditional asset class investments available on financial markets.[1]

Differences, as compared to 'traditional' investments, justifying use of this attribute are distinct. In the case of REFs, the alternative aspect is represented by the object of investment, a real estate investment instead of the securities offered on a financial market; by investing in this type of fund, final investors can obtain exposure to the real estate market trend, increasing diversification of their own portfolios by including less correlated types of investment, in terms of yield and risk, than traditional asset class investments.

PEFs collect typically medium to long term financial resources from investors and use them to buy reference or control stakes in companies they think they can exploit, also thanks to managerial contribution which these subjects can usually give. The final investor entrusting savings to PEFs therefore searches for investment opportunities, often outside financial markets, able to generate returns which are not correlated to financial market trend.[2] PEFs significantly participate in corporate governance as regards companies in which they invest, influencing relevant managerial decisions, directing them towards the objective of 'value creation' for shareholders (the fund and, consequently, investors having invested in said fund).

HFs are again in a different situation, being institutions which, while significantly investing on financial markets, are outside the boundaries of traditional 'institutional investors' (mutual funds, pension funds, insurance companies). The latter address the large public of savers, are fully regulated by measures aiming at guaranteeing stability, are closely monitored by supervisory authorities, have specific limits in terms of investment policies and 'permitted' investment, are obliged to daily calculate 'net asset value' (for mutual funds), must ensure transparency towards both authorities and investors as regards composition of their investment portfolio. On the contrary, HFs are distinguished by less regulation, investment limits which are basically autonomously de-

[1] According to a widely used scheme, traditional asset class include money market instruments, bonds, equities, currencies, derivatives, money management institutions (mutual and pension funds, separated accounts, products issued by insurance companies).
[2] A PEF portfolio is usually concentrated on few investments thought to be particularly promising by fund managers.

fined, a certain opacity in the composition of their portfolio, less constraints in reporting to supervisory authorities and in transparency towards investors. Traditional mutual funds have specific constraints in terms of liquidity and investors have the right, at any time, to withdraw and convert their investment into cash;[3] they are limited in terms of asset classes in which they can invest (with the prevailing share limited to assets negotiated on regulated markets) and can avail themselves of limited 'leverage' and short selling opportunities;[4] HFs can freely invest in non-listed and less liquid assets, finding a limit only in their stated investment policies, they are not obliged to guarantee liquidity to their own investors (if not within the limits established by themselves), can widely resort to leverage (by investing much more than their net asset value thanks to the debt they can raise), can short sell securities[5] (usually through securities lending, in the case of naked short selling being prohibited).

For all these reasons, HFs are historically aimed at limited segments of investors, singled out on the basis of parameters established by domestic regulations, generally referring to portfolio size or possession of special subjective profiles identifying them as 'qualified investors' and, as such, less needy of the regulatory protection required by *mass market* investors. Even if 'alternative' investments are, generally speaking, earmarked to collect limited portions of an investor's overall portfolio, the volume of these funds has considerably grown as of the beginning of the Nineties to date; in particular, HFs have significantly increased assets under management, going from a product mainly aimed at the cream of investors to widespread use and also reaching, to a growing extent, segments of the retail market. Minimum threshold to enter these products was lowered, restrictions regarding the concept of 'qualified investor' were slackened and, just as important, many HFs became an investment object by means of structured products earmarked for the general public.

The table below details this long term evolution, highlighting how, before the outbreak of the crisis, HFs' assets under management had reached near-on two trillion dollars, three times more than at the beginning of the decade, ten times more than in the mid-Nineties.

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[3] This right is valid for 'open end' mutual funds, the most widespread in Italy as well as in leading countries worldwide.
[4] Both trading options, leverage and short selling, can only be carried out using derivatives.
[5] Short selling is used in different ways by HFs; further to bear speculation on the trend of some financial assets, these market participants often short sell, according to hedging policies, securities of distressed companies which they themselves are financing; see Brophy, Ouimet, Sialm (2009); Massoud *et al.* (2011).

year	total assets managed	net yield	of which on-shore funds	of which off-shore funds	number of funds traded	of which funds of funds
1990	38,910		9,560	29,350	610	80
1994	167,360	-1,141	24,728	142,632	1,945	291
1998	374,770	4,406	135,382	239,388	3,325	477
2002	625,554	99,436	194,786	430,768	5,379	781
2006	1,464,526	126,474	463,747	1,000,779	9,462	2,221
2007	1,868,419	194,515	614,789	1,253,630	10,096	2,462
2008	1,407,095	-154,447	432,610	974,486	9,284	2,439
2009	1,600,156	-131,180	507,592	1,092,564	9,045	2,162
Q2 2010	1,647,692	9,537	519,992	1,127,700	9,083	2,101

Table 8.1. Size of the hedge funds industry (data in millions of USA dollars)
Source: *Hedge Fund Review* (2010)

Table 8.2 instead details HFs' distribution on the basis of investment strategies pursued.

Strategy	**30.6.10**	**Strategy**	**30.6.10**
Energy/Basic Materials	$ 31.113	Active Trading	$ 9.069
Equity Market Neutral	$ 29.267	Commodity	$ 14.038
Fundamental Growth	$ 70.061	Currency - Discretionary	$ 5.571
Fundamental Value	$ 318.959	Currency - Systematic	$ 18.010
Multi-Strategy	$ 5.496	Discretionary Thematic	$ 131.862
Quantitative Directional	$ 13.642	Multi-Strategy	$ 28.143
Short Bias	$ 4.156	Systematic Diversified	$ 91.509
Technology/Healthcare	$ 29.315	**Macro**	**$ 298.201**
Equity Hedge	**$ 502.010**	**Strategy**	**30.6.10**
Strategy	**30.6.10**	Fixed Income - Asset Backed	$ 27.510
Activist	$ 36.016	Fixed Income - Convertible Arbitrage	$ 37.343
Credit Arbitrage	$ 4.146	Fixed Income - Corporate	$ 64.512
Distressed/Restructuring	$ 111.520	Fixed Income - Sovereign	$ 10.919
Merger Arbitrage	$ 14.531	Multi-Strategy	$ 260.155
Multi-Strategy	$ 11.721	Volatility	$ 8.609
Private Issue/Regulation D	$ 4.692	Yield Alternatives	$ 8.021
Special Situations	$ 247.786	**Relative Value**	**$ 417.069**
Event-Driven	**$ 430.411**	**Total Industry**	**$ 1.647.692**

Table 8.2. HFs' distribution according to investment strategies followed
Source: *Hedge Fund Review* (2010)

Decision by the financial system's governance authorities to also structurally regulate these forms of 'alternative' investment is a result of the financial crisis and consequent general turmoil on financial markets. Further to more strictly regulating typology of subjects already submitted to a specific discipline, such as banks, the reform process currently underway has gradually extended its own reference boundaries, drawing inspiration from the principle that any subject able to significantly impact on financial markets should not ignore the principle established by concrete core regulations protecting stability, increasingly considered a public good to safeguard through structural, further to prudential, action. As regards the subjects being discussed, 'alternative managers', actually very different one from the other, we can state that the regulations which have joined them together in the same discipline, pursue two basic goals. The first is investor protection against the risks inherent to these investment products. The second is the systemic consequences ensuing from the behaviour of these institutions. In our opinion, this is a point on which it is worthwhile giving full details regarding the three different types of 'alternative' investments. The objective of investor protection is common to the three types of above-mentioned funds, even if the risk profile of these investments depends on very different factors. REFs give performances connected to real estate market trend, PEFs have returns which depend on the trend of (few) participated companies, whereas HFs obtain results which depend on the combined effect of, on one hand, financial market trend and, on the other, of investment strategies in place.[6]

In some cases, risk can be assessed *ex ante*, whereas in others a forecast is more difficult and this is the reason why best practice recommends curtailing investment in these products to a limited percentage of the investor's portfolio.

Different remarks must be made on the issue of systemic importance of these market participants' behaviour. Sustaining that REFs, by investing on the real estate market, can contribute to stressing, during particular market phases, the upward trend of this particular asset class, is a line of reasoning not confirmed by empirical evidence. The interconnectedness between the outbreak of the financial crisis and the United States real estate market quotations is confirmed by fact, as set forth in Chapter 1, but that the upsurge in home prices was caused by purchases of real estate funds certainly cannot be sustained; as pointed out in the first Chapter, real estate prices were spurred on by private demand, sustained by a heavy increase in mortgages which were subsequently securitised. The size of REFs industry, at the international level, is still too small to ascribe these institutions systemic importance even within the boundaries of the specific market in which they invest. PEFs invest in a restricted number of companies worldwide, manage still limited masses of funds and can, through intervention based on heavy financial leverage, contribute towards increasing debt of companies in which they have invested. This circumstance, usually carried out during a phase in the economic cycle featuring high liquidity and low interest rates, exposes participated

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[6] Grouping HFs according to investment strategies put in place, we can single out some consolidated categories: a) Equity Hedge (*long/short*), strategies which consist of simultaneously assuming both a long position on deemed undervalued securities and a short position on others, considered undervalued: the objective of this strategy is to benefit from potential market *mispricing*, with low or no exposure to the overall market trend (*beta exposure*) and contextual search of 'alfa'; b) Arbitrage, strategies aimed at obtaining profit by gaining on price differences between equivalent assets; on different or similar markets (*equity market neutral; fixed-income arbitrage; convertible bond arbitrage; mortgage-backed securities arbitrage*); c) Event-driven, strategies aiming at benefiting from special events which can involve a company, such as mergers, takeovers, turnarounds, restructuring, etc. (*merger arbitrage*; distressed securities; *special situations*); d) Global Macro, investment strategies aimed at profiting from evolution on the international macro-economic scenario and consequent impact on currency and interest rates; e) Managed Futures, strategies which invest, through futures, on financial instruments, currencies and commodities. This classification helps to understand the map of potential investment strategies, even if we must remark that crossovers often occur in terms of instruments or markets. All HFs have a point in common, the use of leverage and strong discretionary powers in adjusting their investment strategies to different market situations.

companies to a significant financial risk which can typically be observed on the economic cycle's changing, when conditions for access to credit are more limited and when price of said credit is higher. Moreover, the importance of these market participants' behaviour as regards systemic risk, appears negligible in view of the limited number and overall size of interventions carried out and in view of the practically non-existing correlation with financial market trends. HFs must be considered differently. They operate on financial markets having much more important resources and near-on complete freedom in trading; during periods of 'bull market' they can, also thanks to financial leverage, exasperate upward trend; in bearish phases, by means of short selling, they can, on the contrary, significantly emphasize decrease in the price of particular financial assets, contributing, but certainly not determining, production of systemically important consequences. Although financial systems' governance authorities are aware of the fact that the financial crisis was certainly not generated by HFs'[7] behaviour, we can infer that these same authorities could deem it more opportune to make regulation of these subjects more incisive in the aim of submitting their activity to control. Summing up, the reform currently underway proposes to extend the boundaries of regulations and supervision to these subjects. The circumstance that regulatory action must include the entire world represented by these different subjects has grounds based on a goal, a joint goal as we have seen, of protecting final investors. The attention given to the systemic importance appears, on the contrary, grounded and within, in our opinion, reasonably curtailed limits, uniquely as regards HFs; greater space shall be given to these institutions in the following analysis.

Lastly, before carrying on with examination of regulatory action, we believe it would be useful to place the HF industry in its correct perspective, by comparing its size with that of 'traditional' investment funds, the description of which is carried on Table 8.3. As can be inferred from data, at the end of 2010, this type of fund had assets under management equivalent to about 25 trillion dollars, concentrated for over 80% in the United States and Europe. The size of the 'traditional' asset management industry grew enormously up to the outbreak of the crisis, peaking in 2007; after the strong contraction recorded in 2008, the subsequent recovery of subscriptions and market prices, brought back total assets to levels near-on maximum levels during the pre-crisis period.

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[7] See Commission of the European Communities (2009). "While AIFM were not the cause of the crisis, recent events have placed severe stress on the sector. The risks associated with their activities have manifested themselves throughout the AIFM industry over recent months and may in some cases have contributed to market turbulence. For example, hedge funds have contributed to asset price inflation and the rapid growth of structured credit markets. The abrupt unwinding of large, leveraged positions in response to tightening credit conditions and investor redemption requests has had a procyclical impact on declining markets and may have impaired market liquidity. Funds of hedge funds have faced serious liquidity problems: they could not liquidate assets quickly enough to meet investor demands to withdraw cash, leading some funds of hedge funds to suspend or otherwise limit redemptions. Commodity funds were implicated in the commodity price bubbles that developed in late 2007". See Ang, Gorovyy, van Inwegen (2011). Authors highlight interesting evidence as regards use of leverage by HFs, by showing, in particular, how their degree of leverage, at the beginning of 2009, ensued as being lower than degree declared by leading investment banks.

type of fund	2005	2007	2008	2009	2010	2010	area
equity	8.336	12.443	6.498	8.948	10.250	*52%*	USA
	47%	*48%*	*34%*	*39%*	*41%*		
bond	3.450	4.279	3.389	4.546	5.231	*32%*	Europe[8]
	19%	*16%*	*18%*	*20%*	*21%*		
money market	3.351	4.940	5.786	5.317	4.531	*6%*	Australia
	19%	*19%*	*31%*	*23%*	*18%*		
balanced	1.563	2.636	1.772	2.345	2.672	*4%*	Japan
	9%	*10%*	*9%*	*10%*	*11%*		
other	512	884	676	840	1.002	*6%*	other
	3%	*3%*	*4%*	*4%*	*4%*		
total	17.757	26.132	18.920	22.953	24.699	*100%*	total

Table 8.3. Size of the worldwide industry of mutual funds; distribution by type of fund and geographical area
Source: European Fund and Asset Management Association, International Statistical Release, Q4 2010

By comparing these data with those contained in Table 8.1, we can see how HFs' still represent a low percentage, below 7%, of traditional asset management industry. Moreover, comparison of size must not lead to thinking that these subjects have marginal importance. In the first place, we must remember that the capacity of HFs to affect market trend is superior to that expressed by asset under management because of their systematic use of leverage. What is more, the second consideration regards the fact that HFs, having substantial investment freedom, can concentrate on specific asset classes, in this way increasing their influence on prices dynamics.[9] These reasons, together with the above-mentioned principle of investor protection, have led authorities to choose regulation.

8.2. Regulation of HFs in Europe

The European Union has decided to regulate the subject of alternative investments by means of a directive[10] (Alternative Investment Fund Managers Directive – AIFMD), earmarked to be assimilated by domestic law by mid-2013.

[8] The datum regarding Europe only includes UCITS funds (those traded on the basis of European coordination directives we shall describe and comment below). By also including non-UCITS funds, holders of 2.7 trillion in management assets, the European industry's share would go up to 36% of the United States share which would go down to 43%. The datum regarding the industry's polarization inside these two areas would ensue as being reinforced.

[9] Traditional funds usually have more diversified investment portfolios, both owing to regulatory constraints and management's autonomous choices. In the case of HFs, driven by the goal of maximising the result within a given investment strategy, the possibility of concentrating on specific asset classes is structurally higher.

[10] EU regulation process, as regards HFs, started in April 2009 with the proposal for a directive, as mentioned above, drawn up by the European Commission. This proposal was adopted on first reading at the European Parliament in November 2010 (European Parliament 2010b) and was finally translated into the Directive of the European Parliament and of the Council (2011). The decision to use the instrument of a directive instead of a regulation was justified by the will to find correct equilibrium between regulation 'uniformity' and 'flexibility' on its adoption by individual countries. As compared to regulation choices made in other areas, where, through regulation, complete uniformity was sought, it would seem that we can deduct that the approach to this particular sector features the conviction that it would be appropriate to

The directive and measures to adopt by member states will probably tend to produce, as we shall see below, a situation of greater 'regulatory symmetry' between these subjects and 'traditional' mutual funds, disciplined by their relevant directives, known as UCITS (Undertakings for Collective Investments in Transferable Securities).[11] In future, management company choices will not be made owing to alternative terms between, on one hand, highly regulated UCITS products and, on the other, substantially non-regulated HFs products; on the contrary, the choice will be between two regulation alternatives and it will be interesting to see how strategies will be developed by market participants offering these two different investment products. For these reasons, by way

preserve, while remaining within the framework of cornerstones established by the directive, a form of greater flexibility for member states.

[11] The regulatory framework at the European level for traditional investment funds was defined over the years when some coordination directives were launched, aimed at creating a single European market for these investment products; by acquiring a member state licence on the basis of domestic regulations in line with the principles ratified by European directives, the managers of these funds can freely offer their products on the entire European market. The first directive aiming at defining a European framework for the investment fund industry goes back to 1985 (Directive 85/611/EEC) and introduced the concept that a fund licensed in a member country by regulations coherent with the directive, could be freely traded throughout Europe. Fund marketing rules, different in different countries and with a limited definition of assets eligible for investment, in fact prevented that an effective European market be created for these financial instruments. At the beginning of the Nineties, achieving harmonisation was pursued with a draft directive (UCITS II), which, what is more, never completed its legislative completion. Instead, the new initiatives undertaken at the end of the Nineties brought about definition of the regulatory framework for investment funds at the European level (so called 'UCITS III' directives). Directive 2001/07/EC (the so-called Management Directive) established the 'European passport' for funds and directive 2001/108/EC removed the crossborder marketing barriers for investment products subject to the same regulations in each member state, also defining a wider range for investments these subjects could make (among these, non hedging derivatives, were also included, within a 100% limit of Net Asset Value). The more extensive investment possibilities were counterbalanced by requisites oriented towards mitigating and managing risk assumption and increasing transparency towards supervisory authorities and clients. The regulatory process was subsequently completed by the launching, on January 13th, 2009 (and subsequent adoption by the European Council on June 22nd, the same year), of the new directive, known as UCITS IV, which ratified a further step forward in consolidating the single European market. On the basis of this directive, the further principle of a 'manager passport' was introduced. On the basis of this principle, the fund licensed by a member state can be managed by a manager residing in another member state, as long as the latter can prove having the requisites established by aforesaid directive. The direction taken should stimulate competition between management companies and encourage decreasing costs for final investors. Other aspects foreseen in the new directive concern prudential supervision of management companies, entrusted to country of origin, simplifying the process to obtain a crossborder offering licence, a uniform and more simplified regime as regards fund mergers, definition and acknowledgement of so-called *master/feeder* structures, on the basis of which a fund, called *feeder*, can, instead, invest part or all of its capital in another fund, called *master*), raising the level of investor protection by means of redefining procedures and informative document contents (in fact, the simplified prospectus introduced by the UCITS III is replaced by a synthetic and schematic document containing essential information – key investor information – which potential subscribers must receive and knowingly assess before subscription). The new directive came into force on July 1st, 2011. On the whole, the above-mentioned directives have significantly contributed to the standardisation of the European market for investment funds and, today, over 70% of funds offered in Europe are registered as UCITS. The attempt made by European regulatory authorities to achieve a single European market of asset management services appears grounded by awareness of the structural fragmentation of this market in Europe, ensuing from historical fragmentation on far more modest domestic markets; according to data supplied by Caceis Investor Services, with reference to the financial year ending on 31/12/2008, the European industry of UCITS funds managed total assets for 4.6 trillion Euro and relied on 37,000 funds, for an average 121 million each; the United States industry of similar products (mutual funds) managed masses equivalent to 6.9 trillion Euro and relied on about 8,000 funds, involving an average of approximately 860 million Euro, over six times the European average. See Caceis Investor Services (2010).

of commenting the European regulation of HFs, we shall repeatedly refer to existing regulations as regards 'traditional' funds, in the aim of understanding, on stating final conclusions, the potential redefinition of boundaries in the two industries which, if now clearly separated, could have many more factors in common in the future.

The basic points of the new regulation's structure, addressed to subjects (Alternative Investment Fund Managers – AIFMs) managing and offering alternative investment funds (AIFs)[12] can be identified in the following: an authorization regime to perform this activity, compliance with given rules of behaviour, compliance with specific organisational requirements, compliance with the principle of transparency towards investors and supervisory authorities, enforcement of powers granted the latter to protect market stability.

Articles 2 and 3 define the framework for implementation, by singling out three categories of alternative fund managers, whatever their legal structure and without taking into account that funds be either 'open-ended' or 'closed-ended':[13]

- all European AIFM managing one or more alternative funds;
- all non-European AIFM managing one or more European AIF;
- all non-European AIFM marketing in a European Union country one or more AIFs, whether European or non-European.

A fund is considered European (EU - AIF) if licensed or registered in a member state or has its registered offices in a member state. A manager is considered European (EU - AIFM) if registered offices are in a member state. The above classification takes on importance as regards the expected evolution of HFs marketing in the European Union, inspired by the single passport, a practice which tends to gradually refer, as we shall see below, both to European and non-European managers.

Though with exemptions and facilitations provided for in Articles 2 and 3,[14] the European Commission has evaluated that the AIFMD will enable supervisory authorities to control 30% of hedge fund managers operating in Europe, however 90% owners of overall assets; for this reason market coverage by the new regulation would seem near-on total.

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[12] Article 4 (1): "For the purpose of this Directive, the following definitions shall apply: (a) 'AIFs' means collective investment undertakings, including investment compartments thereof, which: (i) raise capital from a number of investors, with a view to investing it in accordance with a defined investment policy for the benefit of those investors; and (ii) do not require authorisation pursuant to Article 5 of Directive 2009/65/EC".

[13] Article 2 (2): "For the purposes of paragraph 1, the following shall be of no significance: (a) whether the AIF belongs to the open-ended or closed-ended type; (b) whether the AIF is constituted under the law of contract, under trust law, under statute, or has any other legal form; (c) the legal structure of the AIFM".

[14] The directive schedules a decidedly facilitated regime for companies directly or indirectly managing funds having assets not over 100 million Euro in the case of funds using financial leverage (500 million Euro in the case of funds not using financial leverage) and do not give investors the right to redemption for a five year period from the date of initial investment in each AIF. These companies cannot benefit from the rights guaranteed by the AIFMD (in particular of the opportunity to avail themselves of the so-called 'passport'), unless they decide to benefit from the opt-in right, in which case they shall be obliged to fully submit to the conditions imposed by aforesaid directive.

The other essential exemption refers to so-called *passive marketing*: the AIFMD has not removed the opportunity for European investors to freely invest in AIF shares or stocks even when established outside the European Union and does not oblige the relative manager to submit to European regulations as long as the buying of shares is carried out on buyer's complete and unequivocal initiative and is not anticipated by any offer.[15]

Authority granted by the regime (Articles from 6 to 11), enables competent authorities to take an industry 'census', thereby obtaining, for each subject, a considerable volume of data such as, among others, management company's ownership structure, executive identity and qualification, management company's organisational structure, compensation policies adopted, powers delegated to third parties to perform specific functions, depositary of assets, investment strategies followed.

Capitalization[16] is among the requirements needed to obtain authorisation, even if this aspect assumes a very different meaning in this context as to what we have discussed above with reference to banks. In the case of the latter, capital represents the first line of defence against deterioration of assets quality; in the case of alternative fund management companies, capital losses are sustained by clients and capital resources have the purpose of enabling physiological functioning of the company, or of supplying coverage against the risk of contentious procedures potentially arising with clientele.

As regards organisational and operating requirements, as provided for in Article 12, the AIFMD firstly states some general principles with which mangers of alternative investment funds must comply.[17] Although this section of the directive substantially tra-

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[15] In this way, the intent is to avoid investor 'solicitation' by managers not submitted to the directive. This provision, in fact, confirms the principle, originally at the basis of the HF market, that these investment products must be, in some way, reserved to qualified investors clearly making their autonomous will to invest be known, without having been solicited.

[16] Capital requirements requested by the directive are the same as those imposed by the UCITS IV directive regarding 'traditional' investment fund managing companies: 300,000 Euro initial capital for AIFs managed internally and 125,000 Euro for AIFMs appointed externally, to which further own funds must be added for an equivalent 0,02% of the asset value managed exceeding a threshold of 250 million Euro (with an overall ceiling of 10 million Euro). As compared to the UCITS IV directive, the AIFMD also requires specific protection to cover the risk of potential liability ensuing from management activity. Against these risks (still being defined), additional capital funds will be requested, or, as an alternative, an appropriate professional indemnity insurance be acquired. *Article 9(7).* "To cover potential professional liability risks resulting from activities the AIFM may carry out pursuant to this Directive, both internally managed AIF and externally appointed AIFM shall either: (I) have additional own funds which are appropriate to cover potential liability risks arising from professional negligence; or (II) hold a professional indemnity insurance against liability arising from professional negligence which is appropriate to the risks covered".

[17] Article 12 (1): "General Principles. Member States shall ensure that, at all times, AIFMs: (a) act honestly, with due skill, care and diligence and fairly in conducting their activities; (b) act in the best interests of the AIFs or the investors of the AIFs they manage and the integrity of the market; (c) have and employ effectively the resources and procedures that are necessary for the proper performance of their business activities; (d) take all reasonable steps to avoid conflicts of interest and, when they cannot be avoided, to identify, manage and monitor and, where applicable, disclose, those conflicts of interest in order to prevent them from adversely affecting the interests of the AIFs and their investors and to ensure that the AIFs they manage are fairly treated; (e) comply with all regulatory requirements applicable to the conduct of their business activities so as to promote the best interests of the AIFs or the investors of the AIFs they manage

ces the similar regulation imposed by the UCITS IV directive, the AIFMD does not alter the opportunity for the manager to preferentially treat an investor, should this kind of eventuality be explicitly provided for by rules or instruments of incorporation of the AIF. We are dealing with the practice, widespread in many HFs, of the so-called *side letters*, a radically differentiated element as compared to traditional funds; on the basis of this side letters, agreements are entered into between investors (or potential investors) and the hedge fund (or its manager), agreements in which a specific treatment is granted to the investor, differing from treatment to which all other clients are entitled. The Commission has been called upon to establish, with subsequent measures, procedures to decline this principle and define what information must be made public on the issue of preferential treatment.[18]

The AIFMD includes a specific discipline as regards compensation (Article 13 and Annex II),[19] and draws origin from the April 30th, 2009 European Commission's recommendation on compensation policies in the financial services industry (2009/384/EC).[20] This discipline is basically structured into two parts: the first, featuring some more general principles, is contained in Article 13; the second, supplied with full details and practical indications, is contained in Annex II of the directive.

Article 13 establishes that AIFMs must have compensation policies and practices mirroring and encouraging healthy and effective risk management and that assumption of risks which are not coherent with provisions in the fund's rules should not be encouraged.

Persons to whom these principles must be applied are top managers, subjects which, by their behaviour, can determine risk taking (risk takers), control personnel, any employee whose total pay is in the same compensation range as top management and risk takers whose professional activities have a concrete impact on the risk profile of managed funds. Compensation paid to these subjects must comply with ceilings and requirements imposed by Annex II of the AIFMD, specifically setting criteria regarding the management company's compensation policies and practices, subjects assigned to adopt and implement said policies and practices, compensation structure, components and payment due-dates, principles to follow in the case of early contract resolution and retirement.

In particular, stress must be given to the provision imposing, when compensation is connected to results, that the total amount of the employee's compensation be based on jointly taking into account both individual and overall management company performance; moreover, assessment of individual results must take place by applying both quantitative and qualitative criteria.

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and the integrity of the market; (f) treat all AIF investors fairly. No investor in an AIF shall obtain preferential treatment, unless such preferential treatment is disclosed in the relevant AIF's rules or instruments of incorporation".

[18] Market participants are convinced that eventual differentiated treatment should not merely be mentioned in rules or instruments of incorporation, but detailed in terms of content. Therefore the directive does not prohibit this practice, but curtails and submits it to stricter prior disclosure rules.

[19] See Article 13 and Annex II.

[20] See Chapter 7.

Assessment of results must be carried out over a period of time coherent with the life cycle of the fund managed and in such a way as to guarantee that the compensation's variable amount be structured so as to stimulate obtaining sustainable long term results. Moreover, a substantial portion of this compensation component, equivalent to at least 50%, must consist of units or shares of the AIF or equivalent financial instruments. Finally, variable compensation must be at least partially deferred over time (at least 40%), always taking into account the time horizon of the fund at issue.

Discipline on the subject of conflict of interest, introduced in Article 14 of the AIFMD, traces, in its essential traits, the UCITS IV directive. As a general principle, the management company must be organised in such a way as to minimise possible conflicts of interest occurring, by also isolating, within the organisational structure, tasks and responsibilities which could be incompatible with each other, or which could create systematic conflict of interest. Moreover, as different types of conflict of interest can arise between different subjects, the AIFM must resort to all necessary procedures to identify them. The directive provides that above-mentioned conflicts of interest can arise between:

- the AIFM or one of the AIFs managed by the AIFM or investors in said AIF;
- an AIF (or its investors) and another AIF;
- the AIF (or its investors) and another AIFM client;
- two AIFM clients.

Once conflict of interest has been singled out, the AIFM must 'adopt every reasonable measure' to prevent, reduce or control the conflict; when this is not sufficient to ensure investors are not damaged, investors must be informed of these conflicts and appropriate practices and procedures to manage these conflicts developed.[21] Future legislative measures are entrusted with the task of better specifying the practical meaning of these provisions.[22]

As also regards risk management practices, the European directive aligns HF requirements with those of traditional funds, as contained in the UCITS IV directive. The manager of alternative funds, once risk management functions are 'functionally and hierarchichally' separated from other operating functions (particularly including portfolio management), must at least, according to Article 15:

[21] Article 14 (2): "Where organizational arrangements made by the AIFM to identify, prevent, manage and monitor conflicts of interest are not sufficient to ensure, with reasonable confidence, that risks of damage to investors' interests will be prevented, the AIFM shall clearly disclose the general nature or sources of conflicts of interest to the investors before undertaking business on their behalf, and develop appropriate policies and procedures".

[22] In particular, it will be necessary to better understand what 'adopting every reasonable measure' means in preventing, reducing or controlling conflict. In fact, for a fund manager, it could be extremely complicated to identify conflict of interest arising between two or more of the latter's clients.

- adopt procedures of due diligence which are adequate, documented and regularly updated as compared to investment strategy, objectives and risk profile of the AIF itself;
- make sure that risks associated with every AIF investment position and its overall effect on the fund's portfolio can be identified, measured and carefully controlled at any time by means of adequate stress tests;
- make sure that the AIF's risk profile corresponds to size, portfolio structure and investment fund strategies, as well as of objectives defined in the fund's rules or instruments of incorporation, prospectus and offering documents.

The Commission has been referred to for the task of specifying which risk management systems should be adopted by the AIFM, the frequency with which they should be submitted to review, the methodology to be used in stress tests. Provisions in the directive on the issue of risk management in fact establish principles which leading HFs managers, especially those addressing a widespread clientele, already usually apply as 'best practices'. The regulation's effect will then be to impose that smaller market participants align with best market practices, thereby determining the industry's structural upgrade. Compliance with the above requirements involve considerable costs and could become a catalyser for the industry's consolidation process.

Article 16 established guidelines for liquidity management, a particularly significant aspect as each fund is distinguished by special constraints towards investors, in terms of redemption times and procedures.[23] The trade-off in this case is between potential manager's need to invest in less liquid assets, for the returns they are expected to provide, and commitments undertaken with subscribers who must be allowed to carry out withdrawals within the time limits promised by the fund. The directive requests managers to equip themselves, for each managed fund,[24] with an adequate system for liquidity management, by adopting procedures which ensure that the liquidity profile of fund investments be aligned with underlying constraints, by implementing stress test procedures to verify the fund's capacity in facing its commitments even under exceptional conditions.[25] The above-mentioned procedures must enable verification that, for each man-

[23] Liquidity terms which HFs grant their investors are variable and coherent with the type of asset in which they invest. HFs investing in more liquid activities can grant their clients reduced advance notice to obtain redemption; on the contrary, HFs investing in less liquid assets, or investing by means of investment strategies requiring more time to be efficiently carried out, grant their clients decidedly longer terms of advance notice to obtain redemption. According to estimates in the *Hedge Fund Review*, on June 30th, 2010, 15% of funds are granted 0 to 5 days for advance notice, 11% between 6 and 15 days, 37% between 16 and 30 days, 11% between 31 and 45 days, 11% between 45 and 60 days, 12% between 61 and 90 days and 2% over 90 days. See *Hedge Fund Review* (2010).
[24] Excluding closed-end funds which do not resort to financial leverage.
[25] During the crisis, a great number of HFs placed constraints on investor redemptions, revealing how the liquidity commitment undertaken with the latter was incompatible with the stress situation of financial markets, inside which it became impossible to liquidate assets held by the fund at a minimum of convenient terms. In assuming these measures, managers have believed to align themselves with investors' interests, preserving, as far as possible, the consistency of their portfolios. Moreover, these facts have put a question mark as regards liquidity commitments assumed by HFs towards their own subscribers, in view of

aged AIF, investment strategy, liquidity profile and investor redemption policies are coherent with each other.[26]

Valuation of assets forming the fund's portfolio represents another delicate aspect, considering the characteristics of the investments made by these kinds of funds. According to Article 19, AIFMs must equip themselves with rules and procedures for each fund, ensuring correct and independent valuation of assets included in their portfolios; further to the directive's dictate, the manager must be aligned with domestic legislation and provisions established by the fund's rules or instrument of incorporation.

Rules applying to asset valuation and calculation of net asset value (NAV) must be established by the law in the country where the fund has registered offices and/or by the fund's rules or instrument of incorporation. In any case, these rules must guarantee that asset valuation and NAV calculation take place at least once a year.

Valuation can be performed, alternately:

- by an external valuer, who can be either a natural or legal person independent from both the AIF and AIFM, as long as this external subject (I) is subject to compulsory registration or to provisions and regulations of the law or professional rules of behaviour, (II) can give sufficient professional guarantees to perform its tasks efficiently, and (III) be appointed in compliance with AIFMD requirements;
- by the AIFM's internal structure, on condition that the person appointed by the company for valuation has separate functions from persons appointed for portfolio management. Compensation to personnel appointed for valuation must not be connected to the results of the valuation itself and organisational mechanisms must be put in place able to guarantee that said personnel does not find itself in conflict of interest, or have to endure undue pressure by other company staff. In the case of internal valuation, the competent authorities in the fund's home member state can request that the manager submit its results to verification by an external valuer or auditor.

The AIF's depositary can also be appointed for the valuation function. In this case, the depositary must be structured in such a way as to guarantee separation between the evaluation and custody functions; conflicts of interest, if any, must be identified, monitored, managed and disclosed to AIF's investors.[27]

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the fact that use of illiquid activities can significantly contribute towards generating profit. The issue is discussed in Teo (2011).

[26] Article 17 (1,2): "AIFMs shall regularly conduct stress tests, under normal and exceptional liquidity conditions, which enable them to assess the liquidity risk of the AIFs and monitor the liquidity risk of the AIFs accordingly. AIFMs shall ensure that, for each AIF that they manage, the investment strategy, the liquidity profile and the redemption policy are consistent".

[27] Article 19 (4): "The depositary appointed for an AIF cannot be appointed as external valuer of that AIF, unless it has functionally and hierarchically separated the performance of its depositary functions from its

Second level legal measures will have fundamental importance in practically understanding the contents of the 'functional and hierarchical' separation concept. Even in the case of an external valuer being appointed, the AIFM will however remain responsible for correct asset valuation, as well as of the NAV calculation.[28]

Use of financial leverage – dealt with in Articles 4, 15 and 25 of the directive – represents, as we have said from the very start, one of HFs' peculiar features, and the AIFMD does not provide for any explicit limit as to alternative fund managers resorting to this instrument in their investment strategies. However, the directive requests that leveraged fund managers undertake a series of action to reduce the possibility that fund exposure could create excessive risks for the financial system or for investors, and moreover guarantees significant powers to competent authorities to use in particularly serious situations. These provisions mark the passage from mere investor protection logics to pursuit of a more general objective, preservation of stability within the markets in which these funds operate.

Starting with a broad definition of the financial leverage concept – defined by Article 4 as "the methodology by which the alternative investment fund manager increases the exposure of an alternative investment fund it manages whether through borrowing of cash or securities, or leverage embedded in derivative positions or by any other means",[29] the AIFMD provides that the AIFM must:

- inform the competent authorities as regards use of financial leverage;
- personally establish a maximum leverage ceiling for each fund it manages, taking into account type of fund, strategy followed, leverage sources, the assets/liabilities ratio and other indicators;[30]
- supply investors, before subscription, with information regarding possibilities and procedures according to which the fund can make use of financial leverage and its ceiling (the AIFM must also periodically report changes to this ceiling, if any, and the total of leverage effectively used);
- prove that established leverage ceilings are reasonable and that each managed fund duly complies with them.

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tasks as external valuer and the potential conflicts of interest are properly identified, managed, monitored and disclosed to the investors of the AIF".

[28] Without prejudice to the AIFM being able to obtain compensation from the external valuer, should the latter be responsible for a loss suffered by the AIFM due to external valuer's negligence or due to deliberate failed execution of the latter's tasks.

[29] Article 4 (1) (v): "Leverage means any method by which the AIFM increases the exposure of an AIF it manages whether through borrowing of cash or securities, or leverage embedded in derivative positions or by any other means".

[30] Article 15 (4): "AIFMs shall set a maximum level of leverage which they may employ on behalf of each AIF they manage as well as the extent of the right to reuse collateral or guarantee that could be granted under the leveraging arrangement, taking into account, inter alia: (a) the type of the AIF; (b) the investment strategy of the AIF; (c) the sources of leverage of the AIF; (d) any other interlinkage or relevant relationships with other financial services institutions, which could pose systemic risk; (e) the need to limit the exposure to any single counterparty; (f) the extent to which the leverage is collateralised; (g) the asset-liability ratio; (h) the scale, nature and extent of the activity of the AIFM on the markets concerned".

Member states' competent authorities are charged with evaluating the risk which use of leverage could cause and, where deemed necessary, can impose limits on the leverage ceiling that an AIFM can use, or impose restraints on management of the fund in the case use of leverage is supposed to create conditions of a systemic risk on markets in which the fund invests. In principle, this provision gives competent authorities significant powers, the exercising of which could materialize, when authorities themselves feel that HFs transactions contribute towards determining significant peaks of volatility in the asset classes they deal with.

The AIFMD intervenes on the management company's organisational profile by disciplining the delegation of AIFM's operating functions to third parties. This practice is widespread in the world of HFs, insofar as this specific industry includes very different-sized market participants, having highly differentiated resources, structures and skills. As a rule, smaller-sized market participants avoid, as it would be uneconomic, investing in personnel, systems and processes, thereby delegating certain operating functions to other subjects. We are dealing with typically small alternative management companies belonging to banking groups, which perform 'production functions' serving distribution networks belonging to the same banking group which, by means of this strategic choice, obtains the result of offering its clients its 'own' product, thus more closely protecting business relationships. When asset under management are not so relevant, the management company tends to reduce its own operating costs by entrusting third parties, typically big and specialised market participants, even with 'core' functions, which, to be effectively performed would require significant investments. The legislator's worry is that, faced with these delegations, control of the delegated processes be loosened; on the contrary, the aim of the directive is that the delegating AIFM preserves its capacity to fulfil its obligations towards the client.

As in the case of UCITS IV discipline, and on the basis of similar principles, the directive therefore regulates, at Article 20, this significant aspect; unlike the UCITS discipline, which leaves it up to member states to decide whether, and to what extent, to allow investment funds to delegate one or more of their functions, the AIFMD dictates specific rules, valid for the entire European Union. We must stress that limits and impositions provided for in Article 20 are only valid should the delegation concern one of the functions listed in Annex I[31] of the AIFMD, held to be essential in performing management activity.[32]

What is more, the AIFMD, like the UCITS IV directive, also states the principle that AIFMs cannot take functional delegation to such extremes as to no longer be considered the real AIF managers.[33] These provisions too, like the previous ones on the issue of risk management, tend to increase management companies' degree of structuring; market participants who have today built their own *business model* very markedly on delegation of significant functions will have to review their own set-up and make the necessary investments; the only alternative is concentration with other subjects, aimed at increasing activity size and making the above-mentioned investments economically viable.

At Article 21, the AIFMD provides that the manager must appoint a single depositary for each fund; the appointment must be granted by means of a written contract, in which, among other things, the flow of information needed by the depositary to fulfil its duties must be regulated. An AIFM cannot hold the function of depositary.[34]

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[31] Annex I (1,2): "Investment management functions which an AIFM shall at least perform when managing an AIF: (a) portfolio management; (b) risk management. Other functions that an AIFM may additionally perform in the course of the collective management of an AIF: (a) Administration: (I) legal and fund management accounting services; (II) customer inquiries; (III) valuation and pricing, including tax returns; (IV) regulatory compliance monitoring; (V) maintenance of unit-/shareholder register; (VI) distribution of income; (VII) unit/shares issues and redemptions; (VIII) contract settlements, including certificate dispatch; (IX) record keeping; (b) Marketing; (c) Activities related to the assets of AIFs, namely services necessary to meet the fiduciary duties of the AIFM, facilities management, real estate administration activities, advice to undertakings on capital structure, industrial strategy and related matters, advice and services relating to mergers and the purchase of undertakings and other services connected to the management of the AIF and the companies and other assets in which it has invested".

[32] Article 20 (1): "AIFMs which intend to delegate to third parties the task of carrying out functions on their behalf shall notify the competent authorities of their home Member State before the delegation arrangements become effective. The following conditions shall be met: (a) the AIFM must be able to justify its entire delegation structure on objective reasons; (b) the delegate must dispose of sufficient resources to perform the respective tasks and the persons who effectively conduct the business of the delegate must be of sufficiently good repute and sufficiently experienced; (c) where the delegation concerns portfolio management or risk management, it must be conferred only on undertakings which are authorised or registered for the purpose of asset management and subject to supervision or, where that condition cannot be met, only subject to prior approval by the competent authorities of the home Member State of the AIFM; (d) where the delegation concerns portfolio management or risk management and is conferred on a third-country undertaking, in addition to the requirements in point (c), cooperation between the competent authorities of the home Member State of the AIFM and the supervisory authority of the undertaking must be ensured; (e) the delegation must not prevent the effectiveness of supervision of the AIFM, and, in particular, must not prevent the AIFM from acting, or the AIF from being managed, in the best interests of its investors; (f) the AIFM must be able to demonstrate that the delegate is qualified and capable of undertaking the functions in question, that it was selected with all due care and that the AIFM is in a position to monitor effectively at any time the delegated activity, to give at any time further instructions to the delegate and to withdraw the delegation with immediate effect when this is in the interest of investors.The AIFM shall review the services provided by each delegate on an ongoing basis".

[33] Article 20 (3): "The AIFM's liability towards the AIF and its investors shall not be affected by the fact that the AIFM has delegated functions to a third party, or by any further sub-delegation, nor shall the AIFM delegate its functions to the extent that, in essence, it can no longer be considered to be the manager of the AIF and to the extent that it becomes a letter-box entity".

[34] As specific regulations prohibiting that these two functions be performed by the same subject are lacking, in some jurisdictions this coincidence between manager and depositary has been effectively verified

To be appointed depositary, a subject must be a European bank, an investment company authorised by the terms contained in the MiFID directive, or other institution subject to continuous prudential supervision falling under the type of institutions which are enabled to perform the role of depositary as per the UCITS IV directive.[35] Non-European funds can have, as a depositary, the 'same type' of subjects, as long as said subjects are submitted to efficient regulations and supervision, having similar features to EC rules.

A subject already acting as a prime broker[36] for a specific fund can also be appointed as depositary, as long as this subject has 'functionally and hierarchically' separated custody and brokerage functions and has identified, managed, monitored and made public every potential conflict of interest.

The AIFMD also imposes some limits regarding the State in which the depositary has registered offices:

- in the case of a EU fund, the depositary must have registered offices in the same member State as the fund;
- in the case of a non-EU fund, the latter can choose to appoint a depositary with registered offices in the fund's home country, in the AIFM home member state (if European), or in the AIFM's reference member state (if a third country).

The directive singles out safe-keeping functions distinguishing between two types of assets: those which can be held in custody (for example, all financial instruments which can be registered in a financial instruments account) and those for which, instead, custody is not feasible:

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and the case of the Madoff fraud highlighted its potential devastating consequences. Moreover, we must not be excessively surprised by the fact that investors accepted to invest their money in funds whose depositary was an affiliated company, with the consequent absence of the third party requirement, essential for control purposes; as we have stressed, the 'alternative' feature of the HF industry is also based on the fact that relationships between market participants have strong fiduciary characteristics, a market pillar when regulations are lacking. The choice today is to go from a fiduciary relationship to a relationship hinged on explicit discipline regarding market participants' behaviour.

[35] Article 21 (3): "The depositary shall be: (a) a credit institution having its registered office in the Union and authorised in accordance with Directive 2006/48/EC; (b) an investment firm having its registered office in the Union, subject to capital adequacy requirements in accordance with Article 20(1) of Directive 2006/49/EC including capital requirements for operational risks and authorised in accordance with Directive 2004/39/EC and which also provides the ancillary service of safe-keeping and administration of financial instruments for the account of clients in accordance with point (1) of Section B of Annex I to Directive 2004/39/EC; such investment firms shall in any case have own funds not less than the amount of initial capital referred to in Article 9 of Directive 2006/49/EC; or (c) another category of institution that is subject to prudential regulation and ongoing supervision and which, on 21 July 2011, falls within the categories of institution determined by Member States to be eligible to be a depositary under Article 23(3) of Directive 2009/65/EC".

[36] The prime broker, typically a major investment bank operating internationally on most important financial markets, is the subject by means of which the HF makes the transactions implementing its investment strategy. Services offered by the prime broker include lending of money and securities, netting and clearing as counterpart of HF's transactions, management of guarantees, etc. The role of prime brokers is so relevant that some hold that their discipline could be more effective, for the purpose of this industry's stability, than HFs regulation itself. See King, Maier (2009).

- the first, i.e. all those assets which can be registered in a financial instruments account or physically delivered to the depositary, must be registered in segregated accounts, opened in the AIF's or relative AIFM's name, so as to enable identification by owner at any time;
- as regards the second, i.e. those assets which cannot be held in custody in the narrow sense, the depositary must verify the AIF's or relative AIFM's entitlement and must keep an updated register listing all instruments of this type owned by the fund. On verifying whether the AIF or AIFM is effectively the owner of these assets, the depositary must refer to information or documents supplied by the AIFM and, where possible, on external assessments.

Reading this last measure is important so as to be aware of how a peculiar industry, such as the hedge funds industry, works; in fact, a structure featuring concatenation of funds is typical of this market segment, as in the master-feeder model, with the consequence, for example, that the only AIF assets with registered offices in Italy can be the shares of one or more AIFs with offshore registered offices, which, in their turn, hold shares of other hedge funds and so forth. Substantially, the asset which the depositary with registered offices in Italy receives from the AIFM is often a simple receipt from a bank registered in an offshore centre.

All this becomes significant especially in view of the discipline dictated by the AIFMD as regards depositary's liability: the latter is, in fact, liable towards the fund and relative investors for loss of the financial instruments held in custody, unless the depositary is able to prove that said loss was caused by an external event beyond its reasonable control, the consequences of which would have been unavoidable despite all reasonable efforts to the contrary. As regards other assets, the depositary shall be liable for all other losses endured by the fund or relative investors owing to negligent or intentional failure to fulfil its obligations pursuant to the AIFMD.[37]

The depositary shall however preserve the possibility of delegating its safe-keeping functions,[38] by complying with a series of specific requirements listed at paragraph 11 of Article 21, among which the requirement that the delegation does not occur to get around constraints imposed by the directive and that objective reasons persist motivating said delegation. As depositaries will, by means of the custody delegation, have the possibility of discharging their liabilities onto the delegated subject, granted that dele-

[37] Article 21(12): "The depositary shall be liable to the AIF or to the investors of the AIF, for the loss by the depositary or a third party to whom the custody of financial instruments held in custody in accordance with point (a) of paragraph 8 has been delegated. In the case of such a loss of a financial instrument held in custody, the depositary shall return a financial instrument of identical type or the corresponding amount to the AIF or the AIFM acting on behalf of the AIF without undue delay. The depositary shall not be liable if it can prove that the loss has arisen as a result of an external event beyond its reasonable control, the consequences of which would have been unavoidable despite all reasonable efforts to the contrary. The depositary shall also be liable to the AIF, or to the investors of the AIF, for all other losses suffered by them as a result of the depositary's negligent or intentional failure to properly fulfil its obligations pursuant to this Directive".

[38] No other depositary function can be delegated. Article 21(11): "The depositary shall not delegate to third parties its functions as described in this Article, save for those referred to in paragraph 8".

gation took place in compliance with procedures established by the AIFMD and that the contract has been entered into in writing,[39] we can reasonably expect widespread use of said delegation.

Measures regarding transparency are structured in three parts: yearly report (Article 22), disclosure to investors (Article 23), reporting obligations to competent authorities (Article 24).

The AIFM introduces the obligation for AIFMs to prepare an annual report for each European AIF and for each AIF marketed in the European Union; this report must be made available to the competent authorities and investors (upon request) no later than six months after the financial year's end. The annual report must at least include the following elements:

- a balance-sheet or a statement of assets and liabilities;
- an income and expenditure account for the financial year;
- a report on the activities of the financial year;
- any material changes in the information listed in Article 23 during the financial year covered by the report;
- the total amount of remuneration for the financial year, split into fixed and variable remuneration, paid by the AIFM to its staff, and number of beneficiaries, and, where relevant, carried interest paid by the AIF;
- the aggregate amount of remuneration broken down by senior management and members of staff of the AIFM whose actions have a material impact on the risk profile of the AIF.

We can observe how the annual report's minimum contents substantially traces the UCITS IV provision, added by the last three points above: in particular, as regards the fourth point, information which could fall within this category are those concerning side letters.

As regards disclosure to investors, Article 23 provides that the AIFM must supply investors with a long series of information, among which:

- investment strategy and procedures by which the AIF can change said strategy;
- a description of the valuation procedures and pricing methodology used for assets;

[39] Article 21(13): "The depositary's liability shall not be affected by any delegation referred to in paragraph 11. Notwithstanding the first subparagraph of this paragraph, in case of a loss of financial instruments held in custody by a third party pursuant to paragraph 11, the depositary may discharge itself of liability if it can prove that: (a) all requirements for the delegation of its custody tasks set out in the second subparagraph of paragraph 11 are met; (b) a written contract between the depositary and the third party expressly transfers the liability of the depositary to that third party and makes it possible for the AIF or the AIFM acting on behalf of the AIF to make a claim against the third party in respect of the loss of financial instruments or for the depositary to make such a claim on their behalf; and (c) a written contract between the depositary and the AIF or the AIFM acting on behalf of the AIF, expressly allows a discharge of the depositary's liability and establishes the objective reason to contract such a discharge".

- a description of the liquidity management system, including information about redemption rights under normal and exceptional circumstances, as well as about agreements in force with investors on the subject of redemption;
- all commissions, costs, expenses borne directly or indirectly by investors;
- the identity of the prime broker, a description of any significant agreement entered into between the fund and the prime broker, including a description of conflicts of interest, if any;
- how the AIFM guarantees equal treatment to investors and, should an investor or group of investors obtain preferential treatment, a description of their legal or economic links with the AIF or AIFM;
- the fund's historical performance.

Other requirements are then provided for in Article 24 as regards reporting requirements to competent authorities: the AIFM is obliged to regularly supply information concerning leading markets on which it operates, the financial instruments which it trades for its own AIF,[40] the percentage of illiquid assets owned by each fund, each new agreement, if any, concerning fund liquidity management, risk profile of investments and risk management systems used, categories of the assets in which it invests, results of stress tests provided for in regulations on the issue of risk management and liquidity management.[41]

Finally, hedge funds significantly using financial leverage (an attribute to be defined in the future rulemaking process), are subject to particular and more costly provisions concerning information[42] to be communicated to competent authorities.

Point 5 of Article 24 moreover determines that competent authorities can, when they deem it necessary for systemic risk monitoring purposes, request additional information as compared to the above-mentioned, both on a continuous or *ad hoc* basis, by informing the ESMA on this subject. The European authority can, in its turn, under ex-

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[40] Article 24(1): "An AIFM shall regularly report to the competent authorities of its home Member State on the principal markets and instruments in which it trades on behalf of the AIFs it manages. It shall provide information on the main instruments in which it is trading, on markets of which it is a member or where it actively trades, and on the principal exposures and most important concentrations of each of the AIFs it manages".

[41] Article 24(2): "An AIFM shall for each of the EU AIFs it manages and for each of the AIFs it markets in the Union, provide the following to the competent authorities of its home Member State: (a) the percentage of the AIF's assets which are subject to special arrangements arising from their illiquid nature; (b) any new arrangements for managing the liquidity of the AIF; (c) the current risk profile of the AIF and the risk management systems employed by the AIFM to manage the market risk, liquidity risk, counterparty risk and other risks including operational risk; (d) information on the main categories of assets in which the AIF invested; and (e) the results of the stress tests performed in accordance with point (b) of Article 15(3) and the second subparagraph of Article 16(1)".

[42] Article 24(4): "AIFM managing one or more AIF employing leverage on a substantial basis shall make available information about the overall level of leverage employed by each AIF it manages, a break-down between leverage arising from borrowing of cash or securities and leverage embedded in financial derivatives and the extent to which their assets have been reused under leveraging arrangements to the competent authorities of its home Member State. That information shall include the identity of the five largest sources of borrowed cash or securities for each of the AIF managed by the AIFM, and the amounts of leverage received from each of those sources for each of those AIFs".

ceptional circumstances, itself request the HF's competent authorities (those in the home country), to collect and supply additional information.

From this process, aspiring to establish reinforced disclosure, the role of funds making systemic use of leverage clearly arises. These kinds of funds are defined, at the Directive's Paragraph V,[43] as belonging to a specific category deserving appropriate discipline. In fact, Article 25 provides for a series of special measures for funds which systematically make use of leverage:

- member States must make sure that the competent authorities use information collected as per Article 24, for the purpose of verifying whether use of leverage could contribute to the generation of systemic risk;
- moreover, the aforesaid competent authorities must make information collected available to authorities in other member States, to the ESMA and ESRB;
- the AIFM must prove that leverage limits scheduled for each fund are reasonably determined and complied with continuously. The competent AIF authorities, having evaluated the systemic risk profile which could ensue from use of leverage, have the faculty to place limits on said leverage, following communication to the ESMA, which is held to issue *advice* in favour of the authorities who have decided on action, the ESRB and competent authorities in the home country of funds managed by the AIFM;
- the ESMA will carry out the role of coordination aimed at ensuring that action as mentioned above, be executed by competent authorities according to shared and joint logics;
- the ESMA will be able, on the basis of information received by competent authorities and by taking into account the ESRB's opinion, itself dispose for the adoption of measures aimed at limiting use of leverage by AIFMs.

The above provisions well integrate with those provided for in Charter IX ('Competent Authorities'), in which the powers of competent authorities and the ESMA are defined. After having made it clear that each member State must identify, by informing the E-SMA and the Commission, the authority to which competence is to be ascribed for HF supervision[44] and after having recalled the liabilities of these authorities,[45] Article 46 declines its powers.[46] The directive's evident orientation is to ascribe competent au-

[43] The remaining Articles in this Paragraph are devoted to private equity funds.
[44] See Article 44.
[45] See Article 45.
[46] Article 46. "Powers of competent authorities. 1. Competent authorities shall be given all supervisory and investigatory powers that are necessary for the exercise of their functions. Such powers shall be exercised in any of the following ways: (a) directly; (b) in collaboration with other authorities; (c) under their responsibility by delegation to entities to which tasks have been delegated; (d) by application to the competent judicial authorities. 2. The competent authorities shall have the power to: (a) have access to any document in any form and to receive a copy of it; (b) require information from any person related to the activities of the AIFM or the AIF and if necessary to summon and question a person with a view to obtaining information; (c) carry out on-site inspections with or without prior announcements; (d) require existing telephone and existing data traffic records; (e) require the cessation of any practice that is contrary to the provisions adopted in the implementation of this Directive; (f) request the freezing or the sequestration of

thorities with broad and incisive powers to take action. They will have access to all documents and information considered necessary, shall be able to arrange for inspections, question people, receive documentation on telephone traffic and data files, decide on termination of practices held to be in conflict with the directive, seize assets, suspend AIFM activity, summon the depositary and external auditors for hearings, take any step to obtain compliance with the directive, decide to suspend the issue, repurchase or redemption of units to protect public interest, withdraw AIFM or depositary authorisation, arrange for verifications or investigations, start legal proceedings in the case of a crime. In conclusion, it will be the member States' duty to guarantee that competent authorities have the fullest powers to fulfil their ascribed tasks.

Within this framework of extended powers which will be ascribed to domestic competent authorities, the ESMA will perform a role of coordination and interconnectedness between said authorities.[47] The framework of HFs' supervision which arises

assets; (g) request the temporary prohibition of professional activity; (h) require authorised AIFM, depositaries or auditors to provide information; (i) adopt any type of measure to ensure that AIFMs or depositaries continue to comply with the requirements of this Directive applicable to them; (j) require the suspension of the issue, repurchase or redemption of units in the interest of the unit-holders or of the public; (k) withdraw the authorisation granted to an AIFM or a depositary; (l) refer matters for criminal prosecution; (m) request that auditors or experts carry out verifications or investigations. 3. Where the competent authority of the Member State of reference considers that an authorised non-EU AIFM is in breach of its obligations under this Directive, it shall notify ESMA, setting out full reasons as soon as possible. 4. Member States shall ensure that the competent authorities have the powers necessary to take all measures required in order to ensure the orderly functioning of markets in those cases where the activity of one or more AIFs in the market for a financial instrument could jeopardise the orderly functioning of that market".

[47] Article 47. "Powers and competences of ESMA. 1. ESMA may develop and regularly review guidelines for the competent authorities of the Member States on the exercise of their authorisation powers and on the reporting obligations by the competent authorities imposed by this Directive. ESMA shall further have the powers necessary, including those enumerated in Article 48(3), to carry out the tasks attributed to it by this Directive. 2. The obligation of professional secrecy shall apply to all persons who work or who have worked for ESMA, and for the competent authorities or for any other person to whom ESMA has delegated tasks, including auditors and experts contracted by ESMA. Information covered by professional secrecy shall not be disclosed to another person or authority except where such disclosure is necessary for legal proceedings. 3. All the information exchanged under this Directive between ESMA, the competent authorities, EBA, the European Supervisory Authority (European Insurance and Occupational Pensions Authority) established by Regulation (EU) No 1094/2010 of the European Parliament and of the Council and the ESRB shall be considered confidential, except where ESMA or the competent authority or other authority or body concerned states at the time of communication that such information may be disclosed or where such disclosure is necessary for legal proceedings. 4. In accordance with Article 9 of Regulation (EU) No 1095/2010, ESMA may, where all the conditions in paragraph 5 are met, request the competent authority or competent authorities to take any of the following measures, as appropriate: (a) prohibit the marketing in the Union of units or shares of AIFs managed by non-EU AIFMs or of non-EU AIFs managed by EU AIFMs without the authorization required in Article 37 or without the notification required in Articles 35, 39 and 40 or without being allowed to do so by the relevant Member States in accordance with Article 42; (b) impose restrictions on non-EU AIFMs relating to the management of an AIF in case of excessive concentration of risk in a specific market on a cross-border basis; (c) impose restrictions on non-EU AIFMs relating to the management of an AIF where its activities potentially constitute an important source of counterparty risk to a credit institution or other systemically relevant institutions. 5. ESMA may take a decision under paragraph 4 and subject to the requirements set out in paragraph 6 if both of the following conditions are met: (a) a substantial threat exists, originating or aggravated by the activities of AIFMs, to the orderly functioning and integrity of the financial market or to the stability of the whole or a part of the financial system in the Union and there are cross border implications; and (b) the relevant competent authority or competent authorities have not taken measures to address the threat or the measures that have been taken do not sufficiently address the threat. 6. The measures taken by the competent authority or

from the above-mentioned measures, seems foreordained to radically change the way these subjects operate. In the first place, we go from a model based on discretional choices by member States, to a well-defined, precise and detailed European framework. Competent authorities will have very extensive powers, both for collecting required information and for taking steps towards action deemed opportune. The coordination of the ESMA and its interconnectedness with the ESRB are meant to guarantee that systemic risk be constantly monitored; where needed, wide-ranging and significantly incisive action is scheduled. It is obvious how, under such conditions, many HF activities, today exerted with ample degrees of freedom within domestic contexts still distinguished by modest or non-existing regulation, shall substantially change. As regards protection against systemic risk, the directive does not grant the ESMA any powers for specific action on HFs in the aim of preventing, for instance, short sales of particular financial activities. This power to take action is, instead, the subject of a more general provision, contained in the directive's proposal on short selling,[48] in which, at Articles 18 and 19, provision is made for action by member State competent authorities, in agreement with the ESMA.

Regulation of alternative funds's marketing, contained in Articles from 31 to 43, largely draw inspiration from the 'European passport' system already established for UCITS funds by 2001 European directives, even if the regulations contained in the AIFMD have many peculiarities.

The first aspect to consider is the fact that the Articles concerning marketing exclusively refer to offer of fund shares or units to so-called professional investors, a very restricted category of potential clients identified by the MiFID directive[49] and which includes a series of institutional investors and individual investors meeting with certain requirements.[50] Instead, Article 43 leaves the option up to member States to extend the

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competent authorities pursuant to paragraph 4 shall: (a) effectively address the threat to the orderly functioning and the integrity of the financial market or to the stability of the whole or a part of the financial system in the Union or significantly improve the ability of competent authorities to monitor the threat; (b) not create a risk of regulatory arbitrage; (c) not have a detrimental effect on the efficiency of the financial markets, including reducing liquidity in those markets or creating uncertainty for market participants, in a way that is disproportionate to the benefits of the measures. 7. Before requesting the competent authority to take or renew any measure referred to in paragraph 4, ESMA shall consult, where appropriate, the ESRB and other relevant authorities. 8. ESMA shall notify the competent authorities of the Member State of reference of the non- EU AIFM and the competent authorities of the host Member States of the non-EU AIFM concerned of the decision to request the competent authority or competent authorities to impose or renew any measure referred to in paragraph 4. The notification shall at least specify the following details: (a) the AIFM and the activities to which the measures apply and their duration; (b) the reasons why ESMA is of the opinion that it is necessary to impose the measures in accordance with the conditions and requirements set out in this Article, including the evidence in support of those reasons. 9. ESMA shall review its measures referred to in paragraph 4 at appropriate intervals and in any event at least every three months. If a measure is not renewed after that three-month period, it shall automatically expire. Paragraphs 5 to 8 shall apply to a renewal of measures. 10. The competent authorities of the Member State of reference of the non-EU AIFM concerned may request ESMA to reconsider its decision. The procedure set out in the second subparagraph of Article 44(1) of Regulation (EU) No 1095/2010 shall apply".

[48] European Commission (2010).

[49] Directive of the European Parliament and of the Council (2004).

[50] MiFID Directive, Annex II. "Professional Clients for the Purpose of this Directive. Professional client is a client who possesses the experience, knowledge and expertise to make its own investment decisions and properly assess the risks that it incurs. In order to be considered a professional client, the client must com-

ply with the following criteria: I. Categories of client who are considered to be professionals. The following should all be regarded as professionals in all investment services and activities and financial instruments for the purposes of the Directive. (1) Entities which are required to be authorised or regulated to operate in the financial markets. The list below should be understood as including all authorised entities carrying out the characteristic activities of the entities mentioned: entities authorised by a Member State under a Directive, entities authorised or regulated by a Member State without reference to a Directive, and entities authorised or regulated by a non-Member State: (a) Credit institutions (b) Investment firms (c) Other authorised or regulated financial institutions (d) Insurance companies (e) Collective investment schemes and management companies of such schemes (f) Pension funds and management companies of such funds (g) Commodity and commodity derivatives dealers (h) Locals (i) Other institutional investors (2) Large undertakings meeting two of the following size requirements on a company basis: – balance sheet total: EUR 20 000 000, – net turnover: EUR 40 000 000, – own funds: EUR 2 000 000. (3) National and regional governments, public bodies that manage public debt, Central Banks, international and supranational institutions such as the World Bank, the IMF, the ECB, the EIB and other similar international organisations. (4) Other institutional investors whose main activity is to invest in financial instruments, including entities dedicated to the securitisation of assets or other financing transactions. The entities mentioned above are considered to be professionals. They must however be allowed to request nonprofessional treatment and investment firms may agree to provide a higher level of protection. Where the client of an investment firm is an undertaking referred to above, the investment firm must inform it prior to any provision of services that, on the basis of the information available to the firm, the client is deemed to be a professional client, and will be treated as such unless the firm and the client agree otherwise. The firm must also inform the customer that he can request a variation of the terms of the agreement in order to secure a higher degree of protection. It is the responsibility of the client, considered to be a professional client, to ask for a higher level of protection when it deems it is unable to properly assess or manage the risks involved. This higher level of protection will be provided when a client who is considered to be a professional enters into a written agreement with the investment firm to the effect that it shall not be treated as a professional for the purposes of the applicable conduct of business regime. Such agreement should specify whether this applies to one or more particular services or transactions, or to one or more types of product or transaction. II. Clients who may be treated as professionals on request II.1. Identification criteria Clients other than those mentioned in section I, including public sector bodies and private individual investors, may also be allowed to waive some of the protections afforded by the conduct of business rules. Investment firms should therefore be allowed to treat any of the above clients as professionals provided the relevant criteria and procedure mentioned below are fulfilled. These clients should not, however, be presumed to possess market knowledge and experience comparable to that of the categories listed in section I. Any such waiver of the protection afforded by the standard conduct of business regime shall be considered valid only if suitable assessment of the expertise, experience and knowledge of the client, undertaken by the investment firm, gives reasonable assurance, in light of the nature of the transactions or services envisaged, that the client is capable of making his own investment decisions and understanding the risks involved. The fitness test applied to managers and directors of entities licensed under Directives in the financial field could be regarded as an example of the assessment of expertise and knowledge. In the case of small entities, the person subject to the above assessment should be the person authorised to carry out transactions on behalf of the entity. In the course of the above assessment, as a minimum, two of the following criteria should be satisfied: – the client has carried out transactions, in significant size, on the relevant market at an average frequency of 10 per quarter over the previous four quarters, – the size of the client's financial instrument portfolio, defined as including cash deposits and financial instruments exceeds exceeds EUR 500,000, – the client works or has worked in the financial sector for at least one year in a professional position, which requires knowledge of the transactions or services envisaged. II.2. Procedure The clients defined above may waive the benefit of the detailed rules of conduct only where the following procedure is followed: – they must state in writing to the investment firm that they wish to be treated as a professional client, either generally or in respect of a particular investment service or transaction, or type of transaction or product, – the investment firm must give them a clear written warning of the protections and investor compensation rights they may lose, – they must state in writing, in a separate document from the contract, that they are aware of the consequences of losing such protections. Before deciding to accept any request for waiver, investment firms must be required to take all reasonable steps to ensure that the client requesting to be treated as a professional client meets the relevant requirements stated in Section II.1 above. However, if clients have already been categorised as professionals under parameters and procedures similar to those above, it is not intended that their relationships with investment firms should be affected by any new rules adopted pursuant to this Annex. Firms must implement appropriate written internal polioffer of alternative funds to retail investors, without prejudice to the right, for domestic legislators, to impose stricter constraints for those funds which will also be marketed retail. Moreover, individual member States shall have the right to impose different regulations as regards different types of alternative funds.

On this subject, we must say that some European Union States have already started to produce regulations aimed at directing their own domestic industries towards the objectives set by the directive, and, at the same time, to modify regulations in force regarding retail marketing; for example, the Irish legislator has recently lowered the minimum investment threshold of hedge funds from 250,000 to 100,000 Euro, in the wake of what has become a rather widespread trend in this industry. A question which comes to mind is whether gradual lowering of the minimum thresholds required to purchase hedge fund shares is due to progressive opening of the market, made possible and hoped-for by the increase in regulations or whether, instead, it is a consequence of competition between financial centres which are attempting, by increasing the potential size of their reference market, to attract the biggest possible number of hedge fund managers.

In any case, on regulating retail marketing of alternative funds, individual member States are subject to an important restriction: they cannot impose stricter regulations on funds coming from other member States. In this way, the principle of a single passport was made more effective, coherently with the directive's objective to create a single European market for AIFs.

In fact, the AIFMD establishes a European passport which, as of 2013 (or when individual member States will have translated the directive's measures into domestic laws), will automatically become a single instrument to market alternative funds inside the European Union. Therefore, as of that moment and as regards funds domiciled inside the European Union and managed by European managers, it will be possible to market fund shares throughout the EU through simple authorisation obtained from the competent authority of the home member State.

Instead, the process which, as intended by the legislator, will lead to enforcement of the passport for non-EU alternative funds and/or managers, will be different: this process draws inspiration from the principle of gradualness, leaving a time lapse of a few years for third countries market participants to comply with the regulations imposed by the AIFMD. In particular, the directive provides that the passport be made available for all different types of funds as of 2015 (subject to the ESMA's positive opinion and subsequent European Commission's decision), but that this regime must co-exist for at least three years (up to 2018) with current private placement domestic regimes, or with domestic laws which, to date, regulate the fragmented European market of alternative investment funds.

As regards those funds which will remain subject to domestic laws and will not request the European passport, till possible, they will also however have to comply with some of the regulations introduced by the directive.

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cies and procedures to categorise clients. Professional clients are responsible for keeping the firm informed about any change, which could affect their current categorisation. Should the investment firm become aware however that the client no longer fulfils the initial conditions, which made him eligible for a professional treatment, the investment firm must take appropriate action".

In particular, non-European funds and/or managers must be domiciled in countries which are not on the black list drawn up by the FATF[51] and whose competent financial authorities have signed cooperation agreements with the relative authorities of member States in which fund clients are domiciled. Moreover, as regards non-European managers, they will however have to comply, up to 2013, with regulations concerning transparency towards investors; instead, as regards non-European funds managed by European companies, while remaining up to 2015 (at least) within the framework of domestic legislation, as regards marketing, the aforesaid shall have to comply with the directive's measures, the only exception being regulations regarding the depositary.

We can therefore suppose that management companies domiciled in third countries will try to remain subject to single domestic laws, till possible, whereas European managers marketing offshore funds will most likely have a greater interest (as of 2015) in requesting the European passport.

8.3. Regulation of HFs in the United States

United States authorities have also, by means of the DFA, chosen to change the HF industry's structure, opting for regulation of subjects involved in this market. Inside reform law, various measures appear aiming at overall HF discipline, but the section more directly addressing this subject is contained in Title IV, called 'Private Fund Investment Advisers Registration Act', which, for the first time, effectively establishes that a great number of AIFs dealing and marketing their own products in the US, must register with the Securities and Exchange Commission (SEC).

Title IV of the Dodd-Frank Act amends the 1940 Investment Advisers Act and cancels a specific regulation it contains which is often used by hedge and other alternative fund managers in the aim of dodging the obligation to register as investment advisers; in fact, the above-mentioned regulation provided for exemption of managers with less than fifteen 'clients' and that these managers should not present themselves to the public as a management company or act in the capacity of financial consultant for a management company registered with the SEC.

The basic aspect of this regulation concerned 'client' definition: as a rule, in calculating the numerical threshold mentioned above, management companies were allowed to count each hedge fund or managed fund[52] as a single 'client'. In this way, as the ef-

[51] Actually, the so-called black list drawn up by the Financial Action Task Force on Money Laundering is empty since 2007; to date, no country is considered *non-cooperative* according to FATF itself criteria.

[52] Investment Advisers Act, Article 203(b)(3). "The provisions of subsection (a) [the general investment advisor registration requirement] shall not apply to […] any investment adviser who during the course of the preceding twelve months has had fewer than fifteen clients and who neither holds himself out generally to the public as an investment adviser nor acts as an investment adviser to any investment company registered under title I of this Act, or a company which has elected to be a business development company pursuant to section 54 of title I of this Act and has not withdrawn its election. For purposes of determining the number of clients of an investment adviser under this paragraph, no shareholder, partner, or beneficial owner of a business development company, as defined in this title, shall be deemed to be a client of such investment adviser unless such person is a client of such investment adviser separate and apart from his status as a shareholder, partner, or beneficial owner".

fective number of final investors having adhered to single funds managed was usually higher, even subjects with more significant sizes ended up by avoiding the obligation to register.

At the same time, alternative funds have often taken advantage of regulations[53] which allowed, under certain conditions, exemption from registration as an investment company under the Investment Company Act; on the basis of these regulations, AIFs were not subject to registration funds having a maximum of one hundred investors or funds the shares of which were fully owned by investors classifiable as 'qualified purchasers'.[54] The combined effect of the above provisions was that opportunities to dodge compulsory registration was very high, with authorities consequently losing direct control on subjects operating in this specific segment of the financial industry.

Today, the Dodd-Frank Act imposes registration to all alternative fund managers, unless they fall under one of the explicitly mentioned categories exempt from this obligation:

- foreign private advisers: advisers of foreign funds are exempt from registration if their registered offices are not in the United States, have no more than fifteen clients in the United States and manage, on behalf of these clients, less than 25 million;
- venture capital fund advisers, under the condition their activity is limited to this kind of funds. However, they are obliged by the Dodd-Frank Act to preserve and supply the Sec with information and data, if any, that the Sec itself will deem opportune to request;
- small or medium sized alternative fund managers; managers of private funds, the assets of which are not over 150 million dollars, are exempt from SEC registration as investment advisers. However, funds belonging to this category must preserve and supply the SEC with information and data, if any, which the SEC will deem required.

Title IV of the Dodd-Frank Act also introduces a series of transparency requirements for alternative funds, which will be obliged to register with the SEC on the basis of new regulations. Each private fund will have to supply, upon request and for each fund managed, information as regards the following aspects:

- the total of managed assets and financial leverage level used, including level generated by *off-balance sheet* positions;
- exposure to credit risk;
- open positions and investment strategies;
- valuation policies and practices;
- type of financial instruments owned;
- any agreement or side letter guaranteeing preferential treatment for some investors;

[53] Sections 3(c)(1) and 3(c)(7) of the Investment Company Act.
[54] Definition, to be found in Section 2(51) of the Investment Company Act, includes a series of institutional investors or private investors having investments equivalent to at least 5 million dollars.

- trading practices;
- any other information which the SEC, in agreement with the Commodity Futures Trading Commission (CFTC), will deem necessary and appropriate. On introducing additional transparency requirements, the SEC will be able to establish different core regulations for different categories of alternative funds, by basing itself on size, type and investment strategy pursued.[55]

The SEC is charged with continuously analysing information obtained from documents sent by registered advisers and the latter are likewise held to supply, at any time and upon simple SEC request, every other information which the authority deems opportune to request.[56] The SEC will obviously have to guarantee confidentiality for all data and documents received by advisers, and aforesaid information shall not be subject to compulsory publication, otherwise imposed by the Freedom of Information Act. The Commission will only be able to share information with the CFTC or Congress (on the basis of a confidential agreement) in some specific cases.[57]

The gathering of information, aimed at guaranteeing visibility of HFs offering their own products on the United States market, is carried out by means of two standardised forms which alternative fund advisers must fill in: form ADV, provided for by SEC rules on implementation of the Investment Advisers Act and modified by rule No. IA-3060, on July 28th, 2010, 'Amendments to Form ADV'; form PF, specifically introduced by the SEC to implement the section concerning transparency in Title IV of the Dodd Frank Act.

The ADV form[58] is the form which fund advisers (of any kind) must fill in when applying for registration with the SEC. This form can be filled in electronically, is public and split into two sections. The first section requests a series of information concerning ac-

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[55] Dodd-Frank Act, Section 404(2). "Such other information as the Commission, in consultation with the Council, determines is necessary and appropriate in the public interest and for the protection of investors or for the assessment of systemic risk, which may include the establishment of different reporting requirements for different classes of fund advisers, based on the type or size of private fund being advised".

[56] There is a limit to the control authority's requests, insofar as the production of additional information must not involve excessive costs or loss of time for the adviser; this limitation, clearly aimed at protecting supervised subjects, introduces obvious elements of ambiguity in the relationships between these subjects and the supervisory body.

[57] Dodd-Frank Act, Section 404(2). "(8) Commission Confidentiality of Reports. – Notwithstanding any other provision of law, the Commission may not be compelled to disclose any report or information contained therein required to be filed with the Commission under this subsection, except that nothing in this subsection authorizes the Commission – (A) to withhold information from Congress, upon an agreement of confidentiality; or (B) prevent the Commission from complying with – (I) a request for information from any other Federal department or agency or any self-regulatory organization requesting the report or information for purposes within the scope of its jurisdiction; or (II) an order of a court of the United States in an action brought by the United States or the Commission. (9) Other Recipients Confidentiality. – Any department, agency, or self-regulatory organization that receives reports or information from the Commission under this subsection shall maintain the confidentiality of such reports, documents, records, and information in a manner consistent with the level of confidentiality established for the Commission under paragraph (8)".

[58] <http://www.sec.gov/about/forms/formadv.pdf>.

tivity performed, company ownership, clients, staff, affiliated companies, if any, and any kind of legal event connected to the company or its staff.

The second section, modified and in force at the beginning of 2011, obliges management companies to supply information to clients using simple and clear language, so as to enable effective awareness as regards the features of the product and its risk profile. This section of the ADV form is, in its turn, split into two sub-sections: section 2A, which contains 18 items,[59] generically describing adviser activity, and section 2B which includes basic information on the most important members forming company staff.

The SEC then proposed a form exclusively addressed to AIFMs, as an implementation of the provisions introduced in Sections 404 and 406 of the Dodd-Frank Act; the objective is to put in practice the transparency requirements imposed by Title IV of the reform law.

This form, called PF, is split into five sections: filling out the first section is compulsory for all private fund advisers, whereas the others are each addressed to a different type of large private fund advisers (HF, liquidity fund, private equity fund advisers). For the purposes of form PF, HFs are considered all those alternative funds having a compensation system based on performance (*performance fees*)[60] which can operate with a leverage of more than one and a half times its NAV, or with a gross total exposure double its NAV and can short sell securities and other financial instruments.[61] An adviser is considered a large adviser if assets managed are at least 1 billion dollars. Small advisers shall be obliged to update form PF once a year, whereas advisers managing assets over a billion dollars will have to update the PF form on a quarterly basis. Although advisers over this threshold are only ca. 200, they manage more than 80% of total assets managed by the AIF industry in the United States.

In its turn, section 1 of form PF is split into three subsections:

- subsection 1A requests general information concerning the adviser and type of funds managed. In particular, the adviser must specify whether one or more types of funds are managed;
- subsection 1B requests information describing each specific fund. The adviser must fill in a separate 1B form for each fund managed, specifying a series of data such as fund NAV, size and sources of debt;
- subsection 1C, which must also be filled in for each fund managed, must supply information regarding fund strategy, credit risk and compensation

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[59] The 18 items requested by the SEC for section 2A of the ADV form are the following: cover page, material changes, table of contents, advisory business, fees and compensation, performance-based fees, types of clients, methods of analysis investment strategies and risk of loss, disciplinary information, other financial industry activities and affiliations, code of ethics, participation or interest in client transactions and personal trading, brokerage practices, review of accounts, client referrals and other compensation, custody, investment discretion, voting client securities, financial information.

[60] Taking into account unrealized gains.

[61] Form PF; Proposed Rule, p. 8075. "As any private fund that (I) has a performance fee or allocation calculated by taking into account unrealized gains; (II) may borrow an amount in excess of one-half of its net asset value (including any committed capital) or may have gross notional exposure in excess of twice its net asset value (including any committed capital); or (III) may sell securities or other assets short".

mechanisms. Moreover, the adviser must indicate whether each fund adopts a single strategy, or a combination of strategies (*multistrategy*), and must calculate the percentage of funds' assets managed through use of trading software based on pre-established algorithms.

Section 2 is specifically addressed to advisers of large HFs, subject to decidedly stricter transparency provisions; in its turn, the section is split into two subsections:

- subsection 2A requests listing information concerning, on an aggregate basis, all hedge funds which the adviser manages. Items included in this section of the form require specific data on fund exposure to each different type of financial instrument, stating, for each asset class, whether the fund is exposed owing to a long or short position and whether said position has been taken on regulated markets or over-the-counter. Total NAV of all funds must also be broken down according to the geographical composition of investments;
- subsection 2B must be filled in for each single qualifying hedge fund managed by the adviser. A hedge fund is considered qualifying if it has a NAV of at least 500 million dollars,[62] on its own or in combination with other parallel funds. As regards these funds, the adviser must supply information concerning portfolio liquidity, risk profile, positions taken, portfolio composition, guarantees granted to the most important counterparts bearing most of the fund's credit risk. Moreover, for each of the funds, the adviser must regularly supply risk measurement, such as, for example, the monthly VaR. Finally, a theoretical stress test is requested, according to which the adviser must list which effects specific market trends could have on the fund; for example, what could happen to the fund's NAV if raw material prices go down by 5%? And what could happen if the default rate on corporate bonds go up by 1%?

Systemic importance

If Title IV specifically refers to HFs, other DFA titles set forth measures which could strongly affect activity of these subjects.

As explained in Chapter 3, Title 1 of the Dodd-Frank Act, the so-called Financial Stability Act, contains some provisions which enable the Federal Reserve's Board of Governors to assume supervisory powers on *non-bank financial institutions* should impact caused by their activity be considered significant for systemic risk of United States financial markets.[63] The power to nominate a financial company as being systemically

[62] Form PF; Proposed Rule, p. 8149.

[63] Dodd-Frank Act, Section 113(a)(1). "The Council, on a nondelegable basis and by a vote of not fewer than 2⁄3 of the voting members then serving, including an affirmative vote by the Chairperson, may determine that a U.S. nonbank financial company shall be supervised by the Board of Governors and shall be subject to prudential standards, in accordance with this title, if the Council determines that material financial distress at the U.S. nonbank financial company, or the nature, scope, size, scale, concentration, inter-

important and therefore to submit said company to the supervision of the Federal Reserve is granted to the Financial Stability Oversight Council (FSOC), which will have to assess whether financial distress, if any, nature, scope, size, concentration, interconnectedness of the U.S. non-bank financial company could pose a threat to the financial stability of the United States.[64]

On establishing whether supervision is or is not required by the Federal Reserve for a financial company, the FSOC must consider the following factors:

- the size of financial leverage;
- the amount and nature of off-balance sheet exposure;
- the amount and nature of transactions and relationships with other significant market participants in the financial industry;
- the company's importance as a credit and liquidity source for the United States' financial system;
- the company's importance as a credit source for low income or minority group subjects;
- whether the company only manages or owns assets;
- the nature, extension, size, concentration and interconnectedness of activities carried out;
- whether the company is already regulated or not by another United States agency or whether it is subject to similar regulations in another country;
- the amount, nature and geographical location of owned financial assets;
- the company's financing procedures, with reference to dependence on short term debt;
- any other risk factor deemed adequate by the FSOC.

As the FSOC has not, as yet, used these powers granted by Title I of the Dodd-Frank Act, and as the above criteria do not contain specific practical indications, it is not yet clear to what extent hedge fund advisers could be included among subjects potentially submitted to supervision by the Federal Reserve. The consequences of FSOC nomination would be those provided for in Section 165, of which we have already discussed in the Chapter on banks.[65]

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connectedness, or mix of the activities of the U.S. nonbank financial company, could pose a threat to the financial stability of the United States".

[64] To be subject to supervision by the Federal Reserve, the company at issue must be 'predominantly' financial; at least 85% of its revenues must originate from financial activity and 85% of its assets be formed by financial assets.

[65] We recall that Section 165 lists two categories of prudential standards, distinguishing between general rules which the Federal Reserve must adopt with companies under its supervision and 'more stringent prudential standards' which the Fed can decide or not decide to adopt. The following items are part of the first category: capital requirements and limits for use of financial leverage; liquidity requirements; general requirements for risk management, including the establishment of a risk management committee by one year of the beginning of Fed supervision; obligation to periodically supply the Fed and the FSOC with a plan to be carried out in the case of eventual financial problems or bankruptcy; obligation to periodically supply a report on credit exposure, which includes exposure amount towards credit institutions with at least 50 billion dollars in assets. Instead, the following are part of the second category: contingent capital requirements, including a provision which obliges the company to hold a minimum amount of debt ready to be

Finally, in case a non-bank financial company could pose a serious threat to the financial stability of the United States, the Fed's Board of Governors can impose a limit on use of the financial leverage.[66]

Relationships between HFs and banks

Title VI of the Dodd-Frank Act contains, at Section 619, the above-mentioned Volcker Rule, which restricts some activities of banking institutions and financial companies under supervision by the Federal Reserve. The provision, which will come into force on July 21st, 2012,[67] contains two essential aspects, the restrictions described above[68] on proprietary trading by banks and relationships between the latter and HFs.

As regards this last aspect, the approved provision restricts the possibility for banks and other financial companies, submitted to supervision by the Fed, to sponsor or invest in a hedge fund or in a private equity fund. The obvious purpose of the provision is to isolate banks as compared to market participants potentially able to take on significant risk positions, thereby generating losses in the investment portfolio of said banks.

Sponsoring is the term defined in Section 619(h)(5) and includes management, being a general partner or fund trustee, control on most directors of the fund, having the same name of the fund (or a similars name).[69]

Restrictions imposed on banks are decidedly stricter than those imposed on non-bank financial institutions supervised by the Fed. In fact, the Volcker Rule generally prohibits each bank from sponsoring or investing in a hedge fund, unless all the criteria defined in Section 619(d) are satisfied.[70]

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converted into equity capital in the case of financial distress; additional transparency requirements; short term debt limits; other eventual prudential measures, as recommended by the FSOC and deemed suitable by the Federal Reserve.

[66] Dodd-Frank Act, Section 165(j). This constraint, thought for banks, should be adapted to HFs, finding out specific limitations in the use of leverage.

[67] As of that date, the companies involved will have two years time to adapt to the new rules. Beyond the transition period provided for by law, the Federal Reserve will have the possibility to grant involved institutions up to a maximum of three extensions, with a one year duration each.

[68] See Chapter 3.

[69] Dodd-Frank Act, Section 619(h)(5). "The term to 'sponsor' a fund means – (A) to serve as a general partner, managing member, or trustee of a fund; (B) in any manner to select or to control (or to have employees, officers, or directors, or agents who constitute) a majority of the directors, trustees, or management of a fund; or (C) to share with a fund, for corporate, marketing, promotional, or other purposes, the same name or a variation of the same name".

[70] Dodd-Frank Act, Section 619. "(I) the banking entity provides bona fide trust, fiduciary, or investment advisory services; (II) the fund is organized and offered only in connection with the provision of bona fide trust, fiduciary, or investment advisory services and only to persons that are customers of such services of the banking entity; (III) the banking entity does not acquire or retain an equity interest, partnership interest, or other ownership interest in the funds except for a de minimis investment subject to and in compliance with paragraph (4); (IV) the banking entity complies with the restrictions under paragraphs (1) and (2) of subparagraph (f); (V) the banking entity does not, directly or indirectly, guarantee, assume, or otherwise insure the obligations or performance of the hedge fund or private equity fund or of any hedge fund or private equity fund in which such hedge fund or private equity fund invests; (VI) the banking entity does not share with the hedge fund or private equity fund, for corporate, marketing, promotional, or other purposes, the same name or a variation of the same name; (VII) no director or employee of the banking entity takes or retains an equity interest, partnership interest, or other ownership interest in the hedge fund or private equity fund, except for any director or employee of the banking entity who is directly engaged in providing investment advisory or other services to the hedge fund or private equity fund; and (VIII) the banking entity

As far as banks' investments in HFs are concerned, the main restriction introduced by the Volcker Rule is the so-called *de minimis* ceiling: banks will be allowed to invest in a fund which they organise or market, as long as their investment is not over 3% of the fund's capital and as long as the overall value of all investments by single banks in hedge funds or private equity funds does not go over 3% of the Tier 1 core capital of said banks. The second ceiling could be brought further down by SEC, which must guarantee that total investments in alternative funds be immaterial for the banking institutions involved.[71]

Interconnectedness with the derivatives market

Title VII of the Dodd Franck Act, as we have seen, specifically deals with the regulation of derivatives, in the aim of increasing transparency and efficiency, by reducing potential systemic risks which use of these financial instruments can create.

Among factors which can affect HFs' activity, there is the disciplining of subjects trading on the derivatives market: the legislator intends to achieve reform objectives by subjecting swap dealers[72] and 'major swap participants' to registration and minimum capital and margin requirements.

Hedge funds which, in many cases, make ample and extensive use of derivative financial instruments, are involved in the discipline imposed by Title VII of the Dodd-Frank Act, insofar as they can be nominated as major swap participants. This nomination must be carried out if the natural or legal person passes at least one of the following three tests:[73]

- holds a substantial position in at least one the major categories of derivatives as defined by the SEC and by the CFTC (rate swap, credit swap, equity swap, other commodity swap);
- its open positions on the derivatives market determine a significant risk for the counterparty which could have adverse effects on the financial stability of the United States' banking system and financial markets;

discloses to prospective and actual investors in the fund, in writing, that any losses in such hedge fund or private equity fund are borne solely by investors in the fund and not by the banking entity, and otherwise complies with any additional rules of the appropriate Federal banking agencies, the Securities and Exchange Commission, or the Commodity Futures Trading Commission, as provided in subsection (b)(2), designed to ensure that losses in such hedge fund or private equity fund are borne solely by investors in the fund and not by the banking entity".

[71] Dodd-Frank Act, Section 619. "Limitations on Size of Investments. – Notwithstanding any other provision of law, investments by a banking entity in a hedge fund or private equity fund shall – (I) not later than 1 year after the date of establishment of the fund, be reduced through redemption, sale, or dilution to an amount that is not more than 3 percent of the total ownership interests of the fund; (II) be immaterial to the banking entity, as defined, by rule, pursuant to subsection (b)(2), but in no case may the aggregate of all of the interests of the banking entity in all such funds exceed 3 percent of the Tier 1 capital of the banking entity".

[72] Swap dealers are individuals or institutions acting as counterparts in a derivative contract. They too are regulated by provisions contained in Title VII of the Dodd-Frank Act. For further details, see Sections 721-754 and 761-774.

[73] We must stress that the Dodd-Frank Act provides that the test, as mentioned above, must be carried out by exclusively taking into account the legal person and not the entire company group; therefore, for the purpose of this definition, companies are not bound to use the group's consolidated situation.

- is a financial institution making ample use of financial leverage, which is not subject to capital requirements established by an appropriate government agency and holds a substantial position in at least one of the four major swap categories.[74]

The consequences of being nominated a major swap participant are not, as yet, very clear, because, as we have seen, final regulations must still be issued. In any case, the three additional and greater burdens which will be imposed on HFs identified as being major swap participants are the following: greater capital requirements, comparable to those imposed on banks; additional obligations as regards clearing and setting of adequate margins; other requirements connected to the management of counterparty risk.

Independently from eventual nomination as a major swap participant, the other 'regulatory risk' is represented by the CFTC's possibility of imposing position limits on certain derivatives.[75] The peculiarity of this provision is that the CFTC can not only impose position limits on a single institution, but can even address its action to a group of institutions.[76]

8.4. Conclusions

On one hand, evolution of the HF industry and, on the other, the effects of the crisis, have led governance authorities in major financial systems to regulating 'alternative investment'. On one hand, growth in size of assets under management and spreading of investor categories ever closer to the retail market, have changed the original nature of

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[74] Dodd-Frank Act, Section 721. "The term 'major swap participant' means any person who is not a swap dealer, and – (i) maintains a substantial position in swaps for any of the major swap categories as determined by the Commission, excluding – (I) positions held for hedging or mitigating commercial risk; and (II) positions maintained by any employee benefit plan […] for the primary purpose of hedging or mitigating any risk directly associated with the operation of the plan; (ii) whose outstanding swaps create substantial counterparty exposure that could have serious adverse effects on the financial stability of the United States banking system or financial markets; or (iii) (I) is a financial entity that is highly leveraged relative to the amount of capital it holds and that is not subject to capital requirements established by an appropriate Federal banking agency; and (II) maintains a substantial position in outstanding swaps in any major swap category as determined by the Commission".

[75] Dodd-Frank Act, Section 737(a)(4). "Notwithstanding any other provision of this section, the Commission shall establish limits on the amount of positions, including aggregate position limits, as appropriate, other than bona fide hedge positions, that may be held by any person with respect to swaps that are economically equivalent to contracts of sale for future delivery or to options on the contracts or commodities traded on or subject to the rules of a designated contract market subject to paragraph (2)".

[76] Dodd-Frank Act, Section 737(a)(4). "Aggregate Position Limits. – The Commission shall, by rule or regulation, establish limits (including related hedge exemption provisions) on the aggregate number or amount of positions in contracts based upon the same underlying commodity (as defined by the Commission) that may be held by any person, including any group or class of traders, for each month across – (A) contracts listed by designated contract markets; (B) with respect to an agreement contract, or transaction that settles against any price (including the daily or final settlement price) of 1 or more contracts listed for trading on a registered entity, contracts traded on a foreign board of trade that provides members or other participants located in the United States with direct access to its electronic trading and order matching system; and (C) swap contracts that perform or affect a significant price discovery function with respect to regulated entities".

this investment product, justifying regulation aimed at final client protection. On the other, the capacity to significantly affect markets thanks to leverage and investment strategies having a broader range, as compared to 'traditional' funds, has generated widespread consensus at the international level as regards the opportunity of monitoring them, for the purpose of protecting systemic risk. Therefore, reform currently underway marks the passage from a widely non-regulated context, in which the industry's functioning was based on long terms fiduciary relationships between market participants, to a situation in which the search for stability goes through imposition of the provisions established by competent authorities on the basis of guidelines shared at the supranational level.

The fundamental principles of the new provisions appear to be very clear: registration, organisational requirements, obligation to inform authorities and the market, special attention to leading market participants and to those which, owing to strategies pursued, can be considered as being more relevant from a systemic point of view. As compared to the set-up in the process of being defined, a few considerations must be made.

In the first place, we must point out that the new HF discipline must be assessed in combination with other regulatory interventions, which, while referred to other spheres, can affect the activity of these subjects. On one hand, the ESMA's powers to take action in case of market turmoil, for example, can affect all market participants trading on said market and, therefore, HFs too. On the other hand, decisions by the authorities appointed to protect from systemic risk – think about the role ascribed to the FSOC by the DFA – can place these organisations under the jurisdiction of a more forceful and more discretional supervision by the Federal Reserve. Lastly, but perhaps we are dealing with the most significant effect, assessment must be made of the impact provisions being defined on derivatives can have and which would have the effect of submitting activity performed by HFs to new obligations on clearing and margins.

The second observation concerns the effects of regulation on the industry's structure. As we have already commented, on one hand, some aspects of the new discipline represent a spur to industry's concentration. Measures on the issues of organisational requirements imply investments which can be economically viable only in the case of assets under management being larger than those currently existing in many HFs; this is of course true for all market participants wanting to obtain authorisation under the new rules. The incentive towards growth in size could, on the other hand, be limited by the circumstance that leading market participants will most likely be those which are subject to 'special attention' by supervisory authorities, owing to their potential systemic importance.

The third observation concerns new regulations' effectiveness, in particular its coverage capacity as compared to the structure of this industry at global level. As regards this aspect, distinction must be made between HFs operating in countries which are adopting the new regulation and those which are, instead, domiciled offshore and to which these new rules will not apply. The latter will obviously enjoy a 'regulatory advantage', counterbalanced by the impossibility of offering their products on markets where regulations will be in force. Moreover, the two sectors will not be entirely separated but, because of the regulations structure currently being implemented, we can expect significant phenomenon of osmosis.

Leading HF managers, featuring a history of excellent performances,[77] will have the tendency to keep their business offshore and to not accept the cost represented by compliance with the new regulations: they will continue to be approached by institutional investors which do not need to be 'protected' by regulation as they are in the condition to guarantee themselves through accurate due diligence activities carried out by professional advisers.

On the basis of the passive marketing principle contained in the AIFMD, it will be possible for a European investor to put its money into an HF domiciled offshore, therefore not subject to investor home country regulations; similar opportunities are available for a United States investor, which is not prevented from access to HFs which are not registered with the SEC, insofar as they are based offshore. Furthermore, the funds of hedge funds will be able to continue investing in offshore funds as occurs today, without new regulations significantly altering the existing business model.

As an alternative, institutional and professional investors domiciled in regulated countries will be able to open *segregated accounts* with *global custodians* and *prime brokers*, the management of which will be entrusted to worldwide leading large private fund advisers, even if the latter are not registered in Europe or the USA, which will be requested to use the strategy followed for their offshore funds. As compared to their direct investment in offshore vehicles, this solution has higher costs but greater guarantees as regards transparency, liquidity and risk management.

Managers operating in countries which will adopt the new regulations are called upon to redefine their offer strategies, taking into account the crossovers between the new HF discipline and existing discipline regarding 'traditional' investment funds.

This statement is particularly valid for Europe, where the UCITS directive, in particular UCITS III, have contributed to considerably widening the possible range of investments performed by traditional funds, giving them the opportunity to set up 'hedge like' investment strategies. In outline, a European manager will be in the position to offer, separately or jointly, UCITS products replicating hedge like strategies, funds of hedge funds, under similar current conditions, HFs disciplined by the new directive. This last possibility will find its natural slot as regards hedge funds whose investment strategies cannot be replicated by means of UCITS products and the 'regulated' manager will have to face competition by offshore managers, endowing itself with the necessary resources and skills to produce returns in line with market expectations.

Summing up, the industry tends to evolve with increasingly differentiated characteristics between regulated and non-regulated market participants. The first are called upon to valuate costs and benefits of the new regulations and to assess whether being 'alternative', as compared to traditional funds, is a real advantage; the second are in a

[77] The issue of HFs' performance is crucial in understanding the evolutionary prospects of these players: in fact, evidence shows how returns on these investments is, on average, often disappointing for investors, especially when these returns are adjusted for risk assumed. Only managers able to produce returns coherent with risk and costs will be in a position to collect money from investors in a sustainable long term perspective. See, among more recent contributions on this issue, Dichev, Yu (2011).

situation whereby they are able to operate on the basis of conditions similar to those now in place, but have the burden of proposing their services, in terms of costs and returns, as an investment opportunity based on fiduciary relationships similar to the first stage in the hedge fund industry's development. They will turn to qualified investors, aware of the risks assumed through a non-regulated investment. The regulated section of the industry, domiciled and trading within advanced financial systems, will have a much wider client target and growing competition from more traditional investment products.

On this point, it is worth remembering that new debate has started as regards some risk profiles distinguishing the industry of traditional funds, especially in Europe, thanks to exploitation of the opportunities in the UCITS directives. The reason for this attention lies in the fact that it would be paradoxical to regulate HFs, on one hand, in the name of their presumed higher risks and not to be aware, on the other, of the risks arising inside the industry of traditional funds which, by using the UCITS brand, present themselves to the general public as regulated and safe products.

Subjects under observation are Exchange Traded Funds (ETFs), investment products 'replicating' market indexes and traded on major world markets in the same way as different kinds of securities. These two features make it an attractive product for the investor, also for the retail investor, insofar as they allow diversification at low costs and a high degree of liquidity; growth in size of this category of investment funds was, in fact, vertiginous and today they represent about 5% of the asset management industry at global level.[78] Two documents published in April 2011 by the BIS[79] and the FSB[80] have set off warning bells for market participants and supervisory authorities as regards the potential risks inherent to these developments. The reason is that ETFs are, by now, over 40% 'synthetic' products which offer the investor the return on a given index, not through purchase of the securities which go to form said index, but through a *total return swap* contracted between an ETF sponsor and a banking counterparty offering the first, as a guarantee, a basket of different securities as compared to those in the index, usually securities with poor liquidity which the intermediary has in its portfolio for investment purposes. Both the BIS and FSB stress the risk connected to the passage from physical to synthetic ETFs. Greater opacity, difficulty in facing unexpected redemption requests by ETFs final investors, counterparty risk connected to potential counterparty default as regards the total return swap. As well specified in the two above-mentioned documents, the problem is particularly significant in Europe, where synthetic ETFs have developed most owing to investment opportunities granted by UCITS III to 'traditional' fund managers, whereas in the United States, the regulatory framework, based to date on more prudential criteria, does not allow these practices.[81]

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[78] The ETFs market segment has increased by a yearly 40% rate over the last ten years, more than the overall industry of traditional funds, increased by 5%. Most of these funds are listed on European and United States markets.

[79] Bank for International Settlements (2011).

[80] Financial Stability Board (2011e).

[81] Asia has also followed in the wake of Europe. Many of Asia's investment funds have become compliant with the UCITS directive, in the aim of facilitating placement with the general public as regulated products

The warning signal issued by the two above-mentioned international organisations is particularly addressed to Europe and was assimilated by the ESMA in a consultative document[82] on the issue of UCITS products, issued during July 2011. The European market authority asked market participants to share a few reflections on an issue already pointed out in these pages, the demarcation line between UCITS and HF investment products, made weaker by the third directive on traditional investment funds. The consultative document issued by ESMA takes due notice of the fact that this regulatory development has led to hedge fund *retailisation*, and that, at times, these funds are listed on regulated markets (when having the form of ETFs), and that, by virtue of the MIFID directive, all UCITS funds are considered, by definition, 'non-complex products'. The worry of European authorities is obvious and takes note of an aspect we have quoted a number of times in this chapter. On one hand, the UCITS *brand* identifies European products earmarked for the general public for whom there exists an *a priori* assumption for investor protection; on the other, growing investment freedom granted to UCITS fund managers has, in fact, led to the creation of complex products (which the document defines as 'structured UCITS'), at times even listed. In view of pursuing both investor protection and market integrity, the European authorities have begun to reflect on how to make them compatible with HF regulation underway and existing regulation on 'mass' products. On the outcome of consultations with market participants, we shall be able to know what the authorities' orientations will be on this significant issue and to understand if/how action can be decided on this particular segment of the industry of investment products.

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able to protect investor rights. Estimates are that over 70% of ETFs domiciled in Singapore and Hong Kong are UCITS III compliant. See Bank for International Settlements (2011).

[82] European Securities Market Authority (2011).

Chapter 9

Regulatory Powers for Financial Markets: Short Selling, Credit Default Swaps and the Tobin Tax

9.1. Proposed European regulations for short selling and credit default swaps (CDS)[1]

At peak moments in the crisis, financial market regulators in a number of countries sought to curb the volatility and downward pressure of their markets by imposing restrictions on trading activity. Regulators initially acted to stop short selling – that is, selling by a market participant who does not own the assets sold – as this practice was seen as worsening the downward spiral of the prices of numerous financial assets. Many regulators maintained that major investors were behind this behaviour. By short selling, these investors pushed down the prices of financial assets, allowing short sellers to buy back the same assets at lower prices, earning a profit from speculating. By contrast, small investors became caught up in the panic created by the drop in market prices, resulting in them making losses because of these dynamics. On the basis of these assumptions and given the pervasive sense of tension that was so palatable during crisis peaks, the regulatory authorities in a number of countries, including some outside Europe, came up with different solutions[2] in accordance with their assessments of the most appropriate responses. Therefore, some countries pushed ahead with the short selling ban, while others did not.[3] Different responses from market regulators create two types of problems. First, in an increasingly globalised market, different responses mean limited effectiveness as market participants, especially the biggest ones, can move their activi-

[1] See European Commission (2010d).

[2] See European Economic and Social Committee (2011). "In May 2010, Germany announced a ban on naked CDS referencing Euro zone countries, as well as naked short sales of Euro zone sovereign debt and equities of certain German financial institutions. The regulator cited the 'extraordinary volatility of debt securities' to justify the move. This action took other Member States by surprise and upset the markets. As with the short selling of equities, the new EU regulatory powers and provisions will prevent a repetition of such unexpected unilateral action in future".

[3] One also finds, for example, that in August 2011 there were different responses when the financial regulators in France, Italy, Spain and Belgium decided to impose a short selling ban on financial stocks in their respective markets. The measure (later extended for a month at the end of August) was adopted in the wake of speculative pressure having pushed bank shares right down in these countries (in a single trading session, Société Générale's share price loss 15%; the following day the aforementioned authorities brought in the ban). According to estimates published by the *Financial Times* on August 26th, 2011, the measure had a major impact on the trading volumes for these shares. Indeed, after having doubled in the five sessions leading up to the ban, the volume of transactions plummeted by about 62% in the days immediately after the imposition of the ban. In the US market, the SEC caught financial companies by surprise in the summer of 2008 when, between July and September, it imposed restrictions on short selling, thus breaking an established regulatory tradition. The effects of these measures are analysed in Bris (2008); Boehmer, Jones, Zhang (2009); Boultona, Braga-Alves (2010).

ties to more favourable regulatory contexts. Secondly, there is a clear problem of "political responsibility" for the regulatory authorities. In an integrated international financial market, if some national regulators have acted and others have not, then if the countries where no action has been taken experience further downward pressure, the regulators in those countries can be seen as being responsible for having left the gate open to the speculation that is pushing their markets down.

These thoughts not only form the heart of an ongoing debate, but also lead to two conclusions. The first could be termed 'institutional' and it relates to the reasonable need for a common framework of rules to coordinate the action of the authorities in the various countries. This is the goal Europe has set with the regulation discussed in this chapter. The second is more conceptual, relating to the correlation between drops in the market and speculation, which will be dealt with in detail during this chapter.

As far as short selling is concerned it is useful, before delving into the regulations, to briefly examine the transactions in question, which can be divided into two basic categories: (i) covered short selling[4] and (ii) naked short selling.[5] In the first type, it is assumed that the seller does not have the asset but has a guarantee that it is available. Normally, such a guarantee takes the form of a securities lending agreement with a party who possesses such assets. Thus, covered short selling is physically limited by the number of securities available on the market at a given time.[6]

This is not the case for naked short selling and here there are two further considerations that are worth examining. First, such transactions create settlement risk for the market. If the short seller is unable to obtain the securities between the sale and the settlement, then the settlement process fails, forcing the clearing house to seek an alternative solution to meet the buyer's legitimate expectation to receive the purchased securities. Secondly, in essence, naked short selling place no limits on the activities of participants seeking to take advantage of downward trend, facilitating their actions in a way that can have a major impact on the price performance of the securities.

Regardless of the distinction noted above, which is clearly a valuable one for regulators, it should not be forgotten that short selling generally plays a major role in financial markets.[7] It helps to make markets more liquid and thus also improves efficiency. Furthermore, it helps prevent bullish spirals that result in the prices for financial assets reaching levels that might be totally detached from the fundamental values of the assets themselves. Finally, such trades are not merely used to speculate, but can also be adopted in hedging, arbitrage and market making, which are all strategies that play a part in the normal functioning of financial markets.

These thoughts highlight what a tricky balance any regulation for this area must find and maintain. On the one side, there is the legitimate desire of the authorities to control the normal functioning of the markets and to prevent disruption to them. On the

[4] Here, the short seller has an *ex ante* guarantee of the availability of the securities to be handed over to the buyer when the transaction is settled.
[5] Here, by contrast, the short seller has not ensured *ex ante* that the sold securities are available, hoping to obtain this availability between the time of the sale and the time of the settlement.
[6] The concluding remarks to this chapter provide further reflections on this matter. The availability and the costs of the assets to be sold are analysed in Reed (2007).
[7] Saffi, Sigurdsson (2008); Boehmer, Wu (2009); Diether, Lee, Werner (2009).

other, there is the equally legitimate desire of market participants to enter into trades that, at the same time, allow them to undertake completely legitimate activities (such as hedging risk, arbitrage or market making), thus helping the markets to function more efficiently.

The other aspect that came into the firing line of the authorities along with short selling is the credit default swap (CDS), which is a derivatives contract that allows bond buyers to insure themselves against the risk of the bond issuer defaulting.

A standard CDS involves the buyer paying the seller a premium – the value of the CDS – in return for a commitment from the latter to provide a guarantee (for the buyer) against the default risk of issuer of the securities that the CDS buyer wants to insure against such a risk. Therefore, such a contract involves an exchange (the swap) where the risk of the issuer defaulting (the credit default) is transferred from the buyer to the seller of the CDS; the issuer of the security, in such a contract, is a third party to the counterparties directly involved.

Such contracts have clear economic functions, helping to hedge or mitigate risk for holders of various types of bond portfolios. CDS contracts are largely traded between financial counterparties, as can be seen in Table 5.1, and are tied to a multitude of different debt instruments, basically government and corporate bonds. Furthermore, CDS can be used not only for hedging, but also for equally legitimate, as least in principle, speculative profit-taking.

This is done through what are called naked CDS, which are contracts where the buyer of the guarantee has no asset to insure but hopes to sell on the CDS at a higher price. It is important to stress that this is not something specific to these contracts, since it is a feature of all derivative contracts. For example, the buyer of a future or an option, or even of an OTC derivative, will be viewed as seeking to hedge risk or as taking on a speculative position in relation to whether or not this buyer has an asset portfolio to which the derivative is linked. Hence, the CDS market replicates, with its own specific structure, the reasons behind trading both exchange-traded and OTC derivatives. However, CDS transactions took on special importance because the trading of these contracts became entwined with the problems in the government bond market in Europe. In particular, naked CDS – especially those linked to the government bonds of European Union countries – were widely seen as being responsible for the downward pressure placed on such securities.

One can almost intuitively see the market consequences for the widespread use of speculative naked CDS transactions. As buying increases, the CDS contracts increase in price, which is seen as an increase in the risk level for the issuer that issued the securities that the CDS refer to. This is precisely what played out in early 2010 when fears about Greek government debt began to spread. The bond markets entered troubled times that, through the spread of fear, placed pressure on the bonds issued by numerous other countries in the European Union. The crisis is particularly intense at the time of writing, but even when the first symptoms appeared, a few countries chose to ban naked CDS trading because, they believed, since these instruments aided largely speculative strategies, they made market participants see greater risk in the government bonds issued by

European Union countries.[8] Once again, the regulatory measures were adopted sporadically across European nations, underscoring the need, like with short selling, for a common framework.

It is against such a backdrop that the European Union's regulatory efforts for short selling and CDS took place, with these two cases being grouped together because they were held responsible for the bearish pressure on European financial markets. Whether this was a reasonable assumption is something that is looked at in the conclusions to this chapter.

The European Commission took upon itself the onus to interpret the need for reform and to define a common regulatory framework that would bring consistency to the action taken by the authorities in the various countries. This led to a weighty consultation stage involving the governing authorities for securities markets and market participants, resulting in the regulatory proposal published in September 2010 that was referred to in the opening part of this chapter. This proposal was examined and discussed until reaching the amendment adopted by the European Parliament in the spring of 2011 (European Parliament 2011) after talks to find ways to bring together the divergent positions held by Member States on numerous issues (Council of the European Union 2010).

9.1.1. Proposed regulation

The provisions in Chapter I define:

- the scope of application for the regulation, which is broad in practice and designed to encompass all those financial instruments that might be subject to speculative attacks;[9]
- the concepts of CDS,[10] short selling,[11] naked short selling,[12] long and short positions[13] and, in particular, the concept of short positions on CDS.[14]

[8] The European Economic and Social Committee (EESC) issued an opinion on the proposal for regulation of short selling and CDS (analysed later in this chapter) that stated the following: "Naked CDS form the largest part of the CDS universe". However, in the same document, the Committee stated that it did "not feel that an outright ban on naked CDS in all circumstances is justified". See European Economic and Social Committee (2011).

[9] See Article 1. Scope of application. "Scope This Regulation shall apply to the following financial instruments: (1) financial instruments that are admitted to trading on a trading venue in the Union, including such instruments when traded outside a trading venue; (2) derivatives set out in Annex I Section C points (4) to (10) of Directive 2004/39/EC of the European Parliament and of the Council19 that relate to a financial instrument referred to in paragraph (1) or an issuer of a financial instrument referred to in paragraph (1), including such derivatives when traded outside a trading venue; (3) debt instruments issued by a Member State or the Union and derivatives set out in Annex I Section C points (4) to (10) of Directive 2004/39/EC that relate to such debt instruments issued by a Member State or the Union or to an obligation of a Member State or the Union".

[10] See Article 2, point c). "'Credit default swap' means a derivative contract in which one party pays a fee to another party in return for compensation or a payment in the event of a default by a reference entity, or a credit event relating to that reference entity and any other derivative contract that has a similar economic effect".

The proposed regulation is primarily based on transparency, as established in Articles 6 to 11 of Chapter II. Without delving into the technical details of how such transparency is to be achieved, it is possible to note that the spirit of the proposal is essentially to enable national and European financial market authorities to gain knowledge of the major short positions in stocks, sovereign debt instruments and CDS related to sovereign debt taken on by legal or natural persons. Transparency is targeted by creating notification thresholds above which any party taking on a short position must inform the relevant authorities of the size and nature of the position in question. For stocks, the threshold has been set at 0.2% of the equity capital, with further disclosure required for every additional 0.1%. ESMA has the power to amend these thresholds in relation to market development.[15]

The original Commission proposal included, in Article 6, the "marking"[16] of short orders, which was one of the heavily discussed issues during the regulatory process. However, the new version of Article 6 sets forth the methods to be used by market participants to report short sales to the competent authorities, although it does make clear

[11] See Article 2, point p). "'Short sale' in relation to a share or debt means any sale of the share or debt which the seller does not own at the time of entering into the agreement to sell including such a sale where at the time of entering into the agreement to sell the seller has borrowed or agreed to borrow the share or debt for delivery at settlement".

[12] See Article 2, point sa). "'Uncovered short sale' in relation to a share or debt means a sale of the share or debt which does not fulfil the conditions of Article 12(1)".

[13] Long positions are linked to parties that are net buyers of financial assets, while short positions are those linked to parties that are net sellers of financial assets. Point 3 of Article 3 specifies that the calculations for short positions must also include any position held indirectly through a basket, index or exchange traded fund.

[14] See Article 4. "Uncovered position in a credit default swap. 1. For the purposes of this Regulation, a natural or legal person shall be considered to have an uncovered position in a credit default swap relating to an obligation of a Member State or the Union, to the extent that the credit default swap is not serving to hedge against either the risk of default of the issuer where the natural or legal person has a long position in the sovereign debt of that issuer or the risk of decline in the value of any asset or portfolio of assets to the natural or legal person holding such asset or portfolio of assets where the decline of the price of those asset or portfolio of assets has a high correlation with the decline of the price of the obligation of a Member state or the Union in the case of a decline in the creditworthiness of a Member State or the Union. The party under a credit default swap that is obliged to make the payment or pay the compensation in the event of a default or a credit event relating to the reference entity does not by reason of that obligation have an uncovered position for the purposes of this paragraph. 2. The Commission shall be empowered to adopt delegated acts in accordance with Article 36 specifying, for the purposes of paragraph 1: (a) cases in which a credit default swap transaction is considered to be hedging against a default risk and the method of calculation of an uncovered position in a credit default swap; (b) the method of calculating positions where different entities in a group have long or short positions or for fund management activities related to separate funds".

[15] See Article 5. "Notification to competent authorities of significant net short positions in shares. 3. If necessary, the European Supervisory Authority (European Securities and Markets Authority) (ESMA) may issue and send to the European Parliament, the Council and the Commission an opinion on adjusting the thresholds referred to in paragraph 2, taking into account the developments in financial markets. The Commission may, within three months of receipt of the opinion of ESMA, by means of delegated acts in accordance with Article 36, modify the thresholds mentioned in paragraph 2, taking into account the developments in financial markets".

[16] In the original version of the Commission's proposal, the trading venues were required to define procedures to mark the short selling of shares and provide a daily summary for the market.

that this information does not have to be made public.[17] Public disclosure follows what is established by Article 7 for significant net short positions in shares, whereby it is expressly stated that the identity of the holder of the position shall not be made public.

Like for short sales in shares, Article 8 sets forth a similar notification obligation for net short positions in sovereign debt and the related CDS. The Commission has to determine the thresholds beyond which the notification obligation comes into force, taking into account the amount of sovereign debt issued by each country, the turnover on these markets, and the average size of the positions held by market participants in normal trading conditions. Article 10 clarifies that these notification obligations apply to all market participants, regardless of whether they are located inside or outside the European Union.

Every quarter, the competent authorities in the various countries have to provide ESMA with an overview of all the notifications received and the European regulator also has the power to request, at any time, additional information in accordance with its evaluations and needs.

The information provided has a dual benefit as the market authorities are better placed, because of their knowledge of the positions, to assess potential systemic risks and the market as a whole learns about any significant positions that have been taken on.

Chapter III ("Treatment of short sales and credit default swaps") deals with the issue raised at the beginning, effectively banning naked short selling.

This is achieved by requiring the short seller to have obtained, prior to the sale, a guarantee that the instruments are available.[18] The Commission is required to define the technical standards for the provisions in Article 12 in conjunction with ESMA, which has to present a proposal for those standards before January 1st, 2012. Point 1a of Arti-

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[17] See Article 6. "Reporting of short sales to competent authorities. All investment firms and all members of a regulated market or multilateral trading facility shall include in the transaction reports referred to in Article 25(3) of Directive 2004/39/EC a field indicating, for transactions in shares, whether the transaction constitutes a short sale or not. Intermediaries that undertake short sales indicate these as such in the transaction report of such sales at the end of the trading day to the relevant competent authority. That information shall not be disclosed to the public. The Commission shall be empowered to adopt delegated acts in accordance with Article 36 specifying how such information shall be communicated to competent authorities".

[18] See Article 12. "Restrictions on uncovered short sales and credit default swaps. 1. A natural or legal person may only enter into a short sale of a share admitted to trading on a trading venue or a short sale of a sovereign debt instrument where one of the following conditions is fulfilled at the end of the trading day: (a) the natural or legal person has borrowed the share or sovereign debt instrument; (b) the natural or legal person has entered into an agreement to borrow the share or sovereign debt instrument; (c) the natural or legal person has an arrangement with a third party under which that third party has confirmed that the share or sovereign debt instrument has been located and reserved for lending to the natural or legal person so that settlement can be effected when it is due. 1a. A natural or legal person may enter into credit default swap transactions relating to an obligation of a Member State or the Union only where that transaction does not lead to an uncovered position in a credit default swap as referred to in Article 4. 2. In order to ensure consistent harmonisation of this Article, ESMA shall develop draft regulatory technical standards identifying the types of agreements or arrangements that adequately ensure that the share or sovereign debt instrument will be available for settlement. ESMA shall in particular take into account the need to preserve the efficiency of markets especially sovereign bond markets and sovereign bond repurchase markets (repo markets). ESMA shall submit drafts for those regulatory technical standards to the Commission by 31 December 2011. Power is delegated to the Commission to adopt the regulatory technical standards referred to in the first subparagraph shall be adopted in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010".

cle 12 was not in the original Commission proposal, but was added during the law-making process to create the same ban for naked CDS transactions relating to the sovereign debt securities of Member States.

Articles 14 and 15 govern exemptions, which are a tool employed in the regulation to balance the planned control of market performance with the equally important need to safeguard trading efficiency. First and foremost, exemptions are set forth for shares that, despite being traded on European markets, are principally traded outside the Union. Secondly, there is an exemption for market making because of the significant role this plays in the normal functioning of the market and because it was accepted that those who engage in market making activities rarely take on significant positions on their own account, except for short periods and primarily as a result of the customer's conduct. The parties that plan to use this exemption must notify the relevant authorities in their country. Finally, there is an exemption for activities linked to the functioning of the primary market.

Chapter V ("Powers of intervention of competent authorities and of ESMA") acknowledges that, in exceptional situations, the competent authorities in different countries have the power to limit or ban transactions that, in normal conditions, would be considered perfectly legitimate. The goal is to deal with any threats to market stability in a Member State or, on a broad scale, in the European Union. More specifically, this involves limits on short selling, on CDS transactions and, more generally, on derivatives trading. The proposal seeks to coordinate action by the competent authorities in the various countries, establishing powers and procedures that are as uniform as possible.[19] Article 16a was another element that was not included in the original proposal, but that was added during the law-making process. It empowers the competent authorities, in certain conditions, to require market participants that systematically lend securities to notify any significant increase in the fees for such lending. This would indicate a widespread and growing increase in market participants borrowing instruments so as to short sell them using the covered short selling formula. The powers granted to the competent authorities for the cases envisaged by the regulation are broad and clearly divided. On the one hand, this includes placing restrictions on the transactions in question (i.e. short selling, CDS and transactions that produce similar results), while on the other, it also involves placing temporary limits on the transactions themselves. Prior to imposing the measures indicated in Articles 16 to 19, the competent authorities have to notify ESMA and the other competent authorities about the measures.[20]

ESMA's key role in the framework can be summarised as follows:

- it facilitates and coordinates the actions by the various competent authorities, seeking to ensure consistency of method between them (terms and methods of action, taking particular note of the proportionality of the pro-

[19] The first part of this coordination is disclosure. This informs the competent authorities in other countries that an authority in another country plans to adopt exceptional measures.

[20] Pursuant to point 4 of Article 22, a competent authority in a Member State that receives a notification from an equivalent authority in another country can decide to adopt a similar measure in its country if it feels that this could help the notifying authority achieve the desired market control.

posed measure given the problems faced). In other words, it is about overcoming the weakness that arose following action undertaken autonomously and in different ways by the authorities in the individual countries. Within 24 hours of ESMA receiving a notification from a Member State, it issues a decision stating whether the proposed measure is necessary and appropriate given the market situation.[21] On the other side, if ESMA feels a specific measure should be adopted across Europe, its decision binds the competent authorities to adopt it within 24 hours;

- furthermore, pursuant to Article 24, ESMA can act directly when there is a significant threat to the proper functioning of the financial markets in the European Union and the authorities in the relevant Member State have not acted. It has already been shown that the authorities in the Member States are the first bodies that should determine whether the market is facing an exceptional situation and action is needed; however, under the regulation, ESMA has the power to act first when the competent authorities in the Member States do not feel action is necessary. This first mover power attributed to ESMA was met with sizeable opposition during the process to produce the regulation in its current format and it requires the market conditions in a Member State to have major cross-border implications.[22] The

[21] See Article 23. "Coordination by ESMA. 1. ESMA shall perform a facilitation and coordination role in relation to measures taken by competent authorities under Section 1. In particular ESMA shall ensure that a consistent approach is taken by competent authorities regarding measures under Section 1 especially regarding when it is necessary to use powers of intervention under Section 1, the nature of measures imposed and the commencement and duration of any measures. 2. After receiving notification under Article 22 of any measure that is to be imposed or renewed under Article 16, 16a, 17 or 18, ESMA shall within 24 hours issue a decision on whether the measure or proposed measure is necessary to address the exceptional situation. The decision shall state whether ESMA considers that adverse events or developments have arisen which constitute a serious threat to financial stability or to market confidence in one or more Member States, whether the measure or proposed measure is appropriate and proportionate to address the threat and whether the proposed duration of the measures is justified. If ESMA considers that measures by other competent authorities are necessary to address the threat, it shall also state it in the decision and request those competent authorities to introduce such measures within 24 hours. The decision shall be published on ESMA's website. 3. If ESMA considers that a measure should be introduced at Union level its decision shall be binding on competent authorities and shall be introduced within 24 hours. 3a. ESMA shall regularly review measures under this Article and in any event at least every three months. If a measure is not renewed after that three-month period, it shall automatically expire".

[22] See Article 24. "ESMA intervention powers. 1. In accordance with Article 9(5) of Regulation (EU) No 1095/2010, ESMA shall, where both conditions in paragraph 2 are satisfied, take one or more of the following measures: (a) require natural or legal persons who have net short positions in relation to a specific financial instrument or class of financial instruments to notify a competent authority or to disclose to the public details of any such position; (b) prohibit or impose conditions relating to natural or legal persons entering into a short sale or a transaction which creates, or relates to, a financial instrument and the effect or one of the effects of the transaction is to confer a financial advantage on the natural or legal person in the event of a decrease in the price or value of another financial instrument; (c) limit natural or legal persons from entering into credit default swap transactions relating to an obligation of a Member State or the Union or limit the value of uncovered credit default swap positions that a natural or legal person may enter into relating to an obligation of a Member State or the Union; (d) prevent natural or legal persons from entering into transactions relating to financial instruments falling within the scope of this Regulation or limit the value of transactions in those financial instrument that may be entered into. A measure may apply in circumstances or be subject to exceptions specified by the relevant competent authority. Exceptions may in particular be specified to apply to market making activities and primary market activities. 2. ESMA

> European Commission is required to define the criteria and factors to be used to determine that a market is facing an exceptional situation that requires equally exceptional action. The powers to act are broad and incisive, effectively copying those powers that the competent authority in the Member State should have used to act.

The other Articles in the regulation complete the framework described, detailing the powers of the competent authorities in the individual countries, the obligation of these authorities to cooperate with each other, with ESMA and with non-EU countries, the powers of these authorities to impose penalties, and the methods to be used by the European Commission to produce what is required of it under the regulation.

The draft regulation has not yet completed the parliamentary approval process and there is a fairly widespread feeling that the European institutions should accelerate the process so that the much needed common framework is created.[23] The current version of the regulation is due to come into force on July 1st, 2012.

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shall take a decision under paragraph 1 only if both of the following conditions are fulfilled: (a) the measures listed in points (a) to (d) of the first subparagraph of paragraph 1 address a threat to the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union and there are cross border implications; (b) a competent authority has not taken measures to address the threat or the measures that have been taken do not sufficiently address the threat. 3. When taking measures referred to in paragraph 1 ESMA shall take into account the extent to which the measure: (a) will significantly address the threat to the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union or significantly improve the ability of competent authorities to monitor the threat; (b) will not create a risk of regulatory arbitrage; (c) will not have a detrimental effect on the efficiency of financial markets, including reducing liquidity in those markets or creating uncertainty for market participants, that is disproportionate to the benefits of the measure. Where a competent authority or competent authorities have taken a measure under Article 16, 16a, 17 or 18, ESMA may take any of the measures referred to in paragraph 1 without issuing the decision provided for in Article 23. 4. Before deciding to impose or renew any measure referred to in paragraph 1, ESMA shall, where appropriate, consult the ESRB and other relevant authorities. 5. Before deciding to impose or renew any measure referred to in paragraph 1, ESMA shall notify competent authorities of the measure it proposes. The notification shall include details of the proposed measures, the class of financial instruments and transactions to which they will apply, the evidence supporting those reasons and when the measures are to take effect. 6. The notification shall be made not less than 24 hours before the measure is to take effect or to be renewed. In exceptional circumstances, ESMA may make the notification less than 24 hours before the measure is intended to take effect where it is not possible to give 24 hours notice. 7. ESMA shall publish on its website notice of any decision to impose or renew any measure referred to in paragraph 1. The notice shall at least specify the following: (a) the measures imposed including the instruments and class of transactions to which they apply and the duration of the measures; (b) the reasons why ESMA is of the opinion that it is necessary to impose the measures including the evidence supporting the reasons. 8. A measure shall take effect when the notice is published or at a time specified in the notice that is after its publication and shall only apply in relation to a transaction entered into after the measure takes effect. 9. ESMA shall review its measures referred to in paragraph 1 at appropriate intervals and at least every three months. If a measure is not renewed after that three-month period, it shall automatically expire. Paragraphs 2 to 8 shall apply to a renewal of measures. 10. A measure adopted by ESMA under this Article shall prevail over any previous measure taken by a competent authority under Section 1".

[23] At an Ecofin meeting in May 2011, representatives of the 27 EU countries confirmed that they generally agreed with the structure and contents of the proposal. The only reservation came from the UK, which saw ESMA being given excessive power. The European Parliament called on national governments to grant ESMA special powers to bypass national supervisory authorities. France and Germany once again asked for swifter approval of the rules for banning short selling and limiting the scope of CDS transactions. Barnier asked the Council and EU parliament to vote after the summer break.

In short, should the regulation become law in its current format, it is reasonable to expect that it would produce some desirable results.

First, the competent authorities would be able to obtain accurate information about the situation in markets at a given time. Notifications from participants would enable the authorities to gauge whether certain market trends are the result of short selling or investors disposing of certain positions. The notification required of those that lend securities to short sellers should provide, in the minds of European lawmakers, similar information to above, although practical experience shows that the prices for securities lending, given the structural abundance of material to lend, tend to be quite stable and thus the obligation in Article 16a would not come into effect. The new information base that governing authorities can access is a desirable development, laying the groundwork for actions that respond to actual market conditions.

Secondly, there is increased coordination of action at European level. Until the publication of the rules that categorise as objectively as possible the conditions in which action is necessary, the regulation will tend to relieve the authorities of the responsibility of taking action where a large degree of discretion is involved. Finally, ESMA's ability to act in cases of systemic risk where national authorities have not acted completes the framework for these powers, ensuring Europe has an effectively comprehensive framework.

Following these premises, it seems necessary to table a few preliminary considerations about the logic underlying the actions in question.

Starting with short selling, the first thought relates to the tendency, when stock prices drop substantially, to assume that speculation is the sole cause and the reason for the disruption in price equilibrium. For effective action it is essential that the actual reasons behind the selling causing the drop are analysed and objectively assessed. It is necessary to understand whether the participants are selling assets they do not possess or if the sell offs relate to a need to dispose of positions held by long-term investors. Clearly, in the latter case, measures preventing short selling will not be effective in stabilising market prices. During the crisis and until recently, the authorities in numerous countries enacted bans on short selling that had no impact on the price performance of related assets. In all these cases, selling was a result of market participants fundamentally not having trust in the issuers of the instruments and the rapid disinvestment of structurally long positions was the real cause behind the drop. Doubtless, professional speculators sought to take advantage of this market trend to make a profit. The ban on short selling might have stopped the latter, but it certainly did not put the handbrake on the former, which was the real reason behind the downward spiral. There have been some very recent cases where the prices of numerous financial instruments dropped significantly even though short selling bans were in place for such instruments. Understanding the nature and reasons for selling (the participants involved, where they are located, respective volumes and so on) is the first requirement for ensuring the governing authorities can take effective action. The notification obligation for short selling set forth in the regulation should help the authorities to get a clear picture of the problem.

The second consideration relates to naked and covered short selling. The proposed regulation draws a precise distinction between these two cases that are, in abstract terms, different but that also have numerous similarities that can reduce the effectiveness of any regulatory intervention. For covered short selling it is worth recalling that the only limit is the availability of securities in the immense securities lending market. Indeed, market participants that plan to short sell securities can simply borrow them from other participants, paying a lending commission. The “theoretical warehouse” that short sellers can turn to if they want to make sales is that of long-term investors like traditional mutual funds or other long-term investors that hold securities portfolios as a stable investment. It is not uncommon for such entities to enter into securities lending agreements with financial intermediaries that, in return for a fee, gain access to this securities warehouse to underpin their short selling. The dimensions of this warehouse are so substantial that securities lending prices are stable, at least for the most liquid ones. Therefore, in covered short selling it is necessary for market participants to ensure they have access to the securities, but the sheer number of securities held by long-term investors and lent to bearish speculators is so large, compared to the number of daily trades on the markets, that the downward spiral cannot be thwarted by banning one type but allowing the other. In other words, bearish speculators are not effectively restricted in their activities by a distinction in the regulation between covered and naked short selling. Paradoxically, one could argue that only action involving the securities lending market would curb bearish speculation by removing the raw materials needed to feed such strategies. However, such action would side-line bearish speculation, not (major) drops in the market prices of financial assets caused by investors not being happy with the fundamental conditions of issuers.

Furthermore, the rules governing short selling create substantial *ex-post* control problems for the authorities. Normally, the term short selling refers to overnight transactions, but this overlooks that a market participant could engage in intraday naked short selling provided these positions are closed, with the buyback of securities, before the end of the trading day. It would require complex *ex-post* checks by the authorities to uncover such an infringement.

The bottom line is that the political debate in the search for technical and regulatory solutions to problems like those in question often lacks the necessary serenity to deal with such issues objectively. Drops in the market prices of securities held by investors can result in net losses in wealth that might have serious macroeconomic implications in terms of consumption and, consequently, investment decisions. The idea that regulation can be used to slow such events is a tempting one that, in good faith, seems hard to resist. The notion that the solution is to fight speculation by banning such operations highlights the desire to follow the easier path, rather than accepting that the problem is the fundamental weakness of the companies or countries behind the securities that have seen price drops. Thus, it is hardly surprising that the many attempts in various countries to counteract short selling have often ended in dismay as prices continued their downward trend despite the bans.

Without forgetting the technical differences, one can make similar considerations in relation to CDS trading. The details in Table 5.1 show that this is a relatively small segment of the enormous OTC derivatives market. In terms of notional value, such contracts have never exceeded 10% of the overall market and, in late 2010, this percentage had dropped to around 5%. This is, by definition, a very opaque market (at least until the rules about central clearing come into effect) about which one has knowledge of the daily prices for the trades executed by intermediaries, but only fragmented information about other important aspects, such as volumes and numbers of contracts traded. From the point of view of the authorities, the worries about CDS transactions relate to the links that these have with the market for sovereign debt securities. Once again, there is no shortcut to solving the problems that the market is highlighting through its actions. The pressure on government bonds in the Euro area originates with the lack of trust that investors have in the financial equilibrium of the public finances in some Member States, which abandoned their currencies and adopted the Euro, thinking that this choice could favour a convergence process for their respective economies. However, in many cases, this process has not been completed. Speculation can certainly take advantage of such weakness and amplify market swings, but it is hard to argue that such speculation can operate in a context without some fundamental problem.[24]

9.2. Tobin tax?

The current debate on how to govern the financial industry and especially the desire of regulators to combat speculation in the markets has given new life to the idea of placing a tax on financial transactions. Many supporters of this notion refer, both on a theoretical and cultural level, to the idea proposed by Nobel laureate Tobin[25] to tax currency transactions. Briefly looking at the situation in those years provides some interesting food for thought in assessing the current conditions in which the proposal has risen to the fore again. Tobin's idea was formulated at a time of turbulence in world foreign-exchange markets following the definitive end of the fixed exchange regime that had been put in place, while World War II still raged, at the 1944 Bretton Woods conference. The international monetary system adopted at that conference was based on fixed exchange rates between (participating) currencies and the dollar and between the latter and gold ($35 per ounce). The international monetary structure that resulted from the 1944 agreements was consistent with the "fundamental nature" of the relationships in place at that time among Western economies, where the United States enjoyed political, military and economic hegemony. The end of this system officially came on August 15th, 1971, but was widely expected because of the instability in currency and gold markets well before then. It is clear that the end of that system was by no means attribut-

[24] European Economic and Social Committee (2011). "2.12. While the focus on CDS is justified, there is still a danger that it deals with the symptom of the problem not the cause. The cause is the unresolved political and economic dilemma in which a currency union is faced with a debt crisis. The dilemma has caused economic uncertainty. Lenders need to cover their risks. Opportunists seek to profit from the uncertainty. It is difficult to separate one from the other. Bankers may be profiting, but eurozone governments are giving them every opportunity to do so".

[25] James Tobin first proposed taxing currency transaction in 1972, in the immediate aftermath of the collapse of the international monetary system created at Bretton Woods in 1944. He first presented his theory during the Janeway Lecture at Princeton University and it was later published in 1974 in *The New Economics One Decade Older*, pp. 88-92. It is included in a 1978 Article published in the Eastern Economic Journal. See Tobin (1978).

able to currency speculation, although many market participants engaged heavily in such transactions, betting on the inability of the United States to maintain gold convertibility. In other words, speculators in those days were those parties that realised how things were headed with the development of the European and Japanese economies. The latter had grown dramatically compared to that of the United States from World War II, when the system had been planned, to the late 1960s and the role of the dollar as the international currency meant the amount of this currency that was in circulation was incompatible with the gold convertibility guarantee.[26] The end of a system that had long guaranteed development and stability for Western economies resulted in a prolonged period of turbulence for currency markets that created new problems for the authorities in charge of these economies. In a system of flexible exchange rates, macroeconomic imbalances were immediately reflected in exchange rates in the currency market, where prices varied at speeds well above those with which macroeconomic governance bodies could make structural adjustments. This speed with which financial markets showed changes – a fact that was noted at the start of the first chapter – led Tobin to suggest "throwing sand in the wheels" of the markets. Tobin believed that imposing a tax on currency transactions would make speculation less attractive, reducing short-term volatility and bringing currency trends more into line with medium/long-term economic dynamics. The "by-product"[27] of the proposal would be fiscal revenues that, according to this leading economist, would have gone to the World Bank to finance development projects in the least economically developed countries.

The situation today is very different, although some interesting parallels can be drawn. The major transactions are no longer only foreign-exchange transactions. There are now also those for all the other major asset classes that are traded on the world's main financial markets, shares and bonds (government and non), money market instruments, derivatives, asset management products and so on. Financial innovation and the liberalisation of the 1980s have drawn trading to previously unknown financial markets. Objectively, turning back the clock on all these developments seems both unrealistic and difficult. Today, though, there are "fundamental" problems that are not, in essence, unlike those around at the time when the Tobin tax first came into the heart of the debate. Today, the markets in the Euro area are under attack, especially the government bonds of a number of Member States and the shares listed on European stock markets (notably the shares of financial firms). The first necessity is to question why these attacks are taking place if, in observance of the principles of rationalism, we assume that speculation – if speculation is what it is – does not embark on lost causes. The creation of the Euro is a historic passage for European countries, not the end result. The monetary union was designed to strengthen an integration and convergence process where the structural imbalances of some countries were to be reduced, creating a common

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[26] Tew (1984); Triffin (1960); Velo (1976).

[27] In one of his last interviews, with the weekly *Der Spiegel* in 2001, Tobin re-expressed the intent of his position from 30 years before in order to distance himself from the anti-globalisation movements that were using the Tobin tax as an argument to support their protests. In reiterating his opposition to such movements, he recalled that the sole purpose of the tax was to put a brake on currency markets and to side-line speculation. The revenues from the tax, seen by anti-globalisation movements as a global way to redistribute income, would merely be a "by-product" of the main goal.

framework where the economic and financial conditions were substantially level. The persistence of these imbalances, though, is an on-going threat to the whole project. The differences between Euro countries, especially in terms of public finances, are one of the areas that brings into question the stability of the whole area. Indeed, those European countries that adopted the Euro gave up monetary sovereignty and they are required to meet their own debts by increasing fiscal revenues or reducing public expenditure, since they cannot simply print more money.[28] The strong mandate given to the European Central Bank to ensure price stability means it clearly cannot help States in difficulty by printing more euros. In such a situation, re-balancing public finances has to be done in a more painful way, since a theoretically possible means has been taken off the table.

The intersection between government bond risk and the potential losses of bank assets has been dealt with in depth in other parts of this book. The level of government securities held by European banks is structurally high, meaning that, as a consequence, the risk of capital losses for the banks holding the securities is high.

Finally, the modest growth outlook for Europe compared to other parts of the world makes the backdrop less favourable. The response of the financial markets to these problems is what is currently playing out, with speculation probably emphasising matters. However, it would seem that making markets less flexible through regulatory measures is not the "definitive" answer to these problems.

In this context, as has been shown, the idea of introducing a financial transaction tax has entered the debate once more. At the time of writing, this idea has become even more topical, especially since the political leaders of some major Member States – Germany and France – have made it clear that they are favourable to such an option.[29] The goals are those that have already been indicated, especially to reduce speculation that places pressure on the prices on numerous financial assets traded in European Union markets.

The possible introduction of such a tax has, understandably, resulted in numerous different standpoints being expressed. From the academic side, scientific analysis has produced various studies of this problem, including some very recent ones given how topical this issue is. The resultant publications, as referred to in the footnote, reach some very different conclusions.[30]

The following is a summary of the key arguments on the matter:

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[28] Observing the prices of CDS on European countries and the dynamics of these over recent months, one sees how those related to countries in the Euro area show the greatest risk. The European countries that are not in the monetary union have lower values, since they can still print money to pay debt. Similar considerations also hold for the United States, which is not limited by any restriction on the possibility of printing more and more dollars.

[29] According to the European Commission's spokesperson, Cristina Arigho, the Commission will finalise a proposal to tax financial transactions to present at the next G-20 summit, to be held in France in early November 2011. According to official declarations, France, Germany and Spain are in favour of such a tax, while England opposes it.

[30] Matheson (2010); Honohan, Yoder (2010); Baker (2010); International Monetary Fund (2010); Schulmeister (2010); Davidson (1998).

- one argument put forward by those in favour of the tax is that there is excessive liquidity in the financial markets and, consequently, excessive volatility. This could mean constant overshooting of asset trading prices compared to their fundamental worth (Schulmeister 2010). This could happen because transaction costs are too low and participants face no barriers to 'excessive' trading, as can be gauged from the ratios, judged to be similarly excessive, between volumes traded on the financial markets and the real variables of economic systems, especially the gross domestic product of the various countries (International Monetary Fund 2010). In this outlook, "throwing sand in the wheels" of markets would help to bring prices closer to the fundamental medium-long term values of traded financial assets. Such arguments essentially focus on the upward spiral of prices (Schulmeister 2010), which is clearly not a current problem. Moreover, given that many supporters of the tax are mainly worried about the markets going down, it is possible to raise various objections to the arguments in question. The first is methodological, relating to the objective problem of drawing a line between undesirable trading – because it is excessive – that needs to be contrasted through the tax, and desirable trading, to be kept. The second observation is that, in general, liquidity should be seen as a positive attribute of markets. It aids price discovery and tends to increase the information efficiency for market prices. Volatility is normally inversely related to liquidity because, in a very liquid market, buyers and sellers have a greater probability of finding a counterparty without major price swings. The third objection relates to the relationship between transaction costs and asset prices.[31] One cause for the current financial crisis was the unsustainable increase in property values in the United States. Notably, the transaction costs for this asset class are objectively among the highest possible. In essence, it seems rather unlikely that increasing transaction costs will help to improve, overall, the rationality of the allocation choices made by investors;
- the current backers in Europe of a transaction tax assume that speculation is one of the major causes for the bearish pressure being exerted on government securities and shares traded on European markets. The introduction of a tax could, in this view, be a way to side-line speculation and reduce the consequent volatility of markets. This hypothesis is not overly convincing. A speculator seeking to turn a profit from the drop in the price of a security would certainly not forgo such an opportunity because of a modest tax[32] on financial transactions since a speculator usually stands to

[31] See Uppal (2011). The author examines hotly debated theoretical positions about the possibility of introducing a tax on financial transactions. The empirical evidence referred to in the study, from the author's perspective, affirms that the tax does not reduce market volatility, which actually increases in many cases. Similar evidence on the issue of volatility can be found in McCulloch, Pacillo (2010).

[32] Although precise amounts are not available at the time of writing, the tax in question would probably result in paying a few basis points – five according to some, ten according to others – on each transaction. The proposal the European Commission has committed to producing before the November summit will

make, from short selling, a far larger multiple than the tax itself. A tax on financial transactions is unlikely to scare of major speculators, but it would, in all likelihood, force out of the market the normal providers of liquidity, which provide, with repeated transactions on both sides of the trading book, depth for the demand and supply of securities. Forcing such participants out would make markets more vulnerable to deliberate attacks by speculators, which, in the face of their own substantial sales, would find weaker demand that is conceivably unable to handle the sales. Therefore, it would become easier, in such circumstances, to drag down security prices and then buy them back at these lower levels. If the goal is to stop prices being pushed down by large-scale selloffs, it is clearly more effective to introduce a measure banning covered short selling, despite all the limits discussed previously;

- the third element that the current debate is focusing on is the potential fiscal income that such a tax would generate. The new tax would produce additional revenue for the treasury, which could use this for various purposes, including to provide 'financial help' for those countries that have used substantial resources to support their financial industries during this crisis. This is clearly an aspect that is attractive to those states that have been most heavily involved in the efforts to re-balance public finances. First and foremost, this argument is structurally different to the first two and it seems fair to agree with Tobin that this is a "by-product" of the primary goal. If the aim is to introduce a tax specifically to stabilise the markets, then this aim must form the primary focus of the discussion and it is in relation to this that one must logically assess the measure in hand. Furthermore, it is hard to estimate the income generated by this tax since it is difficult to gauge how much the tax would reduce trading volumes. As noted in various scientific sources referenced before, if the aim is the tax income, then there are probably far more efficient options (International Monetary Fund 2010).

A recent study (Matheson 2010) examining various existing taxes on financial transactions in numerous G-20 countries, showed that such a solution produced rather disappointing results, although it should be added that not all the taxes examined were similar to the one in question. The Tobin tax would reduce the value of the most commonly traded securities, increasing the cost of capital, while reducing trading volumes and overall market liquidity, thus making the price discovery process harder. Furthermore, such a tax would not influence the short-term volatility of market prices, but would increase migration from regulated contexts to non-regulated ones. The latter point does

clarify these terms. On a technical level, there is another issue that cannot be ignored: how will it be applied to derivatives contracts? Will it be applied to the value of the contract or the notional value of the underlying asset? The second option, assuming for the sake of simplicity that the price of the derivative is equal to 5% of the underlying asset, would mean the tax is exceptionally high compared to the value of the contract and it would simply remove any incentive to use such contracts.

not seem to have been suitably acknowledged by those who argue for the introduction of the tax. It seems reasonable that such a decision should be taken by the regulators of all financial systems through an international agreement that puts into practice unanimous political consensus. It does not seem that this is currently the case. In response to a tax on financial transactions, innovative solutions would be found to perform elusive transactions, based in non-regulated environments. Traders could use formats that already exist in the sizeable derivatives market to replicate transactions on listed securities without actually accessing the markets where those securities are listed. Only the net balances to hedge positions would end up on those exchanges. As these alternative trading systems for listed assets become more efficient, the net balances to be settled in the markets would tend to diminish and a paradox would arise with regulated markets providing prices, on greatly reduced volumes, that are applied to trades, involving far greater volumes, performed away from this market.

9.3. Conclusions

The financial crisis, now into its fourth year, has repeatedly created tension on the financial markets, with explosions of volatility. Over time, the root causes for such tension have been fundamentally different: defaults linked to subprime mortgages and the securities created through securitisation, the losses of the major banks (primarily US and then European), the economic crisis and the tensions surrounding industrial shares, the crisis of public finances in numerous European countries and the pressure on government securities and shares of financial firms. In the midst of these 'fundamental' aspects, some movement was obviously caused by speculation, although it was not always speculation. In such turbulence, in terms of investors, it is worth distinguishing between conduct driven by rational economic reasoning and that caused by panic and a lack of reasoning. These aspects are clearly nothing new for how financial markets function and have been analysed scientifically by academics in the past. Behavioural finance,[33] drawing from the dotcom bubble at the end of the last century, has produced a number of works in which the market-efficiency hypothesis is discussed, highlighting how investor conduct is often driven by reasons in contrast to the principle of rational valuation. The actions underlying market movements are the combination of different types of reasons, fundamental movements, speculative strategies, mimicry (panic during crashes and euphoria during bubbles) and irrationalism. Moreover, such actions are interrelated and indistinguishable, making it complex to analyse overall market movements.

It is in such a context that the relevant authorities have to control how markets function. It is evident that control is in the interests of the public and, similarly, the consequences of market disruption on wealth and on the trust of those who invest in the markets are also clear. The goal of the arguments presented in this chapter has been to highlight the importance of equilibrium if the actions taken are actually to be effective. It is not possible to require financial regulations to prevent market movements that, no mat-

[33] See also the work by Shefrin (2000); Shiller (2000); Shleifer (2000); Twede (1999).

ter how violent or undesirable, are rooted in fundamental imbalances that should be corrected with consequent and consistent action by the bodies that govern the economy and not those that regulate the functioning of markets.

Chapter 10

Conclusions

10.1. Some considerations on the reform process: discontinuity, methodology, contents, effectiveness

Discontinuity

The crisis objectively seems to have interrupted a line of medium to long term evolution of the financial industry, opening a new scenario, of which all features and consequences are still not very clear. Between the beginning of the Nineties and the outbreak of the crisis, we have witnessed strong evolution of the financial industry, driven by growth in size and diversification of leading market participants coming from major domestic systems. All this occurred in a cultural, rather than regulatory climate, distinguished by great trust in the industry's capacity for automatic adjustment against the arising external threats and opportunities. The significant liberalisations achieved in the leading country dictated the industry's line of evolution, at the international level, with capital requirements, the only truly uniform feature within systems marked by rather different governance rules, established to protect against risk and to preserve overall stability of this vital infrastructure for world economy. This 'state of the world' worked perfectly as regards the need to compensate great imbalances in world economy, twin deficits and household indebtedness in the United States, public finance imbalances in many European countries, the financing of investments in many rapidly growing countries. In various areas of the world, institutional sectors (households, companies and the public sector) were in a deficit situation, with consequent need to finance it, and the international financial system undertook the role to bridge these gaps by means of its own medium term physiological growth. Within this framework, the need for coordination between national governance authorities 'naturally' took second place and financial companies appeared on the international arena with very different features, as regards institutional, regulatory and supervisory profiles. The close interconnectedness, which tends to be generated between financial companies, created a situation in which no domestic regulator could reasonably be sure of success in guaranteeing stability for its intermediaries, insofar as success on this point also depended, as we have seen, on the effectiveness of controls carried out by the authorities in other countries on which they had no influence. Therefore, the outbreak of the crisis brought two just as obvious needs to the surface for which the reform process is attempting to find coherent answers. In the first place, the principle that the mix between self-regulation and regulation must be modified in favour of the second was accepted; the size of damages caused by the crisis ensued as being obviously too big to allow experimenting new 'failures in market mechanisms'. In the second place, the obvious need arose that regulatory efforts must be carried out in agreement between the different countries taking part in international financial integration, especially the most important countries. In perspective, this circumstance can objectively cause strong transformation; a deeply interconnected financial industry, but governed by poorly coordinated authorities drawing inspiration form different principles and values, could evolve towards a 'system' condition.[1]

Methodology

Commencing with this last consideration, reform action which has been started is based on a methodological (further to a contents) approach that can legitimately be considered innovative as compared to the past. The idea of both more incisive and agreed regulation has been shared by international consensus through explicit statements and commitments by heads of government and regulators in leading countries where the majority of financial companies operating on a global level are based. Although taking on such responsibilities must always be submitted to verification of facts, and in spite of contrast sponsored in some countries by financial industry representatives, the commitments undertaken feature a broad range, greater strictness, major emphasis placed on the need for coordination at the international level. Greater hinge uniformity of legislation in the financial field, agreement between supervisory policies and coordination of crisis management seem to be forcefully sought, also thanks to the role, extensively described, gradually taken on by the FSB. The project to build a common framework at the international level has become a shared target, to achieve even at the cost of sacrificing domestic specificities. In Europe, this evolution has had, in our opinion a very promising and specific declension, the significant transfer of supervisory powers from the domestic level to the European level. The United States has launched its own reform having an ambitious range, by accepting – and this is what seems to be the most important innovation – the principle of a shared discipline at the international level. Monitoring by the FSB points out that also in other areas of the world measures are being adopted which decline the shared standards at the international level. The coordination process currently underway has proportions which were unknown in the past; it is laborious, complex, always submitted to negotiations dictated by the prevailing political needs of single countries at a specific moment, but we are of the opinion that it is going in the right direction. According to some critical positions, these efforts would not seem sufficient towards guaranteeing the future stability of the international financial system; we believe that what is being done today represents the maximum possible, considering political conditions in place. We have pointed out in the first chapter what governance options there are as regards the international financial system, highlighting how, as an abstract concept, the creation of a supranational organisation with regulatory, supervisory and crisis management powers, would be the best solution towards resolving coordination problems. We also added that this solution is purely hypothetical,

[1] Meaning, by the above, strengthening of joint governance regulations drawing inspiration from shared logics, following what has been said in Chapter 1.

just as sound from a logical point of view as unfeasible concretely. One of the results of the crisis is, instead, of directing the system towards greater cohesion and this would appear to be a realistically acceptable short term result.

Contents
As described in these chapters, the reform process has touched upon all criticality points which surfaced with the crisis.

The banking system was submitted to various action, some decidedly incisive and the end result was of structural transformation, as regards regulation, supervision and, in perspective, crisis management. The new regime of capital requirements ratified by the so-called Basel 3 Agreement will increase capital quality and size for all banks in the banking systems of G-20 member States; work, being currently defined, regarding G-SIFIs, will lead to the introduction of additional safety margins for systemically important institutions. The introduction of liquidity requirements, a measure with an ancient flavour, aims at creating further conditions of stability for all banks operating either domestically or internationally. In our opinion, financial supervision in Europe ends up by being strongly reinforced by the creation of European authorities and the transfer of powers being made in their favour. In the United States, in a supervisory framework which is still very fragmented, the transfer to the Federal Reserve of supervisory powers on leading banks and all systemically important financial institutions seems very promising. Moreover, the DFA has introduced specific rules, such as the Volcker Rule and the measure providing for derivative desk push out as an additional instrument aimed at preserving bank stability, according to logics which add structural constraints to prudential supervision. There still is a long way to go within all systems and at the international level, as regards crisis management of financial institutions, insofar as already defined common framework will need much more time for concrete implementation.

Regulation of the derivates market has been defined in its essential outlines and will determine a trend towards central clearing of a very significant share of these contracts, overthrowing current proportions in place between regulated markets and the OTC circuit. A slow-down of the reform process in the United States, a phenomenon which was, in some way, foreseeable, in view of the complexity of rulemaking activity, will tend to mostly align times of reform implementation with those underway in Europe. Coming into force of the new laws will set, as we have seen, the problem of supervision in order to preserve the soundness of market infrastructures, the clearing houses, to which the task of decreasing the implicit risk in these kinds of transactions is entrusted.

Assessment of the new regulations regarding rating agencies appears to be more complex, regulators having decided to follow the only realistically possible road to follow in the short term, the one of increasing accountability of these subjects by means of imposing rules which increase transparency of their activities. More radical solutions, in the aim of containing oligopolist abuses of power which dominate this market are anticipated but, at least for the moment, not concretely pursued.

The issue of executive compensation has been tackled with incisive provisions, aimed at reducing the incentive to assume risk; payment deferral for variable compensations, ceilings for the cash quota directly payable, the obligation to pay defined percentages in the form of shares, claw back possibilities towards management held responsible for a bad financial state; these are the hinges of the new disciplines in all leading areas of the world, according to directions dictated by the FSB. In Europe, where the phenomenon had not, as yet, taken on sizes comparable to those in the United States, reform which has declined these principles was introduced without any opposition and following near-on unanimous political consensus by EU institutions. In the United States, the subject at issue, as described in Chapter 1, stressed more delicate profiles, insofar as the theme of moral hazard contained in the executive compensation incentive system in financial institutions was, and is, part of a far more complex problem, concerning the workings of corporate democracy and, in particular, protection of shareholders in a capitalist system dominated by the public company model. The political choice made with the launching of the DFA was to take mild and more general action on this issue, by introducing a softened version of the 'say on pay' principle, leaving subsequent rulemaking to the specific discipline of compensation in the financial industry, conceived as a somewhat 'special' sector, inside which practically all leading companies will have to accept different rules.

The effort shown by authorities in sharing core principles for regulation has led and is leading previously excluded subjects and activities inside the boundaries of regulation and supervision, at least within many domestic systems. This is the case of provisions concerning so-called 'alternative' fund managers, in particular HFs, having the previously highlighted features and limits, and as regards initiatives underway to soon introduce discipline for the so-called 'shadow banking system'.

Another regulation issue being debated regards the authorities' faculty and their procedures to take action on financial market functioning, currently a particularly delicate aspect in the EU, owing to turbulence distinguishing both the bonds and securities markets, as had occurred at the peak of the crisis in the United States. Rules within this framework must find balanced synthesis between opposing demands. On one hand, the understandable need to avoid panic situations enabling speculation to dominate the market, leading to market conditions of incoherent prices, as compared to the basic values of assets negotiated; on the other, the need to avoid that rules prove to be ineffective or even damaging to market functioning, by reducing liquidity and efficiency. Moreover, we must always remember, and we shall shortly come back to this aspect below, how market regulatory and supervisory authorities have no competence in governing basic structural imbalances which investors target, even exasperating market trends, as has been frequently verified. Last, another regulatory issue currently debated in Europe is taxation of financial transactions, an aspect on which fairly consolidated theoretical analysis and empiric evidence exist. The political and institutional debate underway will lead to definition of concrete regulation conjectures over the next few months. In the previous chapter, we have highlighted the features and limits to this kind of action.

Effectiveness

Objectively, giving a reasonably certain judgement on the effectiveness of reform launched and still underway, in the aim of overall international financial stability, would appear to be rather difficult today. Basically for three reasons.

The first is that the rulemaking process, following launch of the reform laws, is still underway; some measures we have analysed are still being debated, others have been launched, but will only come into force over the next months and years; even those measures which have become law are still lacking declension of the details which could mark the difference between the effectiveness or ineffectiveness of rules.

The second reason is the increasing complexity of the new architecture which is coming out from the reform process, an issue which is relevant for both regulation and supervision. Going from derivatives regulation at the international level to definition of objective standards, in Europe, for authorities' intervention on markets in cases of particular turbulence, from the Volcker Rule's specification to HFs' discipline, just to quote some of the examples dealt with, measures appear complex, both in terms of final declension and in terms of implementation and *ex post* control of market participants' compliance. This complexity is expressed by two aspects; on one hand, the difficulty to give final and clear specifications for measures; on the other, the objective burdens which will have to be sustained by supervisory authorities to guarantee compliance with the new rules. As regards supervision, problems have just as wide a range. In Europe, for example, the newly established supervisory authorities will have to coordinate with domestic authorities downstream, and with European institutions upstream, so as to enable their taking action which should significantly define their role as supervisors of the EU's financial system. In the United States, while the Federal Reserve's role of central organisation for financial supervision on leading banks has become very clear, structural fragmentation persists as regards supervisory authorities on other segments of the banking system. Governance itself of the derivatives market is split between two authorities on the basis of an at least questionable product specialisation principle. In our opinion, a comment must be made on the criterion of specialisation per area of competence, on the basis of which macro-economic and micro-economic supervision ensues as being split, both in Europe and the United States. The most elementary consideration on this subject is that, each time supervisory competences are separated, there are costs regarding communications, coordination and negotiation as to the nature and contents of activity to be carried out. As financial markets need, as a rule, timely interventions, we cannot exclude that more structuring of governance organisations could produce lower levels of effectiveness.

The third reason by virtue of which it would appear legitimate to question ourselves about the reform's effectiveness concerns the new environmental context in which measures must be implemented. At the peak of the crisis, exceptional consensus arose between political authorities and regulators on an international scale, as regards the need to more incisively regulate financial institutions and markets, in spite of awareness that this kind of action would have involved costs for the community; the financial industry made no signs of being opposed to the process being outlined, also in view of the weakened condition in which leading institutions found themselves and the public aid they had received during the most dramatic moments of the crisis.

At the time this book is being written, the 'contextual conditions' have objectively and decidedly changed for the worse. The 'real' crisis, followed and merged with the 'financial' crisis, making reform action problematic. Low economic growth in leading Western economies and the widespread imbalances of public finance, which tend, in their turn, to weaken financial institutions, certainly do not represent the ideal conditions to implement reforms which, in homage to the principle of stability, tend to raise intermediation's overall cost and to make sustaining the economy more difficult. The Basel 3 Agreement represents a symbolic case: a more solid banking system was expected in its wake, but also restrictions on credit conditions. Implementation of the Agreement, in spite of its deferral, will meet with widespread opposition, of which we can already observe first signs and which are inversely correlated to growth shown by economic systems. Measures underway to define G-SIFIs are going in the same direction and will further raise capital requirements for institutions identified as being systematically important. Another example is growth of opposition accruing as regards DFA implementation, held to be a measure able to undermine some aspects of the United States financial industry's competitiveness. Other examples, already discussed in the chapters above, are the new rules on derivatives and securitisation.

Synthetically, the prospect is of significant change, having a global range, in the relationships between financial industry and economic system. Up to the outbreak of the crisis, the international economic system greatly benefited from the results obtained by a financial system able to make growing resources available and in proportion to the needs of subjects in deficit, located in different areas of the world. This intermediation process was carried out with growing risks and, in some cases, not adequately protected, as the crisis highlighted. On the post-reform scenario, as regulation obviously is not a 'free lunch', we can easily foresee that de-leveraging of the system will imply painful adjustments for borrowers showing conditions of greater imbalance.

10.2. Contents and limits of financial systems' governance

Observation of the more recent events, especially evolution of the crisis on European financial markets, forces us, on concluding this book, to propose a few considerations as regards the range and limits of financial systems' regulation.

The fact that our attention has been focused on reform underway must not lead us into forgetting that it is an intrinsically limited instrument as regards the aim of stability, which it however pursues. Correct regulation of intermediaries, markets and financial instruments can certainly help avoiding that the system endogenously generate risk elements which could then be transmitted to the economy, causing its crisis. On the other hand, what rules imposed on the financial system will never be able to avoid is that the shock created outside this system could produce destabilising effects on it. The turbulent situation featuring the current situation of European financial markets is a good example to clarify this concept.

The creation of a single currency was an essential passage for consolidation of European integration; moreover, as we have observed in the chapter above, this is not the final objective but, on the contrary, a passage towards motivating greater cohesion and convergence of economies which have taken part in this historical project. Today, the European Union governs currency, but not the other essential instrument, the fiscal lever, the use of which requires that an institutional evolution create strengthened political power at the central level. Therefore, public finance equilibrium is governed by member states, which, owing to the creation of the Euro, have, in their turn, lost their monetary sovereignty, the end-result being that their debts can no longer legitimately be considered 'sovereign', but only 'governmental' (Mattei Gentili 2011), States being unable to pays these debts by 'printing money'; on the contrary, within this new context, States can only honour their commitments towards subscribers by reducing public spending, increasing taxes, or a mix of the two solutions. Doubts as regards the capacity of one of more States to correct deficits, have driven 'markets' to put pressure on securities they issued, with consequences which are as obvious as they are significant. States losing markets' trust find themselves faced with depreciation of the value of their securities and, in parallel, an increase in interest rates payable on these securities;[2] this, in its turn, lead to worsening of deficits, by virtue of the greater debt burden, triggering off a sequence which, as urgent corrective and incisive action is lacking, could lead to default.

Therefore, the essential issue of debate underway in Europe is how to get out of the situation we have just described. On one hand, perpetuating differences between States having a single currency is not sustainable over the long term. On the other, default of one or more countries obviously can create undermine this currency's very existence, at least in its present form. Without going into details about the different positions as described above, which open up a sphere for contiguous research, differing from the one we have explored so far, we limit ourselves to some factors which have distinguished the experience of these months, during which various interventions were achieved and anticipated to solve problems on the carpet. A first intervention was the creation of a fund earmarked to sustain countries facing difficulties,[3] planned when the problem

[2] Just to give an idea of the different risk/return combinations prevailing in the European Union government bond market, we list, as of August 30th, 2011, the spreads (in basis points) of major European countries versus German ten years bonds: Greece 1595; Portugal 867; Ireland 679; Italy 296; Spain 290; Belgium 181; France 68; Austria 61; Finland 42; Holland 40; United Kingdom 38; Denmark 20; Sweden -8. Outside the European Union, surveys give the following values: Japan -113; Switzerland -105; United States 6, Canada 27. Source: Reuters.

[3] We refer to the creation, in June 2010, of the European Financial Stability Facility, an entity with registered offices in Luxembourg, capital underwritten by Euro zone countries, having the function of issuing bonds on the market and collecting resources to be lent to member states in difficulty. The current capacity of this institution, measured by the volume of triple A securities it can issue on the basis of shared guarantees from Euro area member states is equivalent to 440 billion Euro. The EFSF has carried out three issues of bonds, one in January 2011 and two in June for an overall 13 billion Euro, used to grant loans to Ireland and Portugal. This financing must be added to another pre-existing emergency financing programme, the European Financial Stabilisation Mechanism, managed by the European Commission which, on the basis of said programme, can collect up to 60 billion Euro on the market, guaranteed by the Commission, using funds directly originating from the European budget. Last, the rescue network of European countries was completed by contribution from the International Monetary Fund for an equivalent of 250 billion Euro.

seemed limited to modest-sized indebtedness as compared to the EU's aggregate. The spreading of the crisis to bigger countries clearly highlighted the overall inadequacy of this solution. In the summer of 2011, the European Central Bank performed a substitute role,[4] going ahead with important purchases of public securities issued by more significant countries, in terms of size, such as Italy and Spain. While the above-mentioned action was being taken, political and institutional debate carried out in the search for solutions having greater innovative features, earmarked to structurally tackle current problems. The subject of these anticipations is the creation of a European Fund having a decidedly more significant size than mechanisms currently in place, and which will be able to issue securities guaranteed by member states through various kinds of assets.[5] Beyond technical differences (fund size, guarantee mechanisms, member state shares, etc.), the solution anticipated in this context is certainly interesting for the contribution it can give, for the purpose of market stabilisation, within a medium to long-term perspective, but collides with opposition by member states in the Euro zone less needy of financial aid and worried that excessive aid, as anticipated above, could be offered to countries having greater public finance imbalances, thereby relieving them of the duty to make the painful yet necessary adjustments. The position of more 'virtuous' countries in the area, highly evident in recent statements made by some European leaders,[6] is that countries in difficulty must firstly proceed autonomously with the structural correction of their public finance imbalances and only then, in theory and as a subsequent step, would securities issued by the EU's institutions be accessible. While this book is being written, countries facing greater difficulties – among which Italy – are engaged in launching corrective manoeuvres aimed at recovering equilibrium and regaining investor trust.

At the moment it is objectively difficult to foresee the final outcome of evolution underway, but going back to the subject of our analysis, some conclusions could be drawn as regards repercussions on the Union's financial stability, both at the macro-economic and micro-economic levels. Without reaching default (the possibility of default is enough), the situation we have described above produces undermining effects on the stability of financial systems, by first of all striking at their central core, the banking system.

Overall, the total size of funds which can be used to rescue European countries in difficulty, adds up to 750 billion Euro; although the amount of these resources represents great progress as compared to conditions in place before the outbreak of the Greek crisis, observation must be made that said amount can reasonably tackle the problems of small to medium-sized countries such as Greece, Ireland or Portugal, certainly not the problems created by different sized and differently indebted countries, such as Spain and Italy.

[4] The July 2011 agreements between European countries broadened the EFSF's scope and size of activity, enabling the latter to purchase, on the primary and secondary markets, securities of countries in difficulty. The need for ratification of the agreement by the Parliaments of single countries has not yet enabled exploiting this option, thereby temporarily restricting the EFSF's role in granting loans under emergency conditions. Therefore, the European Central Bank has, in some way, anticipated the tasks which will be performed by the EFSF, by going ahead with purchases deemed necessary for the stabilisation of the government bonds' markets.

[5] On this subject, see the recent contribution by Prodi, Quadrio Curzio (2011).

[6] We refer to public statements made after the Germany-France summit on August 16th, 2011.

Banks of the countries hit by the public finance crisis are perceived as highly risky borrowers and have to sustain greater burdens in wholesale funding on international markets;[7] these deteriorative conditions transfer rapidly onto retail markets, with an overall increase of total bank funding costs. These higher costs tend to be transferred to borrower clients, firstly to companies, limiting their investment capacityr. Economic systems which already show weak growth potential see their own opportunities of recovery compromised by the generalised exacerbation of 'contextual' financial conditions. Subsequently, these developments tend to introduce asymmetric elements in how the banking market works. In fact, we cannot forget how European banks' competitive equality inside an increasingly more integrated market cannot tolerate perseverance of significant differences in funding costs. Banks of countries showing greater public finance imbalances are potentially subject to 'competitive displacement' by competitors able to collect funds at lower costs. This is the consequence we tend to see on both international and domestic markets, firstly with reference to best quality borrowers: banks distinguished by competitive advantages as regards funding will be able to offer better financing conditions to their best clients, whereas other banks will be called upon to choose between lending at uneconomic price conditions, or to address their offer to lower quality borrowers.

Secondly, as we have already observed, depreciation of government securities has a negative impact on bank accounts, both at capital and income levels, and this, in its turn, makes the hoped-for recapitalisation of European banks problematic. As we have already pointed out in Chapter 1, in the decade before the outbreak of the crisis, banks turned out to be an excellent investment for their shareholders. From that moment up to now, on the contrary, bank share returns turned out to be disappointing or heavily negative, for essentially two reasons. The first, the rise in risk premiums, led to a generalised decrease in the prices of many financial activities held by banks. The second, the negative economic cycle, made lending more risky in many countries; the significant rise in credit risk levels was heavily mirrored in bank profit and losses accounts, thereby increasing the level of provisions necessary to tackle the deterioration in the quality of loan portfolios. Adding 'public finance shock' to this scenario, meaning potential default of one or more EU member states, would obviously produce devastating effects, insofar as the destruction of capital which would ensue would be greater than bank recapitalisation needs currently assessed as being necessary. Observation of bank share price trend over the last few months has moreover highlighted how investors ascribe concrete probabilities that this kind of event will occur. Going ahead with recapitalisation in European banks is therefore difficult in a similar context, insofar as investors are called upon to put capital into companies which are threatened with possible default by public issuers; in fact, should this happen, recapitalisation carried out vanish.

[7] This statement is based on observation of 'senior' bonds (lacking specific guarantees, therefore representing the overall risk of issuing banks) issued by leading European banks. For months now, the market pretends rate of return which are closely correlated to those of government securities issued by banks' home countries; more than the 'specific' risk of a single financial institution, what would therefore appear to be significant for investors is belonging to countries showing a differentiated risk profile on respective bonds' issues.

The alternative option also appears difficult to achieve, that bank capitalisation be performed by States, as the latter would find themselves burdened with recapitalisation costs on their already precarious equilibrium, without mentioning the fact that one of the reform objectives is precisely to avoid further bank rescue action by States.

What contribution can the reform process we have described then give to overall stability of the European financial and banking system?

We believe we can state that implementation of the reforms is not a sufficient condition to safeguard the financial system as regards problems, such as default by States, which are of a 'higher scale'. The situation in place today on European financial markets well illustrates what we can expect from regulation within the financial system and what, instead, cannot reasonably be requested of regulation itself.

When solvency of member States, the existence of the single currency and the very future of the EU's economic and financial integration are under discussion, the capacity of reforms designed to avoid 'financial crisis' to give answers to these problems appears very limited; for this reason we don't agree with those who criticize reforms for their inability to achieve objectives they are not designed to achieve.[8]

Effective governance of the financial system and directing it towards conditions of stability are objectives which competent authorities, backed by politics, can reasonably undertake, by going ahead with the reform project defined during these last few years and still in the process of being implemented. This is valid for the European Union and for all countries which have shared this project, firstly the United States, and which are contributing to its achievement. Reference to the current European financial markets' situation moreover enables our confirming that regulation and supervision of the financial system cannot get rid of overall instability outside said system. A widespread public finance crisis among European countries would bring about such consequences as to frustrate any safeguarding manoeuvre for the financial system. More generally speaking, the reforms we have analysed may contribute to the stability of the financial system at the international level, avoiding future crisis generated 'within' the system itself; we cannot pretend, on the contrary, that these reforms will protect the system from an instability arising out of it, as is the case for the current turmoil, particularly evident in Europe, generated by the fear of defaults of EU members states. Governs must face and dominate these instability factors, preventing them from undermining the stability of the financial system and making reforms which are in the course of being implemented vanish.

[8] As we have observed in Chapter 3, the outcome of stress tests performed by the EBA highlighted a capitalisation situation which can be considered satisfactory on accepting the hypothesis of the tests themselves. They do not contemplate, as we have seen, default of a Euro zone member state and this circumstance has been mentioned as an element which has weakened the significance of these tests. It is obvious that heavy default of a sovereign debt would bring about a reduction in banks capital of such dimensions as to make current capitalisation levels of banks insufficient. Moreover, we feel we must confirm that this is a governance problem concerning economic systems on the whole, not the banking system.

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Il sistema finanziario internazionale tra crisi e riforme

Enrico Cotta Ramusino

Italian Abstract

Il lavoro esamina la crisi finanziaria, iniziata nel 2007 e tuttora in corso, e le conseguenti riforme finalizzate a rimuovere le carenze che ne hanno determinato l'esplosione.

Il primo capitolo analizza lo sviluppo del sistema finanziario nel corso dei vent'anni che hanno preceduto la crisi, illustrandone le caratteristiche principali: la crescita dimensionale e conglomerale dei maggiori operatori finanziari, la tendenza generalizzata alla liberalizzazione delle attività finanziarie e la tolleranza nei confronti dell'assunzione di maggiori livelli di rischio. Nei capitoli successivi viene descritto il processo di riforma concertato a livello internazionale al fine di ripristinare condizioni di stabilità nel funzionamento del sistema. Vengono descritti e discussi, in sequenza, gli interventi, regolamentari e di vigilanza, attuati e in corso di definizione, su tutte le principali aree dell'attività finanziaria, dalle banche ai contratti derivati, dalle agenzie di *rating* agli *hedge funds*, dalle norme sul funzionamento dei mercati all'*executive compensation*. Nelle conclusioni vengono esaminate la possibile efficacia delle riforme descritte e le difficoltà connesse alla loro implementazione nell'attuale contesto economico-finanziario dei maggiori Paesi occidentali.

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