

# Systemic importance: what is at stake?



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## Executive summary

The varied range of players and instruments that generated systemically significant, knock on effects and contagion risks during the financial crisis illustrates that it is not size that is the main criterion of systemic importance, and illustrates the limitations of addressing systemic risks mainly through the allocation of additional capital. In other words it is not “too big to fail” that is the issue but “too dangerous to operate through a faulty business model”.

Size is not a factor for identifying the systemic importance of an institution, but may represent an aggravating factor for systemic impact. Rather than the size of the institutions per se, the crisis highlighted the need to take into account the structure and mix of institutions’ funding, including the quality of their balance sheet, the effective scale of their leverage, their level of maturity mismatch and in this context an overly exclusive use of the short term wholesale refinancing market, and stability of the deposit base. In addition, structure and risk management aspects can be significant contributing factors, including business model and diversity of business portfolios, the existence of internal firewalls (e.g., via decentralized liquidity management) structural complexity (such as complex and risky assets, limited diversification, strong interconnection, non-substitutability).

These differences during the crisis demonstrated and accounted for effectively account for the relative strength or fragility of financial institutions, when other external factors come into play. In short, any systemic risk assessment must take into account the different business models and risk portfolios of financial institutions.

More over the systemic importance of institutions should also be assessed on the basis of its interconnection within the financial system.

The challenge is therefore to develop a comprehensive and consistent framework that unfolds the appropriate methodologies for identifying the sensitive “links” within the financial system and deduce from this basis the regulatory and supervisory framework best suited to their diversity. The fight against systemic risks must take on board the fact that the financial system is increasingly complex and notably involves non-banking players with different characteristics and statuses (e.g. hedge funds, money market funds, market infrastructures, etc.).

In addition to the different mechanisms intended to reduce the risks posed by an institution for the system, if it proved necessary to require capital surcharges from the institution, these surcharges should not be evaluated based on its size, but rather an assessment of its risks by its supervisor, e.g. analysing the systemic strengths and weaknesses of its specific business model and assessing how well the institution values its balance sheet, terms its liabilities and manages its risks.

In this respect the Basel 3 framework has significantly strengthened banks’ resilience by extensively introducing systemic stress scenarios (such as VAR and liquidity coverage ratios) for assessing risks and

heightening the calibration and quality of the risk-based regulatory capital. This new framework leads to a very substantial increase in the levels of capital for banks; it is on average multiplied by 7,5.

But the impact on the financing mechanisms of the economies has not yet been assessed – in particular on the strongly bank financing – dependent European economy – of additional regulatory requirements which are not based on the effective risks of the institutions but on the external assessments of the size of their balance sheets, e.g. the counter-cyclical buffer, capital requirements on SIFIs and liquidity requirements.

Moreover the subprime crisis also shows that many of the main sources of risk could have been avoided simply by applying existing regulations if the institutions had been correctly supervised. As prudential requirements on their own cannot guarantee the soundness of banks, it is essential to strengthen macro and micro prudential supervision and make it more “intrusive, sceptical, proactive, comprehensive, adaptive and conclusive”. Within an agreed framework on the principles that should govern systemic importance, such as pro-cyclicality and liquidity, national supervisors should be given sufficient leeway to apply agreed norms, after taking into account the specificities of every financial institution whose business model has a major importance in terms of risk assessment. These agreed norms include capital surcharges, increase in liquidity requirements, restrictions prohibiting certain structures or new products, diversification of counterparties, more systematic use of organised markets and infrastructures, diversification of sources of liquidity, resolution plans including technical continuity plans, living-wills, and actual separability of certain activities – a considerable toolbox of options.

This requires appropriate resources, authority, organisation and constructive relationships between the different agencies involved. There have been many statements from the G20 to improve the efficiency of supervision, and significant progress must be made in this field.

Regulators are looking to reduce systemic risks by focusing primarily on the largest financial institutions and through the imposition of additional regulatory capital. This approach actually heightens the moral hazard involved; indeed, the organisations from the list of these most “sensitive” institutions – in fact the largest - could be easily identified. It also introduces distortions of competition between players that could be included on the list of SIFIs and those that are not listed but are competitors.

Lastly this approach undermines financial stability, as it penalises the institutions that diversify their risks by diversifying their geographical presence and financial activities, and that may be therefore more stable than other institutions which are more concentrated on certain businesses or geographical areas and thus would not be listed as systemically important. It would damage the much needed accurate pricing of the risk with potential negative consequences on the social, economic and financial system in particular in geographic areas that can rely on long-standing efficient supervision.

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Therefore if one wants to capture the systemic risk problem, one has to:

- 1. Address the preventive measures e.g. better macro and micro supervision for identifying the sensitive "links" within the financial system, specific intervention by supervisors on real potential dangers presented by institutions;
- 2. Put in place a set of crisis resolution mechanisms e.g. living wills, bail in instruments, and consistent measures that wind down in an orderly fashion the institutions if necessary;
- 3. Avoid a transfer of the riskiest activities of financial institutions to a shadow banking system that is insufficiently supervised and which could become the future source of systemic risk and moral hazard.

- 6. In this way, rather than a focus on the size of institutions this involves identifying the important "links" in the financial system and the interconnectedness of financial institutions—in their diversity - with a view to not only defining the appropriate scope for financial regulation, contributing towards the calibration of prudential ratios and defining the intensity of supervision, but also defining and supplementing the fields and tools for regulation and supervision (credit decisions, risk management and governance practices, financial structure and status of the various participants in the financial system, bankruptcy law, international coordination, etc.).
- 7. The challenge is to develop a comprehensive and consistent framework for regulation and supervision which prevents and reduces the systemic impacts of any difficulties which may arise at any point within the financial system. Such framework must not cause distortion of competitions and ensure that it does not provoke regulatory trade-offs or duplication. Lastly, insofar as the crisis has taken shape through financial systems with different structures, involving an intermediation chain that was more or less long and complex, the methodologies for identifying the important "links" in the financial system and the regulatory and supervisory framework must show themselves to be suited to this diversity.

## Detailed document

### Systemic importance: what is at stake?

#### 1. The complexity and diversity of the links in the value chain across the financial systems call for the deployment of a comprehensive, consistent and dedicated prudential framework for the systemic risk

- 1. The subprime financial crisis has the specific attributes of a systemic crisis. Indeed, it is characterised by the "failing of part of the financial system", namely that concerning the securitisation of subprime mortgage financing in the US, triggering "serious negative consequences for the financial sector, as well as the economy".
- 2. Since the beginning of the crisis, a wide variety of financial players with very different business models and scales played a central role. We can therefore qualify a range of businesses and vehicles as actually or potentially "systemically important", ranging from special purpose vehicles, to monoline businesses, from major broker dealers to specialist banks, from money market funds to OTC derivative markets, repos, etc. In other words it is not too big to fail that is the issue but too dangerous to operate under a faulty business model.
- 3. The crisis involved a number of financial institutions of diverse sized which eventually had to be bailed out.
- 4. Therefore, it is needed to have an overall view of institutions, financial mechanisms, products and markets to determine their systemic risks and interconnectedness
- 5. It is important to ensure that the different potential sources of systemic risk are well identified so that the enormous moral hazard problem doesn't get repeated.

#### 2. Regulators are looking to reduce systemic risks by focusing on the largest financial institutions and primarily through the allocation of additional regulatory capital

- 8. The G20 leaders are looking to improve the resilience of banks, as well as that of the financial markets (derivative OTC, cash markets, commodities) and shadow banking, particularly since these initiatives systematically incorporate the objective to reduce systemic risks, in addition to the deployment of a macroprudential supervision system at global, regional and national level, all representing essential steps towards establishing a coherent and consistent approach.
- 9. We must be careful that the focus put on "Systemically Important Financial Institutions " (which has taken over from the concept of too big to fail) does not entail the underestimating of micro and macro supervision of the whole financial system. Indeed the current financial crisis provides various examples of financial clusters whose systemic importance has been established<sup>1</sup>.
- 10. Opportunely, the FSB is advocating a policy framework for SIFIs that combines:
  - A resolution framework to ensure that all financial institutions can be resolved safely, quickly and without destabilising the financial system and exposing the taxpayer to the risk of loss;
  - More intensive supervisory oversight for financial institutions that may pose systemic risks;

1. e.g. securitisation SPVs, hedge funds, money market funds, financial institutions collecting deposits, which played a key role as the crisis emerged and spread.



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- Robust core financial market infrastructures to reduce contagion risk from the failure of individual institutions;

in order to contribute towards the deployment of a coherent and consistent framework.

11. At the same time, the FSB's additional guidance for this framework includes "a requirement that SIFIs and initially in particular global SIFIs (G-SIFIs) have higher loss absorbency capacity to reflect the greater risks that these institutions pose to the global financial system; other supplementary prudential and other requirements as determined by the national authorities". It suggests that increasing the levels of regulatory capital is considered to be a prominent tool for reducing the systemic risk. We must not believe that high uniform capital requirements for different types of risk profiles are the obvious appropriate response.

12. However, such a measure represents far from an appropriate response for many systemic "links" revealed by the subprime crisis.

13. Moreover, applying this additional prudential arrangement to financial institutions based on their size<sup>2</sup> raises a strong risk of actually reducing its expected beneficial effect. Indeed it would be partial and induce considerable errors when identifying and measuring the systemic risk of each institution.

### 3. The general drive to increase the volume of capital within the banking system already represents a considerable effort

14. In October 2009, the IMF<sup>3</sup> evaluated the losses sustained by the global banking industry as a result of the subprime crisis at \$2,800 billion. According to the Fund, the banks still needed to make a major effort to recognise them and build the volume of their capital back up again (around \$500 billion). These amounts are to be compared with the public assistance called into play: \$700 billion for the TARP in the US, support for GSEs capped at \$400 billion, then unlimited, € 4.500 billion of national support to the financial sector approved by the European Commission<sup>4</sup> between October 2008 and October 2010 mainly composed by public guaranties to

the financial sector (76%), non-conventional liquidity measures (FED and BOE balance sheets multiplied by 2.5 between September 2008 and January 2009<sup>5</sup>, exceeding \$2,000 billion at the time, while the BCE balance sheet increased 45%), etc.

15. As a result, one year later, the G20 validated the policies outlined by the Basel Committee, leading to a very substantial increase in the levels of capital for banks: in this way, the Core Tier 1 rate at 7% is multiplied by 3.5<sup>6</sup>. Moreover, the market risk weighting is multiplied by more than 3<sup>6</sup> not to mention the impact due to the improvement in the quality of capital<sup>7</sup>, the countercyclical buffers, which may represent a further 2.5 "percentage point increase in the target capital".

16. In view of the volumes at stake, the increase in the amount of capital required has not been officially quantified. Indeed, the Basel Committee is more willing to communicate on the impact as a percentage of GDP with a "percentage point increase in the target capital". The few figures put forward include those from the ECB, which estimates the Tier 1 need for the eurozone's 20 largest banks at \$70 billion for each 1 percentage point increase in the target capital. Assuming that market activities (RWA multiplied by 3) account for one third of the business of these banks, with retail activities (no significant changes in RWA) representing two thirds, the increase in their capital requirements resulting exclusively from the increase in the Core Tier 1 and RWA (x1.66) represents around €600billion<sup>8</sup>.

17. Following the crisis banks triggered a drive to recapitalise (# \$800billion<sup>9</sup> according to the ECB). The Basel III package demands a supplementary financial effort on approximately the same scale. This represents a considerable effort, requiring a rollout schedule staggered between 2011 and the end of 2017. At this level – RWA multiplied by 1.66 on average; minimum capital of 4.5% – all things being equal, the minimum capital alone is increased to around 7.50%<sup>10</sup>. This represents more than the maximum losses identified by the Basel Committee<sup>11</sup> on seven countries over a period from 1981 through to today.

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2. "Size for institutions, the size of exposures, volumes of transactions or assets managed are indicative of the extent to which clients and counterparties could be disrupted". Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations- Report to the G-20 Finance Ministers and Central Bank Governors Prepared by the Staff of the International Monetary Fund and the Bank for International Settlements, and the Secretariat of the Financial Stability Board October 2009

3. Global Financial Stability Report Oct 2009

4. <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/1635&format=HTML&aged=0&language=EN&guiLanguage=de>

5. Source: Trésor Eco no.56, Apr 2009 - DGTPE

6. Core Tier 1 is now set at 7% coming from 2%

7. "The change to the definition of capital represents – by itself – a substantial strengthening of the global capital regime. This is the case before we even begin to discuss an increase in the level of minimum capital requirements or the introduction of buffers". Ibid.

8. We are assuming that, until 2009, the banks were recapitalised in response to the crisis with a view to achieving a core tier 1 of around 3% (before the crisis, this ratio was only around 1% in pure equity). The capital devoted to market activities being multiplied by 3, the general increase in the core tier 1, rising from 2 to 7%, and lastly, the impact of the improvement in the quality of capital therefore result in banks which have 1/3 market activities and 2/3 retail activities multiplying their equity capital by 11.6 (core Tier 1 rising from 1% to 7%x1.66(RWA)= 11.62%). This represents 11.6-3=8.6 additional ratio points and corresponds to €70billion x 8.6 = €602billion in additional capital for the eurozone's 20 largest banks.

9. Global Financial Stability Report, Oct 2009

10. Minimum capital increases from 1% of RWA 1.66x4.5%=7.47% of this RWA

11. Calibrating regulatory capital requirement and capital buffers: a top down approach – BCBS. Oct 2010: High-level summary table, Page 6, => Minimum capital = Maximum of the maximum losses (excluding outliers and gains) = 6.83% < 7.5%

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18. But the impact on the financing mechanisms of the economies – in particular of the European economy that strongly depends on bank financings – of additional regulatory requirements which are not based on affective institutions' risks but on the external assessments of the size of their balance sheets, e.g. the counter-cyclical buffer, capital requirements on SIFIS, liquidity requirements, etc., has not yet been assessed.

#### 4. The effort made to increase the volume of capital within the banking system already takes the systemic risks into account

19. The conservation buffer<sup>12</sup> introduced by the Basel Committee in its new calibration of regulatory capital is intended to "withstand future periods of stress"<sup>13</sup>, 50% of the effort to further strengthen regulatory capital is therefore focused on cushioning possible systemic shocks.

20. This effort is particularly important since the Basel Committee<sup>14</sup> has also taken extreme shocks into account in the new approaches for assessing the effective risks for assets (RWA), which are used as a basis for calculating the regulatory capital; more specifically, the Committee has incorporated the following into them:

- Stressed value-at-risk (VaR) capital requirement based on a continuous 12-month period of significant financial stress
- Capital requirements for counterparty credit exposures arising from banks' derivatives, repo and securities financing activities, introducing stressed inputs
- An increased attention and capital charges to financial institutions –counterpart-risk in particular on risk arising from the interconnectedness of banks and other financial institutions through the derivatives markets.

21. If banks operate for one third on market activities (RWA multiplied by 3) and two thirds on retail activities, all things being equal, the level of the "conservation buffer" required by Basel 3 represents more than 4% of the RWA. This level is equivalent to the consumption of capital required by the stress tests carried out by eight members of the BCBS during the recent crisis<sup>15</sup>.

#### 5. The crisis illustrates the limitations of addressing systemic risks through the allocation of additional capital

22. The monolines case illustrates that an increase in capital (\$34 billion facing an exposure \$3.300 billion of securitized paper) would not make a difference.

23. In this way, how much capital would Lehmann Brothers have needed to have available to absorb the systemic risks it was generating for the financial system? A few days before it filed for bankruptcy, Lehman Brothers had a Tier 1 of 11%<sup>16</sup>. However, this capital (\$28 billion) was not enough to restore confidence, as a badly estimated part of its \$52 billion residential mortgage, real estate and high-yield acquisition finance portfolio seemed at risk. To cover this entire portfolio, it would have needed a Tier 1 of around 24%<sup>17</sup> for it to be considered a going concern. More generally how far would it have been necessary to go in terms of capital given that Lehman Brothers had consolidated bank and bond debt of more than \$600 billion?

24. It was the lack of knowledge of the value of these positions that led to doubts surrounding Lehmann's credit derivative counterparties and transformed this player's bankruptcy into a systemic shock.

25. At the same time, depositors with major money market funds (MMMFs), poorly informed about the volume of Lehmann Brothers commercial paper (CP) effectively held, triggered a run, which spread to all MMMFs. A more appropriate regulation of MMMFs represents a necessary means of protection against such a systemic shock.

26. Lastly, the subprime crisis shows that many of the main sources of risk could have been avoided simply by applying existing regulations if the institutions had been correctly supervised. The AIG group was overseen by several authorities that focused exclusively on its insurance activities, and did not look at what was going on in this subsidiary's accounts, which represents a clear supervisory failing. This is how the AIG group's financial subsidiary (and its large scale trading derivative exposure) soaked up virtually the entire group's capital and led to its downfall. The GSEs simultaneously exceeded their leverage effect constraints, which should nevertheless have been applied for them.

27. In this way, the crisis reveals many examples of the need to provide an overall approach for the prevention of systemic risks, and improve the supervision of financial institutions, while illustrating the limitations of a response through capital allocation alone.

28. It is in this context that explains why, in the end, a certain level of confidence has gradually been restored by a bespoke and gradual combination of equity issuance, deposit guarantees, equity interest acquisitions and targeted nationalisations, non-conventional provision of liquidity by the central banks, etc.

12. The "conservation buffer" represents 2.5 percentage points on top of the 5% percentage points added to the 2 regulatory core tier 1 percentage points by the Basel Committee,

13. Basel Committee on Banking Supervision press release on higher minimum capital standards, Sep 12, 2010

14. Basel III: A global regulatory framework for more resilient banks and banking system – Basel Committee on Banking Supervision, Dec 2010

15. Calibrating regulatory capital requirement and capital buffers: a top down approach – BCBS. Oct High level summary table, page 6, => Max Stress test Tier1/RWA = -4%

16. Lehmann Brothers press release, Sept 10, 2008

17. \$52 billion in Core Tier 1, i.e. 20% of Tier 1 to cover the losses, and to remain a "going concern" 4.5% of core Tier 1 applied to the rest of the RWA, which at the time was around (\$28billion/11% - \$52 billion) = \$202 billion, giving in total 24% of RWA

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**6. Ensuring financial stability, reducing the moral hazard and maintaining a level playing field cannot be based on just a simplistic identification of systemically important institutions**

29. The measures required to reduce the systemic importance of institutions can only be determined on the one hand, based on the role of each institution, not from a general perspective, but specifically concerning each of the various coherent subsets which make up the financial system and the degree<sup>18</sup> of their interconnection with the entire financial system, and, on the other hand, based on each institution's specific fragility.
30. In this respect, it is important to highlight that financial institutions behave in different ways in the event of systemic stress. Rather than their size<sup>19</sup>, it is more the quality of their balance sheet and more specifically the effective scale of their leverage effect, their level of maturity mismatch and in this context their overly exclusive use of the wholesale refinancing market, as well as more generally their business model (diversity of their business portfolios, etc.), and the existence of any internal firewalls (decentralized liquidity management, etc.) which effectively account for their fragility. Moreover, the business model of each sector has to be well understood and the consequences for regulation fully drawn. For the insurance sector, the absence of leverage on one hand and on the other hand the "timing feature"<sup>20</sup> that allows a significant period of time to wind up a failed insurance company, fundamentally make the overall systemic debate by far irrelevant for this sector (outside a very few specific instances).
31. The BIS<sup>21</sup> seems to be firmly in favour of distributing capital surcharges depending on the size of institutions, notably in view of the results achieved when applying the "game theory"<sup>22</sup>. And yet, the BIS highlights the fact that such simulations have been carried out on the basis of an identical default probability and external risk sensitivity for all the institutions associated with the simulation. In this communication, the BIS therefore recaps on the importance of having a precise definition of the financial system beforehand, in addition to the need to cover all financial players (including shadow banking) and the challenges posed by how to evaluate the size of institutions.
32. In fact, the identification of systemically important institutions cannot be based on one criterion such as size, or on identical rules. A small investment bank which does not have any deposits and whose assets include a lot of sophisticated financial products and trading activities may be very risky. In insurance, diversification is of the very essence of the economics and the business model. It is not size as such that matters but rather undiversified size and undiversified activities.

33. Size is not a factor for identifying the systemic importance of an institution, but may represent an aggravating factor for this, in the same way as a strong leverage effect or a major maturity mismatch, etc. when other factors come into play (complex and risky assets, limited diversification, strong interconnection, non-substitutability, etc.). A large bank which has a large deposit base, but whose assets might be very risky, would find itself in a situation whose severity would be heightened by its size.
34. In addition to the other mechanisms intended to reduce the risks posed by an institution for the system, if it proved necessary to require capital surcharges from the institution, these surcharges should not be evaluated based on its size, but rather an assessment of its risks by its supervisor e.g. analysing the systemic strengths and weaknesses of its specific business model and assessing how well the institution values its balance sheet, terms its liabilities, manages its risks, etc. Within an agreed framework on the principles that should govern systemic importance, pro-cyclicality, liquidity etc. supervisors should be given sufficient leeway to apply agreed norms (capital surcharges, increases in liquidity requirements, restrictions prohibiting certain structures or new products, the diversification of counterparties, the more systematic use of organised markets and infrastructures, the diversification of sources of liquidity, resolution plans including technical continuity plans, living-wills, the actual separability of certain activities, etc.) after taking into account the specificities of every financial institution whose business model has a major importance in terms of risk assessment.
35. On the contrary, an approach which determines the systemic importance and additional prudential capital in light of the size of institutions actually heightens the moral hazard involved; indeed, the organisations included in the list of these most sensitive institutions – in fact the largest - would be easily identified.
36. This approach focuses attention on the largest institutions on a global level, while not encompassing the systemic importance of national or regional institutions.
37. Lastly, it introduces distortions of competition between players who are included on the list of SIFIs and those who are not listed but are competitors, undermining financial stability. More specifically, this approach penalises the institutions which diversify their risks by diversifying their geographical presence and financial activities, even though these institutions may not necessarily have a significant size in the various regions or activities in which they operate, and even though they are therefore more stable than other institutions which are more concentrated on certain businesses or geographical areas and which will not be listed as systemically important. As for insurance, it would harm its

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18. The complex issue of systemic risk - BBVA Position paper Oct. 2010  
19. Ibid.  
20. IAIS note on the systemic risk and the insurance sector, §30, October 25th 2009  
21. The systemic importance of Financial institutions BIS Quarterly Review Sept. 2009  
22. Ibid. Method developed by Shapley

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fundamental function of economically pricing the risk with potential negative consequences on the social, economic and financial system.

38. In the end, such an approach - static, simplistic and relatively unrepresentative of the actual systemic risk – is likely to produce various unintended and contradictory negative effects (e.g. a possible increase on bank concentration due to the moral hazard, the reduction of asset diversification, the focus on the more leveraged risky activities, etc.) and risks neglecting the emergence of new risks; it also reveals itself to be incapable of limiting any spill over from the systemic risks notably linked to clusters. More specifically, this approach does not provide any guarantees concerning the treatment of the risks resulting from shadow banking, even though it is contributing to the development of this sector, as illustrated by the recent creation of numerous hedge funds representing the spinning off of proprietary trading activities brought about by the Dodd Frank Act.

## 7. Priorities for combating systemic risks

39. The identification of an institution's systemic importance and the definition of the means required to reduce it cannot just be based on a simplistic approach looking at the institution's size. Since the crisis began, we have seen small or mid-size banks fail and generate risks for other sectors. The supervisors' role is to detect a financial institution's weaknesses early enough and take measures to resolve them. Similarly, work to review each relevant subset within the financial system and their interrelations must be carried out by the supervisors. Only such an analysis will make it possible to identify the causes of systemic fragilities earlier and more relevantly. As such, moves to effectively reduce the systemic risk cannot be based on drawing up one single limited list of important institutions; they require such a review to be carried out at national, regional and global levels, encouraging the creation of macroprudential supervisory authorities. There is also an absolute need for a real comprehensive and macro-prudential perspective where not only negative but also positive externalities are taken into account e.g. the role played by long term investors, like insurance companies, who are the buy side of the market, hence behaving as natural counter-cyclical investors as well as providers of liquidity.

40. The changes in the regulatory framework proposed by the Basel Committee and adopted by the G20 (so called Basel III) have ensured that systemic risk is systematically taken into consideration. Inputting stressed data, factoring in the level of interconnection of financial institutions in the risk weighting standards, and adding a conservation buffer within the Core Tier1 combined with the evolution that standard setters are making toward less pro-cyclical asset valuation rules, the set up of resolution plans together with the very much needed micro-supervision improvements represent an outstanding regulatory set to tackle the institutions-level systemic issues.

41. In particular, and more specifically to reduce a possible moral hazard, as well as the costs for the taxpayer of bailing out an institution, it is essential to make the structure of financial groups more legible (location and valuation of assets, commitments, cash-flows, etc. financial links), clarify the financial responsibilities of their various creditors (e.g. shareholders, contingent capital subscribers, hybrid securities and bonds, depositors, etc.) and facilitate the handling of their financial difficulties and their possible liquidation. Such improvements require major progress to be made on a harmonised and global basis, particularly in terms of resolution regimes including bankruptcy law for financial institutions, living wills, contingency plans, separability of activities etc.

42. The fight against systemic risks must take on board the fact that the financial system is increasingly complex and notably involves non-banking players with different characteristics and statuses (e.g. hedge funds, money market funds, SPVs, market infrastructures, etc.). Regulators and supervisors need also to focus more on Significantly Important Sectors and the interconnectedness between them. The changes to the regulatory framework, the work to review each relevant subset within the financial system and their interrelations, and the advances with resolution tools etc. must therefore involve or concern these specific players and sectors.