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The insolvency of cross border banking groups: Problems and Perspectives

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Vita and main Publications

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- **Russo C.**, *Bail out plans: do they really envision State exit and bank*

repayments? A view from a competitive assessment perspective, in «European Business law Review», Issue 4, 2010;

• **Russo C.,** *Le soluzioni normative alla crisi: alcune riflessioni sulle riforme britanniche e sulle proposte dell Unione Europea*, working paper, gennaio 2010, in
http://www.orizzontideldirittocommerciale.it/upload/Russo.pdf

• **Russo C**., *The Legal Foundation of Free Markets*, book review by Stephen Copp, in «International and Comparative Law Quarterly», Issue 4, 2009;

• **Russo C.,** *Commissione europea, aiuti di Stato alle banche e diritto societario: una difficile convivenza*, in «Banca, Impresa, Società», 3/2009;

• **Russo C.,** *La crisi della Northern Rock: un recente esempio di* regulatory failure, in «Banca, Impresa, Società», 2/2009;

• **Russo C.,** *The Uk Banking Act 2009 –new law, old problems*, in «Bulletin of International Legal Developments», Issue 04, 2009;

• **Russo C.,** *Paese per paese come si salvano le banche*, in *Il Mondo sull'orlo di una crisi di nervi: Origini, Sviluppo, Responsabilità del Terremoto*, book edited by Pellizzon L., Castelvecchi, Roma, 2009;

•**Russo C.**, *Cosi l'Italia aiuta le banche*, in *Il Mondo sull'orlo di una crisi di nervi: Origini, Sviluppo, Responsabilità del Terremoto*, a cura di Pellizzon L., Castelvecchi, Roma, 2009, p.138

• **Russo C.,** *The Alitalia Saga*, in «Bulletin of International Legal developments», Issue 11, 2008;

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Russo C., *La nazionalizzazione non è una ricetta per banche*, in www.lavoce.info, 16.06.08

• **Russo C.,** *Il caso Parmalat tra tutela risarcitoria e conflitto di interessi del* lead manager, in «Giurisprudenza Commerciale», 6/07

Abstract

This thesis discusses the current range of legal and economic problems related to the insolvency of cross border banking groups. The first aim is to show how the actual structure and internal organisation of such groups make them «too big to fail» institutions. Their funding preferences, their soft budgets constraints and their presence in different member States increase the likelihood of contagion and the adverse systemic impact of their failure. A great role is played also by the time inconsistency of States' "no bail out policies".

The second aim is to prove how the lack of a formal EU regime on the matter, which is left to Mou's agreements and poor enforcement authority, is completely inefficient. In fact, the existent legal and operational differences between Member States and the agency conflicts among competent Authorities give raise to serious coordination problems, ring fencing and sub-optimal crisis management.

To ensure a better outcome, a proposal on the design of *ex ante* tools and the different contents, role and timeframe for action of burden sharing agreements, intra-group transfers and "living wills" (*i.e.*, recovery and resolution plans) is spelt out.

Lastly, despite European efforts to mediate such conflicts and create a level playing field, when those crises occurs member States resolve them with *ad hoc* measures and on a case-by-case basis. In the shed of the current economic crisis Member States intervened with plans to sustain the sector. However the final outcome of such measures would be a new financial structure where competition may be hindered. Further, those plans do not avoid moral hazard, do not envision state exit neither bank repayments nor minimize big banks' incentive to behave.

Introduction

The insolvency of cross border banking groups has received increasing attention from regulators of both sides of the Ocean. This was mainly due to the financial turmoil of 2007-2009 where the financial system worldwide was about to collapse were it not for Central Banks', Finance Ministers' and Supervisory Authorities' intervention.

Obviously this is just the last in time episode, since financial crises date back to the last century: one may think at the 1930's Great Depression, at the Asian crisis, at the Mexican crisis, and so on. More recently we have observed cross border failures of banks at micro levels, the most cited being the BCCI's collapse.

It is a common wisdom that banking crises arise globally but are solved locally. This is far from optimal since banking groups' activities have reached a global dimension as well as their liability structure is as such that their failure carries negative externalities in all involved countries. Further, the functions performed by banks are critical for the financial system and the real economy (so called specialty of banks) so the slump in the financial health of one bank may cause severe disruption to the whole system.

But it is not only the global aspect that worries observers and policymakers, what is utmost noticeable is the explosive growth of the dimensions of these groups. This, coupled with the growth of the financial intermediation sector –notably the wholesale money market and the inter-bank exposures –the growth in leverage of those groups and their increased exposure to high risky assets of uncertain liquidity as well as banks' reciprocal dependency, makes those players as institutions too big to fail.

Since 1984 we observed the pursuance of a formal public policy aimed at not allow these big banks to fail. The main justification is, as it is always been, that financial stability is a public good and that the negative outputs a default may have on depositors, public confidence and the real economy are

worth to be avoided.
Which may be true, but it contributed to the creation of a vicious circle that has lead to the current situation whereby financial players are capable of acting above the thresholds that public regulation imposed on them.
This phenomenon is known as moral hazard that, in the cross border case, is amplified by the inability of the Authorities to efficiently coordinate their actions and monitoring and by asymmetries in monetary policies. In fact banks can implicitly rely upon central bank's interventions to stop price falls and to adequate interest rates. Further they can rely on supervisory forbearance and on the time inconsistency of more recent "we are not going to bail out banks" policies. The following steps taken by regulators after the Lehman Brothers collapse even reinforced this hazardous attitude.
The problem is that banks shall be allowed to fail.
This is necessary for the maintaining of a certain incentive for the players to behave and to respect the rules because they know that they will otherwise be out of the market. Competition would benefit as well and taxpayers would not bear the consequences of behaviors they are not responsible of.
The problem is on the designing of an efficient cross border framework.
Supervisors' different powers, objectives, triggers for intervention and available tools add layers of complexity to the matter. Although a certain degree of homogeneity stems from some provisions of the Capital Requirements Directive, these are not yet sufficient.
Clarification is needed on the concept of "crisis": nowadays the lack of a well defined set of triggers for intervention and for resolution is as such that "being insolvent" is a hybrid concept, positively correlated to regulators' intents and discretion on keep the bank afloat or liquidate it.
What seems clear though is that the matter cannot be left to rules applicable to non financial companies, since bank insolvency law shall pursue a broader and different set of objectives: depositor protection and public confidence in the

system, maintenance of financial stability, preserving of critical banking functions and protection of competition. Furthermore the setting should be designed in a way to mimimise the overall resolution costs, the actual cost for taxpayers and to avoid moral hazard.

Today, the crisis of a cross border group would be seen as the crisis of each single entity (subsidiaries) part of the group, because they will be treated accordingly to their legal independency and not to their economic dependency from the parent. Hence the possibility to treat the group on a wide basis is left to government's decisions to ring fence assets or instead to collaborate and take coordinated steps.

In this regard, agency conflicts and regulatory culture differences play a great role, both from an ex ante and from an ex post perspective.

In fact, Authorities, that supervise the group on the basis of a home country control principle, may be reticent to share information on the supervised entity because of threefold reason: i) supervisors' incentive to obtain and give information is a function of their responsibilities; ii) they may find advantageous not to share information with other regulators; and iii) they may have poor or no incentive to take cross border externalities into account: to sum up, supervisors will not take cross border contagion effects into account if they are accountable only to their jurisdiction. Furthermore they may want not to disclose their supervisory forbearance.

This is the case because each State is responsible for depositor protection, lender of last resort tools and the overall financial stability of its system.

We must also acknowledge however that supervisory difficulties in the monitoring of cross border banking groups' activities and behavior is also due to their internal organization.

In fact large banks tend to be organized into "hub and spoke" models: spokes are responsible for risk management within business lines, whereas hubs provide centralized oversight of risk and capital at the group level. The main shortfall is that it

may question the effectiveness of host country supervision of liquidity risk in branches and subsidiaries. In fact, host supervisor may not be able to control how the liquidity is managed by the parent company as well as centralized liquidity management may weaken the legal protection arising from the subsidiary structure, since it may create features that make the group resemble one with a branch structure.

Likewise, business lines (e.g. retail banking, merchant banking and so on), creates an implicit transfer of decision powers from the national entity of the group to a centralized business-line manager who will not necessary be in the home country. This cross border business line integration implies that there may be a higher possibility of intra group, cross border contagion that may not be caught in due time by the responsible supervisor.

When banks centralize operational function, the host supervisor may well be unable to supervise those functions as well as it may be unable to assist a sound subsidiary if the parent company that houses the key operational functions goes bankrupt. This is also why we state that living wills should contain provisions on the resiliency and functioning of those infrastructure systems.

Memoranda of Understanding between single countries may provide to be useful in handling the crisis management, although there is widespread mistrust on their utility.

Our in depth analysis, showed instead that their provisions are actually complete and fairly precise: the thing is that they are neither enforceable nor binding. In fact none of them has been taken into consideration in the recent crisis.

However, the lack of coordination and the inability of the Authority to timely solve the problem have lead to sub optimal resolutions. To give some example, take the Fortis case.

Fortis was a Belgian/Dutch financial conglomerate with substantial subsidiaries chartered in Belgium, Holland and Luxembourg. In September 2008 it was at the peak of its crisis, which actually stated time before. The Dutch government acquired part of its subsidiaries as did the Luxemburg government with its own, whereas the Belgian government

raised its participation into one relevant Belgian subsidiary to 99% and agreed to sell a 75% interest to BNP Paribas in return for BNP shares. BNP also bought the Belgian insurance activities of Fortis and took a majority stake in Fortis Bank in Luxemburg. A portfolio of assets was transferred to a financial vehicle owned by the Belgian state, BNP and Fortis.
However, on December 12, 2008 the Court of Appeal of Brussels suspended the sale to BNP, and decided that the finalized sale to the Dutch State and to the Belgian State as well as the subsequent to BNP had to be submitted for approval by the general assembly of shareholders of Fortis Holding, in order for the three sales to be valid under Belgian law.
On their side shareholders initially rejected some transaction, then after renegotiated and modified some aspects of others.
The Banking Committee (2009) said: «despite a long-standing relationship in on going supervision and information sharing the Dutch and the Belgian Authorities assessed the situation differently. Differences in the assessment of available information and the sense of urgency complicated the resolution». The problem is defined also by the Commission (2010): «The Fortis case is a clear illustration of many of the problems which can arise during a cross border banking crisis. It shows the tendency of authorities to adopt territorial approaches in crisis resolution and how the consequent competition for assets can lead to sub-optimal results. Absence of complete information, exacerbated by the complex business structure of Fortis, compromised the early burden sharing arrangement, and ultimately resulted in the splitting of the group. The misalignment of responsibilities between authorities gave rise to tensions which further compromised cooperation. The absence of a clear legal framework under which resolution measures could be taken resulted in legal challenges from shareholders which created a protracted period of legal uncertainty».
At stage, there are several initiatives in place to create a European common set of tools to handle these crises (see for instance EU Communication proposal 2009). Furthermore

suggestions come from institutions promoting common standards and policies, such as the Banking committee for Banking Supervision, the IMF or the Financial Stability Board.
The red line that links those initiatives is the need to focus on tools that can avoid getting that much into troubles, by giving more attention to *ex ante* resolution mechanisms and recovery planning. Duty of cooperation between authorities is of course advocated.
However, they do not seem to go at the very core of the issue: any voluntary cooperation agreement, whether it is called burden sharing or memorandum of understanding is not currently thought to be enforceable and binding. The same may be true for living wills.
The crisis of border banking groups can be seen from many standpoints.
One can look at the *ex post* decisions to be taken: the study of resolution plans is particularly appealing since it involves a reflection on how to eliminate or reduce taxpayers costs. This may be obtained maybe by changing the way the bank is structured, or adopt ad hoc laws whereby taxpayers support is not required or maybe increasing bank's capital and liquidity requirements in an attempt to avoid bankruptcy.
One may investigate resolution methods as well: capital injection; share transfer order; bridge bank set up; liquidation; nationalization, to figure out a cost benefit and a RIA analysis.
One interested in private international law may want to look at the treatment of assets and their collateral, their legal qualification under different regulatory regimes (intangible goods?) and at the cherry picking problem. The analysis of creditors' satisfaction means and conflict of interests among them is interesting too as the design of an ad hoc directive on resolution: shall it be based on a territoriality or on a universality principle?
However, to conclude the reasoning done so far, the latest issues are outside the scope of my research.
In fact my focus is on the role and design of ex ante resolution mechanisms to confine to the minimum the possible state

intervention.
To this end I would suggest to make current MOU's binding, coupled with the existence of burden sharing agreements.
In fact, a form of burden sharing must be realized because collective costs and stability treats are effectively existent, because we cannot deny that if a crisis explodes it is partly because who had to supervise failed to do it and because the legal personality principle cannot pose such high barriers to impede a global consideration of the group and global responsibilities among all the interested parties. We need to pierce the veil.
However the agreements shall be of a "soft" type, in the sense that they shall not regulate the fiscal responsibility of each member state involved to share the net budgetary costs of the resolution, but the idea is that Member states should ex ante formally commit themselves to participate in a certain burden sharing agreement whenever an identified banking group would face financial difficulties and only if and when a private or internal solution has not proven to be valid. Their aid should be confined to the minimum to avoid taxpayers' burdens and moral hazard. Beside, public authorities should take a more extensive approach of art. 123-126 Eu Treaty (ex art. 101-104).
To tackle what we identified above as the very core issue, the way by which States commit themselves shall fulfill some preconditions: mutual trust, legal recognition, enforceability, commonly agreed assessment of the best policy option. Once done so, the analysis focuses on the triggers for intervention and the to be enacted policy.
In this respect, these burden sharing must contain reference on the transfer of assets within the group before it gets insolvent as a way to avoid state's intervention.
However, the efficiency of this option may be hindered by insolvency, banking and company law obstacles. To this end, within the solution proposed, I suggest to consider in the company's bylaw the possibility of suspending some shareholders rights in crisis situation. The Fortis case is a clear

example of the conflicting tension of shareholders' interests and the need to maintain financial stability and avoid a disruptive bankruptcy.
Other legal differences must be taken into account that may limit the incentive and the possibility of making such transfers: differences in directors' liability regime, supervisor' or shareholders prior approval, subjection of some transfers to certain rules, arm's length principle and so on.
In fact, national laws tend, rightly enough, to protect both subsidiaries and stakeholders. The first from the unduly influence of the parent that may affect subsidiary's independence of assets and independent decision making, and the stakeholders are protected from unfair decisions taken by the board of directors; minority shareholders from majority shareholders decisions; creditors from the development of an imbalance between the creditors of the transferor and those of the receiver. The idea is trying to find a way that satisfies both stability and stakeholders' protection.
Further the thesis shifts its attention towards the resolution and recovery plans (living wills).
The living wills idea is fairly new and derives from the necessity to make the banks being liable for their failure and not to spread the cost to taxpayers.
Further they may help reducing the complexity of the group and consider subsidiaries as independent entities to be wound up singularly.
However the big issue with those plans is their actual shape and their contents.
In absence of any neither practical examples nor specific regulations yet in place, I tried try to figure their features, taking into account their intermediate and final goals.
They shall contain provision in relation to the bank's outside funding option, how they may raise additional capital, and if the consideration of selling business lines or some assets may find legal obstacles.
Resolution plans instead shall be directed to supervisors and their aim would be give them the possibility of having a clear

cut representation of bank's internal mechanisms and infrastructures to help them to choose among the resolution options in consideration.
To conclude, solutions are possible to the crisis of a cross border banking group. However to allow for the safe resolution or recovery of the bank, a great role is played by the State in its ability to strongly force banks to find a private sector solution and to intervene only and according to the boundaries it has previously committed itself to.
Furthermore, States shall avoid any national-interests based attitude and cooperate and collaborate *ex ante* to reach a productive and cost-effective sharing of responsibility.
Time inconsistent policies cannot be admitted anymore.

Chapter 2

Cross border banking groups as «too big to fail» institutions?

2.1. Introduction

There is a variety of reasons behind the failure of a bank.
The first one refers to endogenous causes: wrong business decisions, risk assumptions, misalignment of interests, hence mismanagement, which is usually followed by fraud, as has been the case for BCCI and Banco Ambrosiano.
The second one is related to exogenous events: greater/increased level of competition, change in the levels of demand, alteration of market conditions. Furthermore, among the macro and micro causes identified by the economic literature the most significant may be 1) instability of financial markets; 2) irrational behavior of depositors due to a loss of confidence in the bank's ability to pay its debts; 3) contagion effect; 4) long run unsustainable macro economic and monetary policy; 5) credit booms; 6) large capital inflows combined with currency imbalances[1].
Rather, greater consensus is on the precondition of a crisis, which usually stems from 1) a long period of calm condition with intense competition between financial institutions; 2) increasing and concentrated debt accumulation at low risk premiums; 3) financial innovation and declining capital ratios[2].
However, this ideal condition cannot hold for long and

1 See Lindgren C.-J., Gillian G., Saal M., *Bank soundness and Macroeconomic policies,* IMF working paper, 1996; Collyns C., Kincaid G. R., *Managing Financial Crisis: Recent Experience and Lessons from Latin America*, IMF occasional paper, n. 217, 2003.

2 See the seminal work by Davis, 1995, p 198-199.

therefore at a certain point a shock arises that compel the stability of the system. The triggering event may vary according to the actual situation, but it may generally be caused by the tightening of monetary policies or the unexpected asset devaluation.

Whatever the cause is, the crisis of a bank carries negative externalities that in turn may affect the real economy. The way in which those externalities –stemming basically from credit losses and liquidity problems -impact depositors, creditors and other market sectors depends heavily on how the crisis is resolved, how long does it take to depositors to give access to funds and how long does it take to other claimants and creditors (i.e. banks that acted as lenders in the inter-banking system) to receive their money back.

Another important shortcoming of a run is the ability of the crisis to spill over other credit institutions and affect the system as a whole, even across geographical boundaries. In fact, systemic risk can be broadly defined as the "propagation of an agent's economic distress to other agents linked to that agent through financial transactions"[3]. Those financial transactions are commonly known as inter-bank deposits and loans and may take the form of "intraday debits on payment system, overnight and term inter-bank lending in the central banks fund markets and contingent claims such as interest rates and exchange rate derivatives in OTC markets"[4]. It is easy to image that the freezing of such transactions, the most important case being failures in the payment settlement system, can lead to the so called contagion effect which means widespread liquidity problems among different institutions, panic fire-sale and clearing failures. Furthermore, when a banking panic occurs, the economic ability to "channel funds with productive investment opportunities may be severely hampered, leading to a full scale financial crisis and a large decline in investment

3 See, ROCHET J.-C., TIROLE J., *Interbank lending and systemic risk*, in Journal of Money, Credit and Banking, Vol. 28, n. 4, Part. 2, Nov. 1996, 733-762.

4 See, ROCHET-TIROLE (1996), 733.

and output"[5].

However, in case of an *individual* ailing bank the mentioned effects may not reveal, since the supervisory authority could be able to contain the side effects and resolve the crisis in an orderly manner. This happens usually when the institution does not have a high degree of interdependence with other banks, or in other terms, is not considered as "too big to fail" (TBTF). This latter case arises usually in presence of a group, or a bank that is so large and complex that its failure may have a systemic impact on the whole economy, (the so called *large and complex banking organizations*, LCBO's). De Nicolo and Kwast (2001) have indeed demonstrated the positive relationship between banks consolidation and systemic importance[6].

This issue gains complexity when the group presents cross border aspects. In fact, the usual tools authorities apply to manage systemic risk (i.e. capital regulation), to solve the crisis (i.e. winding up, reorganization, liquidation) and to protect involved parties (depositors, shareholders, other claimants) cannot apply smoothly to those organizations basically because there is no common legal framework in place, which means that among European Member states there is:

- diversity in legal, regulatory and supervisory systems;
- different legal tools authorities can dispose;

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5 See, MISHKIN F. S., *How big a problem is too big to fail? A review of Gary Stern and Ron Feldman's* Too Big To Fail: the hazards of bank bail outs, in *Journal of Economic literature*, Vol XLIV, Dec. 2006, 988-1004; Fore a more detailed analysis, see also, Demirguç-Kunt A., Detragiache E., Gupta P., *Inside the crisis: an empirical analysis of banking systems in distress*, in *Journal of International economic finance*, Issue 25, 2006, 702-718; Kaminsky G.L., Reinhart C., *The twin crisis: the casues of banking and balance of payments problems*, in *American Economic Review*, Issue 90 (3), 1999, 473-500; Gupta P., *Aftermath of banking crisis: effects on real and monetary variables*, in Journal of *International Money and Finance*, Issue 24, 2005, 675-691; Dell'Ariccia G., Detragiache E., Rajan R., *The real effect of banking crisis,* in *Journal of financial intermediation,* Issue 17, 2008, 89-112

6 See DE NICOLO G., KWAST MYRON L., *Systemic Risk and Financial Consolidation: Are they related?*, in www.bankofengland.co.uk

- unclear division of labor between home and host authority in presence of subsidiaries;
- different deposit insurance mechanisms; and
- different grounds for intervention,

in relation to the crisis of a cross border banking group having subsidiaries incorporated in different member States.

Scope of this chapter would be first the definition of a banking group, when it can be considered insolvent and then its qualification as a "too big to fail" institution. We then analyse the main determinants of a TBTF crisis, namely its funding structure and its interlinkages with other financial institutions and finally we will go through the associated systemic and contagion risk that derives in case of crisis.

2.2. Some definitions

Before going through the main problems posed by a large and complex organization as a cross border group, we must first define what the actual shape of such group is and then try to identify the cases where it can be considered insolvent, hence when supervisory intervention is needed.
The first attempt is relatively easy.
Although at European level there is no clear definition of "banking group[7]", using a backward induction/reasoning we can first identify the existence of a group through its basics -the notions of participation and of consolidated accounts -and then determine the credit activity.
Article 17 of the Fourth Council Directive 78/660/EEC[8], defines "participating interest" as "rights in the capital of other

7 For a definition of "group", see *infra*

8 Fourth Council Directive of 25 July 1978 based on article 54 (3) (g) of the Treaty on the annual accounts of certain types of companies, in OJ L 222, 14.8.1978.

undertakings, whether or not represented by certificates, which, by creating a durable link with those undertakings, are intended to contribute to the companies' activities", whereas art. 2 (11), Directive 2002/87/EC[9] specifies the meaning of participation as the "direct or indirect ownership of 20% or more of the voting rights or capital of an undertaking".

At the very basis of a group hence is the concept of participation which in order for our analysis to be relevant must give the "holding" company the ability to exercise a relevant/dominant influence on the controlled entities. This influence may be obtained by many means, the first is the ownership of the great majority of votes in the general assembly (namely the 50%+1 of capital of the controlled company), the second is the ownership of a x percentage of voting rights that allow the parent company to take the main decision in the assembly, the third is the ability of the parent to influence another company by virtue of contractual relationships. Actually a dominant influence over a certain company may be obtained even in presence of other agreements between shareholders that give one of them the power of appointing directors, or of transmitting losses or profits within them, or to cooperate with other companies under a common management, or to give more powers then what would be proportional to the participation and eventually when a third party other than those entitled to exercise such power, is given powers over the choice of the board of directors or auditors[10].
Furthermore, the conditions for the preparation of

9 Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002, on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council, in OJ L 35, 11.2.2003.

10 Those definitions draw heavily on art. 2359 of the Italian Civil Code and art. 23 of the Italian consolidated banking bill.

consolidated accounts encompass and widen even more the concept of participation identified thus far.
In fact, according to art. 1 of Directive 83/349/EEC[11], consolidated accounts and a consolidated annual report are required to an undertaking, considered as a "parent undertaking", when it:
1) has a majority of the shareholders' or members' voting rights in another undertaking (a subsidiary undertaking); or
2) has the right to appoint or remove a majority of the members of the administrative, management or supervisory body of another undertaking (a subsidiary undertaking) and is at the same time a shareholder in or member of that undertaking; or
3) has the right to exercise a dominant influence over an undertaking (a subsidiary undertaking) of which it is a shareholder of member, pursuant to a contract entered into with that undertaking or to a provision in its memorandum or article of association where the law governing that subsidiary undertaking permits its being subject to such contract or provisions (…); or
4) is a shareholder in or member of an undertaking and:
5) (*aa*) a majority of the members of the administrative, management or supervisory bodies of that undertaking (…) have been appointed solely as a result of the exercise of its voting rights
6) (*bb*) controls alone, pursuant to an agreement with other shareholders in or member of that undertaking (a subsidiary undertaking) a majority of shareholders' or members' voting rights in that undertaking".
Furthermore the duty to prepare consolidated accounts arises also when a parent undertaking holds a participating interest in a subsidiary undertaking and *a*) it actually exercise a dominant influence over it, or *b*) it and the subsidiary undertaking are managed on a unified basis by the parent

11 Seventh council directive 83/349/EEC of 13 june 1983 based on the article 54(3) (g) of the Treaty on consolidated accounts, in OJ L193, 18.7.1983.

undertaking.
We can then infer that a parent undertaking is a company that is able to exercise a dominant influence over another undertaking and that a subsidiary is a company that is effectively subjected to that influence[12].
However, we must not overlap the concept of "participation" and the definition of group. In fact, not every time a company controls another a group exists. The latter verifies only in presence of a uniform direction from the parent company that coordinates the management and the businesses of the subsidiaries, following a common economic scope.

To sum up a group could be identified as a set of legally distinct companies (subsidiaries) all subject to the direct or indirect control of a single leadership (an individual, a coalition of individuals, or a government body), as Bianco, Bianchi and Enriques[13] define it, or as art. 2(12), Directive 2002/87/EC puts it: "group shall mean a group of undertakings, which consists of a parent undertaking, its subsidiaries and the entities in which the parent undertaking or its subsidiaries hold a participation, as well as undertakings linked to each other by a relationship within the meaning of Article 12(1) of Directive 83/349/EEC;"
The above entails also that, whatever the actual shape a group

12 From the above derives also a peculiar aspect of the relationships within a group, namely the disproportion of responsibility and power. In fact, the decisions a holding can take are greater than what it would normally be if based only on its share participation in the subsidiary ("power without responsibility"). Whereas subsidiaries' shareholders hold a risk uncorrelated to the decision making power of their board of directors that is subjected to the holding's directions ("responsibility without power"). See, COSTI R., *Le relazioni di potere nell'ambito dei gruppi bancari*, in Giur. Comm., 1995, 886.

13 See BIANCHI M., BIANCO M., ENRIQUES L., *Pyramidal Groups and the separation between ownership and control in Italy*, 1997, p.4 in http://www.tcgf.org/research/control_europe/documents/italy.pdf, also in *The control of corporate union*, eds by Barca and Brecht, 2001, OUP, p. 154.

can have - pyramidal, hierarchic, chain, horizontal and so on - in any event subsidiary undertakings of subsidiary undertakings shall also be considered as subsidiary undertakings of the parent company.

We now have to define when such organization can be considered as having banking nature. We could define it in a positive sense.
A banking group is a conglomerate whose relevant business is "to receive deposits or other repayable funds from the public and to grant credits for its own account"[14]. Namely a group that is primarily engaged in credit activities, such as mortgage and consumer credit, factoring, financing of commercial transactions, as well as guarantees and commitments, money transmission services, issuance and administration of means of payment, trading for own account or for account of customers in money markets instruments, in financial instruments, options and transferable securities, portfolio managment, activities related to the above and other activities that are ancillary to the banking services[15].
Nonetheless, within the group other businesses are possible, such as financial[16] and insurance activities, but the weight of the credit businesses over the consolidated account must be greater then the others[17].

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14 As defined by art. 1, First Council Directive 77/780/EEC of 12 December 1977 on the coordination of the laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions, in OJ L 322 17/12/77.

15 See Annex I, Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006, related to the taking up and pursuit of credit institutions, in OJ L 177, 30.6.2006.

16 Financial activity means granting credit facilities (including guarantees) to acquire participations or to make investments, according to art. 1 of Council Directive 83/350/EEC of 13 June 1983 on the supervision of credit institutions on a consolidated basis, in OJ L 193, 18.7.1983

17 As far as the participation in a credit institutions is concerned, Article 1 of Council directive 83/350/EEC defines "participation" as "the ownership by a credit institution, directly or indirectly of 25% or more of the capital of another credit or financial institution". Directive Council

This is why, in order to avoid any confusion, we must clarify even more the above definition. We must in fact distinguish, where possible, the financial conglomerate identified by Directive 2002/87 and the banking group relevant for our purposes. Although the two's tend to overlap, a financial conglomerate must carry a combination of banking, insurance and financial activity[18]. It is identified by the ratios expressed in the Conglomerate Directive[19] and it is subjected to a supplementary supervisory regime leaded by a coordinator, which takes particular care to the supervision of risk concentration, capital adequacy, intra-group transactions, internal control mechanisms and risk management processes, though without prejudice to the specific sectoral rules. Hence, for the purposes of our analysis, we would consider as a banking group the financial conglomerate that fells into the above thresholds –under the condition that it operates mainly in the banking sector –as well as the organization to whom the conditions laid down in the Conglomerate Directive do not apply but nevertheless it can be considered a banking group[20].

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directive 2000/12/EC related to the taking up and pursuit of the business of credit institutions, in OJ L 126/1, 26.5.2000, gives the definition accepted in the text

18 Theoretically, this means that we can have a financial conglomerate that does not carry banking activity at all.

19 Considering that a financial sector can be a banking sector, an insurance sector and an investment services sector, according to art 3 (1) (2) of the Directive, "for the purposes of determining whether the activities of a group mainly occur in the financial sector, the ratio of the balance sheet total of the regulated and non regulated financial sector entities in the group to the balance sheet total of the group as a whole should exceed 40%. For the purposes of determining whether activities in different financial sectors are significant for each financial sector the average of the ratio of the balance sheet total of the financial sector entities in the group and the ratio of the solvency requirements of the same financial sector to the total solvency requirements of the financial sector entities in the group should exceed 10%".

20 We are perfectly aware of the fact that the above distinction may not hold since the borderline between the two's is really tiny, but it seemed necessary to specify that it is not in the scope of this paper the analysis

Less easy would be the definition of crisis.
When a group can be considered insolvent?
The 2003 Basel capital accord gives an implicit definition of insolvency by fixing the ratios between bank exposures and own fund. Such solvency ratio is the amount of capital a bank must hold to be considered solvent, and it is given by the ratio between bank's own funds and on-and-off balance sheet commitments weighted according to their rated degree of risk: the resulting value should be 8%. Hence, we could argue that a bank whose capital falls below this minimum risk weighted ratio should be considered insolvent. However, the recent banking crisis has shown that a bank can be unviable even when its own funds fulfill the above threshold.
Moreover neither from a legal point of view nor from an economic standpoint there is common consensus over the definition of bank insolvency. In fact the Winding up Directive[21] that regulates the insolvency proceedings of credit institution does not specify its meaning but only define the "reorganisation measures"[22] and "winding up proceedings"[23]. Consequently, we should borrow the agreed definitions of bankruptcy of commercial firms.
Those definitions polarize over two situations: 1) failure to fulfill obligation when they fall due regardless of the value of

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of a financial conglomerate as regulated by Directive 2002/87/EC.

21 Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001, on the reorganisation and winding up of credit institutions, in OJ L 125 of 5.5.2001

22 As "measures which are intended to preserve or to restore the financial situation of a credit institution and which could affect third parties' preexisting rights, including measures involving the possibility of a suspension of payments, suspension of enforcement measures or reduction of claims". Art. 2.

23 As "collective proceedings opened and monitored by the administrative or judicial authorities of a Member State with the aim of realising assets under the supervision of those authorities, including where the proceedings are terminated by a composition or other similar measure". Art. 2

assets and liabilities and/or 2) the total value of liabilities is greater than the assets.
In such cases corporate creditors can start judicial proceedings to liquidate the firm[24].
However, banking crisis are different under many perspectives. The first is that they can realize even in absence of equity or balance sheet problems, since a run can be caused simply by the loss of confidence faced by depositors, maybe due to mismanagement or liquidity problems' rumors. According to Calomiris and Gordon (1991) "a banking panics occur when debt holders at all or many banks in the banking system suddenly demand that banks convert their debts claims into cash to such an extent that the banks suspend convertibility of their debt into cash". Second, an economically insolvent bank may not be considered as such by the responsible Authority and may be offered financial assistance[25] to be kept afloat. Third, Authorities may be allowed by national legislations to intervene even before a problem occurs, notwithstanding if it could be a managerial or a liquidity matter.
Forth, to avoid being insolvent, banks must pay the due attention not only to credit risk treats but also to liquidity and funding problems.
Lastly, although we could agree upon the fact that a bank may become insolvent when its "going concern" value equals the

24 By general definition. National laws give creditors different powers. For a more detailed analysis of some member states bankruptcy laws, see DAVYDENKO S. A., FRANKS J. R., *Do bankruptcy codes matters? A study of defaults in France, Germany and the UK*, London Business School Working Paper, August 2005. For the differences between corporate and banking insolvency regimes in the US, see BLISS R., KAUFMAN G., *A comparison between US corporate and bank insolvency resolution*, Federal Reserve Bank of Chicago Working Paper, 2006. See also ARMOUR J., *The law and economics of corporate insolvency: A review*, ESRC Centre for Business Research Working Paper, University of Cambridge, 2001.

25 See Lastra R.M., *Cross border bank insolvency: legal implication in the case of banks operating in different jurisdiction in Latin America,* in Journal of International Economic Law, 2003, 79-110 (81).

expected values of its liabilities, it is a fact that most of the times the legal insolvency of a bank is an exogenous variable that depends on the decision of the competent authority to withdraw the license, rather than give financial aid to the bank to restore its activities or to sell it to a private purchaser or to winding it up. In other words, as far as banking crisis is concerned, we could differentiate between the failure of a bank and its insolvency. The latter has been explained as yet, the former being a situation where regulatory/legal intervention is needed either to close or to restore the bank's viability.

The last attempt would be the identification of the cross border nature of the group, which is the easiest.
A group can be considered cross border when some of its subsidiaries are incorporated in States different from the parent's one.
By virtue of simplification, our analysis will be focused only on European groups, namely those organizations whose subsidiaries are incorporated in EU member states only, because our investigation will consider the European normative framework.

2.3. The "Too big to fail" doctrine

The exercise conducted thus far has helped us to understand when a set of legally independent undertakings can be considered as part of a banking group. Though it has been conducted in a simplified way, it gave a glimpse of the main issues behind a LCBO that will be better investigated forward.
As a matter of fact, the actual structure of those groups is so complex that they become very difficult to perfectly supervise and nearly impossible to liquidate. Such impossibility has been widely investigated from the supporters of the so called "too

big to fail doctrine"[26], a theory in a sense interconnected with the systemic threat posed by the failure of a large institution[27], that will be treated further as well.

We must preface though, that a TBTF institution seems to be nothing but the result of two assumptions economic in nature: 1) economies of scale and 2) global net between financial players. It is the combination of the two's that determines the most worrying effect of their failure: the propagation of the financial meltdown within the financial system as a whole.

Economies of scale have always been considered as a positive feature for undertakings: from Adam Smith to Alfred Marshall specialisation and division of labour have been considered as a way to facilitate the acquisition of maximum return with minimum costs through a reduction in the investment of money and time and an increase in the return of production[28].

Those economies could be divided into internal and external: the latter are defined in terms of increase of the rate of production and a general fall in the industry level expenses and with an automatic decrease in the total expenses of the firm due to a development of scopes for varied industry activities. Internal economies of scale on the other hand strive to decrease costs and increase production within the "four walls of a company"[29]. As Stigler (1958) puts it, "the theory of economies of scale is the theory of the relationship between the scale of use of a properly chosen combination of all productive services and the rate of output of the enterprise"[30]. Unfortunately, however, those savings are of little help to cover the losses when those banks are failing.

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26 This is the term most in fashion. We can list few variations such as "too interconnected to fail", "too many to fail", "too big to bear", "too political to fail " ...

27 See Taleb N., Tapiero C., *Too big to fail, Too big to bear and risk externalities*, 2009, in www.ssrn.com, for an empirical model establishing a condition for a firm to be to big to fail.

28 Smith A., *An inquiry into the nature and causes of the wealth of nations*, London, Strahan and Cadell, 1776.

29 Marshall A., Principi di Economia, Torino, UTET, 1972.

30 Stigler G. J., The ecomies of scale, in J.L. & Ec on, Issue 1, 54, 1958

Financial networks on the other hand are driven by the above mentioned financial transaction[31] as well as by the development of risk management techniques based upon derivative instruments which involve networks of multiple claims among financial institutions and by the common use by many participants of the same technological means to clear and settle their multilateral claims.

The term TBTF appears for the first time as a consequence of the difficulties faced by the *Comptroller of the Currency* in the US, to liquidate the economically insolvent *Continental Illinois National Bank of Chicago*, in 1984[32].
Continental bank was one of the largest US banks at the time and was the "largest correspondent bank having interbank deposit and Fed funds relationships with more than 2.200 other banks"[33]; although its financial difficulties had been announced by newspaper and appeared also to the competent authorities through the examination reports, its insolvency "caught the regulators unprepared"[34]. The way the Authorities decided to handle the problem differed dramatically from the decisions taken until then in similar cases: here they *de facto* nationalized the bank.
In fact, instead of appointing a receiver of the assets, withdraw the authorisation, sell the assets, pass through uninsured depositors to another bank and let them and the uninsured creditors share any losses, the FDIC injected some fresh money to the holding company by purchasing newly issued preferred shares. The holding downstreamed the received money as equity capital to its subsidiary with the clear effect to "recapitalise the bank and, by having the bank upstream

31 See above, p. 2

32 This description is based upon, Kaufman G., *Too big to fail in U.S. Banking:* quo vadis?, in *Quarterly review of economic and finance,* 2002, 423-436.

33 See Kaufman (2002), 423.

34 Kaufman (2002), 423.

dividends to its parent, permitted the holding company to pay interest on its debt and to stay out of bankruptcy"[35]. The FDIC purchased also billions of bad loans from the ailing bank at adjusted value. The explanations given by the officials at the time were focused on the inherent risks of adverse effects to other banks, to creditors and depositors, given the large size and the interconnection with other banks of Continental.
During the hearings that followed, the Comptroller of the currency, questioned, did not deny that the regulators were ever going to let a big bank the size of Continental Illinois fail. Hence the last statement of the Chairmen had been "let us not bandy words. We have a new kind of bank. It is called too big to fail. TBTF, and it is a wonderful bank"[36], also, the day after the Wall Street Journal headlined "U.S Won't let 11 biggest banks in Nation fail"[37]. There it is.
Therefore, the too big to fail doctrine seems to add another justification for public intervention in banking crisis: in fact, from the consideration of an institution as TBTF derives that it would have 100% of deposits covered and that may be granted public financial support when economic difficulties arise.
Those safety nets should actually be considered together with the reasons that justify the particular care handled by regulators in banking crisis. In fact banks are "special"[38] under many respects:

1. their funding structure.

In fact the main source of liquidity a bank holds is given by

35 *Ibidem*, 424.

36 *Ibidem*, Appendix I.

37 See Carrington T., *U.S Won't let 11 biggest banks in Nation fail,* in *The Wall Street Journal,* 20 September 1984, 2.

38 See, Kelley E. W. Jr, Are banks still special?, in Banking soundness and monetary policy 263, eds Charles Enoch ,John H green, 1997; Corrigan G. E., Are banks special?, in Federal reserve bank of minneapolis annual report, 1982, in www.minneapolisfed.org; Hupkes E., Insolvency, why a special regime for banks?, in current developments in monetary and financial law, vol 3, 2003. for a more positive approach over the failure of a bank, see Lindgren et al, 1996, 114-115.

deposits which are actually a liability of the bank and can be withdrawn at par on demand. On the other hand the main assets of a bank are given by long term loans that are difficult to realise or sell or borrow against on short notice[39]. Under normal circumstances the maturity mismatch would not pose great problems since the deposit withdraw would be covered by the ongoing principal payments of the loans, the capital regulatory requirements would cover the risk of loan losses and a cushion of liquid assets would in any event ensure the bank's ability to repay deposits on demand. Besides, banks do securitize their loans to get fresh money to invest in other financial instruments. Unfortunately, should a shock realise, banks may not be able to repay the likely massive withdraw of deposits as well as if their funding channels frozen up they may incur in an immediate liquidity crisis that may have negative effects on their assets/liabilities maturity mismatch[40].

2. the nature of financial services provided.

We said that basically banks take on household savings and give loans and guarantees to the general public. Despite the existence of other credit intermediaries, banking activities shall still be considered as the primary source of capital for undertakings, families, consumers and even public bodies.

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39 This would be true if the system worked as it should. However banks tend to borrow against or to sell those long run liabilities through securitisation procedures. Which however have the same effect since they are needed to provide fresh money to be used in the medium term. Once a shock occurs, this medium term financing would desappear leaving the bank in pain. *See* the text.

40 Keynes described this situation as "veil of money". He wrote: "A considerable part of this financing (of the economy *nda*) takes place through the banking system, which interposes its guarantee between its depositors who lend it money and its borrowing customers to whom it loans money wherewith to finance the purchase of real assets. The interposition of this veil of money between the real assets and the wealth owner is an especially marked characteristic of the modern world." See Keynes J. M., *Essays in persuasion. The collected writings of J. M. Keynes,* vol IX, MacMillan, London, 1972, 158.

Furthermore banks are the only institution that can provide simoultaneously both banking and financial services.

3. banks constitute the "transmission belt"[41] for monetary policy.
In fact, they are the mean through which monetary policy choices (i.e. interest rate) are put into the economy.

Moreover, as said before, banks are particularly vulnerable to the, grounded or ungrounded, loss of public confidence that, once interested one bank, could spin on the others without apparent reasons and out of any control. Technological progress makes the transmission of the loss spreading even faster.
From those and the abovementioned linkages between institutions, we could deduct that banks can easily act as amplifiers of shock in the financial system, thus transmit the crisis to many other market players and eventually to the final consumer. As a consequence, for long time banks have been considered as pursuing public functions and financial stability has been considered, yet it still is, a public good.
In spite of that, in our opinion the interconnections and stability issues are not sufficient *per se* to justify a public intervention. The very problem is that if handled on time, namely if supervisors would be able to identify the problem before it occurs and if they are able to properly manage the foreseeable consumers' behavior, a crisis may not have the enormous consequences it usually has.
Public intervention would be needed only where the social cost of the run or of the irrational behavior by consumers would be much higher then the costs borne by the bank and its shareholders if allowed to fail. The measure of this ratio obviously depends upon the size and the degree of penetration of the bank in different countries.
However those implicit guarantees have serious consequences

41 See Hupkes E., 2003.

over many fronts: they decrease market discipline because of the perception that the internalization of losses would not be borne by the market; alter the market's perception of the riskyness of TBTF organisatons; affect the degree of competition in the sector, because large banks take on risky decisions more easily, hence tend to "catch it all"; give rise to hazardous choices by the management because they would not borne the consequences of wrong choices.

To be more specific, according to Feldman and Stern (2004)[42], the embarkment on excessive risky projects and the less responsibly behavior would be the combined consequence of both the awareness that the government would bail them out and the reduced monitoring exercised by creditors. Those indeed, given the expectation of the government protection over their loans, would have little incentive to monitor bank behavior or to select relationships with banks that are prudent in their decisions[43]. Nonetheless those findings may be

42 See, Feldman R. J., Stern G. H., *Too big to fail: the hazards of bank bailouts*, the Brooking Institutions, 2004.

43 In our opinion, however, this interpretation is too simplified and needs to be better defined. In fact, the Authors seem to sweep over the fact that monitoring is typically exercised by shareholders. Those, on the contrary, do exercise control especially since they represent the holding company. However their monitoring seems to be more focused on the application of parent's instruction rather that on the kind of risks the subsidiary is embarking into. As far as the creditors is concerned, they are of two types: depositors and other counterparties. The former, tend actually not to monitor at all because they are unable to do it and because they are not informed, not even on the existence of depositor protection mechanisms. The latter is able to monitor *de facto* only their bilateral/MUTUAL exposure, but not the overall vulnerability of the bank in the market. So who could be able to monitor banks' managers? Non executive together with the whole board of directors, firstly, and supervisors secondly. In fact, empirical findings show that there is a positive correlation between though supervision and reduction of risky behavior. See Buch C. M., DeLong G., *Do weak supervisory systems encourage bank risk taking?*, at Journal of Financial Stability, Issue 4, 2008, 23-39. Furthermore today market signals, such as bond-yields spreads are good indicators of bank's stability.

contradicted by empirical studies[44]
But first and foremost they alter the banks' behaviors. In fact, if a bank considers itself as TBTF, its propensity to assume risks, especially in the short run, seems greater as well as its propensity to assume unsustainable leverage risks increases; credit risk would be mispriced and the overall resource allocation would be distorted. The likely intervention of the State to bailing out the bank in financial distress would eventually change its budget constraints. In a world without distortions, in fact, a credit institution would be subjected to hard budget constraints given the disciplinary effect that market would exercise: if a firm is not viable or makes wrong investment of financing decisions it goes out of the market. Nonetheless because a bank knows it is TBTF, its budget constraints would soften and furthermore it would not be able to commit to a safer funding scheme[45].
Lastly a TBTF bank may tend to abuse of its market power and set prices uncorrelated to their actual cost for the bank[46].

So the question would now be why they do arise and why

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44 See Cihak M. et al., *Who disciplines banks' managers?*, IMF working paper n. 272, 2009, in www.imf.org

45 Colombo E., Valentinyi A., *Subsidies, Soft budget constraints and financial market imperfections,* 2002, working paper available at http://dipeco.economia.unimib.it/pdf/pubblicazioni/Wp50_02.pdf, consider rather the impossibility to commit to "a specified financing scheme". Dewatripont and Maskin (1995), consider the SBC problem as endogenous to specified institutions, such as Sate owned enterprises and banks, and as a dynamic incentive problem where a funding source (a government or a bank) cannot commit to keep an enterprise to a fixed initial budget. See Dewatripont M., Maskin E., *Credit efficiency in centralized and decentralized economies*, in Review of economic studies, issue 35, 1995, 541-555. Their model has been further developed by Dewatripont M., Roland G., *Soft budget constraint, transition and financial system*, 1999, in www.ssrn.com. The idea of soft budget constraints as a problem of refinancing loss making enterprises has been first coined and applied to socialist economies by Kornai J., *Resource-constrained versus demand-constrained systems*, in Econometrica, issue 47, 1979, 801-819.

46 See Taleb, 2009

regulators made this happen.
The first answer is very simple (as the second though): this structure allow them to amplify their profits, to regulatory arbitrate, to exploit more favorable taxation system and tax loopholes as well as to exploit the benefits of limited liability of each company.
But foremost they can at the same time consolidate as well as diversify their activities. In fact, bank diversification is usually advocated in financial intermediation theories as a way to increase loans monitoring as well as it enables the bank to finance illiquid assets with liquid liabilities. However, discrepancy between the theory of financial intermediation and empirical findings must be acknowledged[47]
As Avgouleas et al. (2010) said: «banks try to have the best of both of words: exploiting the benefits of the legal structure and exploiting the synergies of operating as an integrated group»[48]
So now we come at the second question: Why regulators make this happen?
This may be mainly attributed on the one hand to economic and entrepreneurial freedom but on the other to political economy reasons. In fact States commitment not to bail out big banks lacks of credibility.
This lack of credibility is just the other side of the spectrum of what Prescott and Kydland called the time inconsistency problem[49].

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[47] As Cerasi and Daltung did. Their explanation to the discrepancy is explained by the fact that thory does not consider the issue of banks' intenrnal organisations: since there is a limit to the number of projects one person can monitor, monitoring more loans entails overload costs. See, Cerasi V., Daltung S., *The optimal size of a bank: costs and benefits of diversification*, in «European Economic Review», 44, 2000, 1701-1726.

[48] And their conclusion is that «faced with a complex and opaque structure, Authorities have little choice but to rescue the whole bank if it is needed». See Avgouleas et al., *Living wills as a catalyst for action*, DSF Policy Paper, May 2010, available at www.ssrn.com

[49] See Kydland F., Prescott E., Rules rather than discretion: the inconsistency of optimal plans, in «Journal of political econom»y, 85, 1977, 473-492

The problem States face with banks, can be considered similar to what faced by governments when dealing with terrorists. Let's recall a brilliant example from Mankiw' class notes about negotiating with terrorists over the release of hostages.
The announced policy of many nations is that they will not negotiate over hostages. Such an announcement is intended to deter terrorists: if there is nothing to be gained from kidnapping hostages, rational terrorists won't kidnap any.
In other words, the purpose of the announcement is to influence the expectations of terrorists and thereby their behavior.

But, in fact, unless the policymakers are credibly committed to the policy, the announcement has little effect. Terrorists know that once hostages are taken, policymakers face an overwhelming temptation to make some concession to obtain the hostages' release. The only way to deter rational terrorists is to take away the discretion of policymakers and commit them to a rule of never negotiating. If policymakers were truly unable to make concessions, the incentive for terrorists to take hostages would be largely eliminated[50].
In our case, despite best governments' efforts, when a big bank is about to fail, the treat of systemic risks and depositors consequences may persuade States to intervene.
On their side, uninsured creditors and shareholders understand that policymakers have incentive to renege and thus will not monitor banks' behavior adequately, contributing to the TBTF vicious circle.

2.4. The (ab)use of leverage by TBTF institutions. Some insights over banks' funding preferences

In the last decades the seminal theorem by Modigliani and

[50] Available at http://gregmankiw.blogspot.com/2006/04/time-inconsistency.html

Miller[51] has been used to explain why, under certain conditions, the choice between debt rather than equity in the funding structure of a firm would be indifferent. The theorem is the result of four layers of analysis, the first stating that basically a firm's debt-equity ratio does not affect its market value, the second saying that a firm's leverage has no effect on its weighted average cost of capital, the third that a firm market value is independent on its dividend policy and lastly that equity holders are indifferent about the firm's financial policy[52].

The conditions under which those conclusions hold are that:

1. taxation system is neutral; 2) there are no frictions in the market (e.g. no transaction and bankruptcy costs); 3) there is symmetric access to credit markets; 4) there are no information asymmetries and finally 5) firms can be included into risky classes.

Actually, the taxation issue has been reviewed by the Authors admitting that under a certain taxation code, the optimal capital structure could be complete debt finance, however, they argue, higher taxes on interest payments than on equity returns reduce or eliminate the advantage of debt finance to the firms. Therefore the indifference between equity and debt remains unfold.

Those assumptions have given rise to a maze of studies of economic scholars, such as the trade off and pecking order theories, focused on the investigation of the optimal capital structure, agency costs, complete or incomplete contracting possibilities, dividend policy, and methods of capital finance, whether lease or buy.

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51 Modigliani F., Miller M. H., *The cost of capital, corporate finance and the theory of investment*, in American Economic Review, issue 48, 1958, 261-297

52 See Modigliani-Miller (1958); Modigliani F., Miller M.H., *Corporate income taxes and the cost of capital: a correction*, in American Economic Review, issue 53, 1963, 433-443; Miller M. H., *Debt and Taxes*, in Journal of finance, issue 32, 1977, 261-275.

Nonetheless the "even footedness"[53], or the frictionless world, of the M-M theorem cannot hold for LCBO.
Banks in fact, do care about getting funded by debt rather then equities. The choice is indeed influenced by bankruptcy costs, agency costs and taxes. Furthermore banks' liability structure is highly regulated through capital adequacy standards, hence the choice between the two's may be driven by considerations related to the eligibility of those instruments into their core capital.
Furthermore, most recent economic theories explain that the banks' capital structure affects its liquidity creation, its credit creation functions and its stability[54]. However, according to Du and Li (2007)[55], banks also rescue enterprises that are on the verge of bankruptcy. This in turn gives State even more incentive to intervene and regulate banks' capital to avoid them being financially unviable.
Consequently, the capital structure should be a trade off between the effects that banking capital has in relation to depositors, borrowers and bank's liquidity, namely should consider that more capital increases the rent absorbed by the banker, increases the buffers against shocks and changes the amount that can be extracted from borrowers, plus should take into account government's choices over capital regulation[56].

So, what are the determinants that influence large banks to choose their optimal level of funding?
First and foremost are regulatory considerations.
In facts worldwide banks should fulfill the requirements on the constituents of capital and on their risk weighted approach

53 See, Villamil A. P., *The Modigliani Miller Theorem*, in the New Palgrave dictionary of economic, Palgrave MacMillan, second edition, 2008,

54 See Diamond D. W., Rajan R., *A theory of bank capital*, at Journal of Finance, vol. LV, issue 6, 2000, 2431-2465

55 Du J., Li D. D., *The soft budget constraint of banks*, at Journal of Comparative economics, issue 35, 2007, 108-135.

56 Nonetheless the same SBC faced by banks give raise to moral hazard problems.

established by the Basel Committee of Banking supervision, a committee comprising the representatives of the major banking supervisory authorities and central banks[57].

The Basel accord divides capital into two main classes, plus a discretionary one: tier 1, tier 2 and tier 3.

Great emphasis is given to equity capital and disclosed reserves. According to Basel's promoters/extensors this capital is "the only element common to all countries' banking systems; it is wholly visible in the published accounts and is the basis on which most market judgments of capital adequacy are made and it has a crucial bearing on profit margins and a bank's ability to compete."[58]

Eligible tier 1 capital must therefore make up at least 50% of total capital –is comprised essentially of shareholder equity and published reserves from post-tax retained earnings. Tier 2 capital admits a variety of forms of term subordinated debt and hybrid capital instruments (though according to their actual shape and national legislations' provisions they can be considered as tier 1 as well), and undisclosed reserves, revaluation reserves, general provisions/general loan loss reserves: those elements will be admitted into tier 2 limited to 100% of Tier 1

Lastly, tier 3 capital –whose prevision is left to national regulators' discretion –is given basically by short term subordinated debt covering market risk for the sole purpose of meeting a proportion of the capital requirements for market risk under certain conditions, namely: *i*) it shall be use only to cover market risks in addition to tier 1 and tier 2; *ii*) it will be limited to 250% of a bank's Tier 1 capital that is required to support market risks. This means that a minimum of about 28½% of market risks needs to be supported by tier 1 capital

57 From Belgium, Canada, France, Germany, Italy, Japan, Luxemburg, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

58 See Basel Committee on Banking Supervision, *International Convergence of capital measurement and capital standards. A revised framework-Comprehensive Version*, June 2006, p. 14, in www.bis.org

that is not required to support risks in the remainder of the book.

To be eligible, instruments have to fulfill supervisory rules regarding their characteristics and are subjected to limits concerning the amount that can be admitted as regulatory capital. As a matter of example, tier 1 instruments must contain provisions for cancellation of dividend payments, deferred dividends should be non cumulative, should be subordinated to all debt, and they should not be of fixed maturity. There is not a maximum threshold of tier 1 capital, however if banks want to consider their preferred stocks as redeemable, those stocks can be used only up to 15% of total capital.

In order for tier 2 instruments to be loss absorbing, their payments should be deferrable and principal and interest should be written down, -the instruments fulfilling those characteristics have been called "upper tier 2" and need to be subordinated to all debt. Whereas, what has been called "lower tier 2" includes fixed maturity subordinated debt with a minimum initial maturity of 5 years and that is generally amortised in its final five years of maturity. This lower tier 2 cannot exceed 50% of tier 1 capital.

Tier 3 capital has minimum maturity of 2 years, cannot be amortised and ranks *pari passu* with lower tier 2. Tier 2 and tier 3 capital cannot exceed 100% of tier 1. Finally tier 1 must reach at least 4% of the risk weighted approach and the total capital base must reach 8%[59].

Furthermore loans, and more general banks' obligations, are grouped into baskets according to their risk classifications and are given a weight to the underlying risk, which must be taken into account when calculating the solvency ratio. The same is done for off balance sheet obligations that are grouped into baskets with different conversion factors.

Given that the Basel accord is applicable worldwide, we must

59 See Basel Committee on Banking Supervision, *Markets for bank subordinated debt and equity in Basel Committee member countries*, BIS working paper n. 12, 2003, in www.bis.org, p. 4-6,

consider this piece of regulation as the first constraint banks face when dealing with funding decisions.
Nonetheless, once banks have fulfilled those obligations, and generally they hold even more capital than the specified thresholds, the Basel accord leaves banks room for maneuver to manage their balance sheet as they wish.
One portion of this management can be considered as an unintended consequence of such regulatory requirements, because under the Basel accord banks may have incentive to bring part of their liabilities off balance. Another portion of such procedure is due in response to changes in anticipated risk and asset prices which are allowed by the mark-to-market valuation of assets[60]. Furthermore, according to the Basel accord banks may be approved by national supervisors to use VaR models (Value at Risk)[61] to estimate price volatility of their exposures[62]: such models –which give the institution's worst case loss estimate –seem to allow for great management of the balance sheet[63].

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60 The Basel accord defines this accounting procedure as "at least the daily valuation of positions at readily available close out prices that are sourced independently. Examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers. Banks must mark-to-market as much as possible. The more prudent side of bid/offer must be used unless the institution is a significant market maker in a particular position type and it can close out at mid market". See Basel Committee, (2006), sec. 693.

61 According to the agreed definition of Value at Risk, it corresponds, within a determined time horizon T to the smallest non-negative number V such that the estimated probability that a bank's loss is greater than V is less than some benchmark probability p. See Panetta *et al.*, *The recent behavior of financial market volatility*, BIS working paper n. 29, 2006. In clearer terms, VaR is the maximum potential loss that would result from a price change with a given probability over a specified time horizon.

62 See Basel Committee, (2006), sec. 178.

63 Interestingly enough, the introduction of VaR models stems from the October 1987 crisis and comes from the private sector. In 1989 Dennis Weatherstone, JP Morgan's chairman at the time, called for a report which combined all of the firm's data on market risk in one place and was able to answer the following question: "how much could JPM lose if

The overall consequence is the banks' ability to "play with leverage", namely to transform their liabilities into new sources of (short term) funding either passing them to a Special Purpose Vehicle or creating new fancy financial instruments by decomposing liabilities and rebuilding together the different slices of the original loans. This process however requires banks to give loans to more borrowers and has as a side effect an increase in the size of the bank. It is a vicious circle.

Let us explain the leverage effect in greater details[64].

By definition leverage is the ratio between bank's total assets and bank's book equity (given by the difference between debts and assets, namely its net worth) and allows banks to borrow money against the expected value of their liabilities. The main features of leverage are its procyclicality and its correlation to balance sheet size. This means that the balance sheet adjustments increase or decrease the leverage value according to the economic cycle: in other words, leverage effect is high (i.e. banks can borrow more money) during booms (because their adjusted balance sheet values are high) and low during busts (because of the decreased value of their balance sheet hence of the collateral they borrow against in the market).

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tomorrow turns out to be a relatively bad day?". Not surprisingly JPM was the earliest developer and earliest adopter of the VaR. As referred by Aldane G. H., *Why banks failed the stress test*, speech given at the Marcus-Evans Conference on Stress Testing, 13 february 2009, available at www.bankofengland.co.uk: «by 1996 they had published their methodology and the detail of the parameterization of their risk models. In 1998 RiskMetrics Group, an independent for-profit business, spun off the JP Morgan methodology and began offering consultancy services to the risk management community». From then onwards it has been widely accepted even in the "regulatory community".

64 This explanation is based upon: Lang L. et al., *Leverage, investment and firm growth*, Stern school of business working paper, no. FD 94-41, 1994; Greenlaw D. et al., *Leverage losses,* Federal Reserve Bank of New York Staff Report n. 328, 2008, in www.nyfed.us; Inderst R., Mueller H. M., *Bank capital structure and credit decisions*, in Journal of financial intermediation, issue 7, 2008, 295-314; Adrian T., Shin H. S., *Liquidity and leverage*, in Journal of financial intermediation, in press, corrected proof, 2010

Accordingly, leverage is negatively correlated with VaR models, since when they signal an increase in the worst cases losses, banks' ability to get new funds decreases, whereas leverage effect is high when values at measured risks are low.
The above has a very simple meaning: leverage acts as a financial accelerator mechanism of a given situation in the market; however it affects the system at aggregate level, namely impacts all the bank's counterparties.
The body of literature that has dealt with the subject always considers the following example, which is based on the assumption that a bank aims at maintaining a constant level of leverage[65]:
take a bank with assets 100 and liabilities 90, its net worth would be 10 and its leverage would be:

$$L = (\text{Total assets/net worth}) \rightarrow 100/10=10$$

Suppose now an increase in the price of securities by 1, bringing total assets value to 101, in such a case our example becomes: assets 101, liabilities 90, net value 11, leverage:

$$L \rightarrow 101/11=9.18$$

Which means that if the bank wants to keep the above leverage value it should get more funds (D) to purchase securities – funds that will obtain because its net value is increased, but how much should the bank borrow?

$$L= (101+D)/11=10$$
$$\text{where } D \rightarrow (101+D)/11 \times 11= 10x11$$
$$101+D= 110$$
$$D=110-101$$
$$D=9$$

65 It is outside the scope of the example introduce a deleveraging effect indeed.

Hence the institution needs to take additional debt by 9 to restore its initial level of leverage. But you can already grasp the dangerous uncorrelation between 1 unit of extra assets against 9 units of extra debt[66].
If we carry on with the exercise we see that the demand curve is upward sloping[67].

Conversely, the opposite case leads to analogous results: consider a shock negatively affecting initial assets prices by 1. We have total assets 99, liabilities 90, net value 9 but the leverage becomes:

$$L \rightarrow 99/9 = 11$$

which is now too high, forcing the bank to sell assets (by 9) to get back to the old value, having its initial capital decreased of roughly 10%: now bank would have assets 90, liabilities decreased because of the transaction 81, the total value diminished to 9 and finally

$$L \rightarrow 90/9 = 10$$

If we carry on we see that the supply curve is downward sloping

The overall example implies basically that once an event occurs, leverage drives the institution to take extra actions that

66 Of course bank could issue new equities to get funded, but the observed tendency is rather on taking over new debt, maybe because the former may be more costly than the latter and because it would dilute the value of shares of existing shareholders. On the contrary however debt holders may ask for specific rights, but this does not seem a great problem since the institution has plenty of debt instruments to issue that do not actually carry any right rather than capital reimbursement.

67 See Greenlaw D. et al., (2008), 39.

amplify the effect of the event because of the linkages between shock and asset dynamics, causing a chain reaction.
In fact, assuming both that the shock itself is procyclical and that banks want to have a constant level of leverage, when banks are highly leveraged, a shock as a reduction in asset prices induce massive asset liquidation, accentuating the price fall and possibly starting a vicious circle. In principle, the mechanism is symmetrical: an initial positive shock may lead to a broad rise in asset prices and hence to an expansion of intermediaries' balance sheets, starting a positive circle.
In other words, because banks make large use of leverage (and a TBTF institution makes even greater use of it) their lending are positively correlated to their credit losses because they need to restore their balance sheet. This means that in presence of a shock they may need to heavily engage in debt transactions, increasing their vulnerability to financial distress.
Lastly, the greater the institution is the biggest would be the leverage-amplifying effects, even because leverage is strictly interwined with other factors, all present in a TBTF institutions, such as network externalities, strategic behavior of large players, contagion in the interbank markets and within the same institution and so on and so forth[68].

Though some empirical evidence may question the actual high level of leverage banks hold, it is a fact that

68 In fact, due to the recent financial turmoil, the Bank for international Settlement has issues a consultative document wherein it proposes to introduce a capital ratio requirement that "put a floor under the build up of leverage (…) thus helping to mitigate the risk of the destabilizing deleveraging processes" and "introduce additional safeguards against model risk and measurement error by supplementing the risk based measure with a simple, transparent, independent measure of risk that is based on gross exposures". According to the document, "the leverage ratio will be calculated in a comparable manner across jurisdictions adjusting for any remaining differences in accounting standards, (…). There will be appropriate testing of its interaction with the risk based measure". See BIS, *Strengthening the resilience of the banking sector*, Consultative document, December 2009, 6.

they do use leverage[69]. In fact, not only the indebtedness of such institutions is much greater than their own capital but the use they make of such debt capital may lead to their final instability.
This consequence has been clearly explained by Minsky (1993)[70], who also provides such a plain definition of leverage that is worth to be mentioned, though he doesn't actually even call it leverage. He says:

"The capital development of a capitalist economy is accompanied by exchanges of present money for future money. The present money pays for resources that go into the production of investment output, whereas the future money is the "profits" which will accrue to the capital assets owning firms (...). As a result of the process by which investment is financed the control over items in the capital stock by production unit is financed by liabilities ---these are commitments to pay money at dates specified or at conditions arise. For each economic unit, the liabilities on its balance sheet determine a time series of prior payment commitments, even as the assets generate a time series of conjuctured cash receipts".

Its financial instability hypothesis is therefore a theory of the impact of debt on system behavior and also incorporates the manner in which debt is validated. To this end, he classifies economic institutions in three classes of debtors, according to their income/debt balance sheet structure: hedge, speculative

69 Lang L., Ofek E., Stulz R., (1994), seem to establish a positive correlation between leverage and growth for firms with good investment opportunities. See Lang et al., *Leverage, Investment and Firm Growth,* April 1994, at http://archive.nyu.edu/fda/bitstream/2451/27272/2/wpa94041.pdf

70 See Minsky H.P., *The financial instability hypothesis,* in Handbook of Radical Political Economy, eds. by Arestis P. and Sawyer M., Edward Elgar, Aldershot, 1993.

and Ponzi finance.
Hedge financing units are those which can fulfill all of their contractual relationships by their cash flow; speculative finance units are units that can meet their payment commitments on "income accounts" on their liabilities, even as they cannot repay the principle out of income cash flow: such units need to roll over their liabilities (e.g. issue new debt to meet commitments on maturing debt), and finally Ponzi unit are those units whose cash flows from operations are not sufficient to fulfill either the repayment of principle or the interest due on outstanding debts by their cash flow from operations. Such units can sell assets or borrow to pay interest, however both operations would led to a decline of the equity value of a unit even as it would increase liabilities and the prior commitment of future incomes. A unit that Ponzi finances lowers the margin of safety that it offers the holders of its debts.
It is unquestionable that current characteristics/models of banking intermediation made those institutions and other similar players closer to speculative and Ponzi units rather than hedging units, as it would have been the case in the last decades. However, as Minsky puts it, the greater the weight of speculative and Ponzi finance, the greater the likelihood that the economy is a deviation amplifying system.
Such particular financing regime of the economy makes the system unstable.

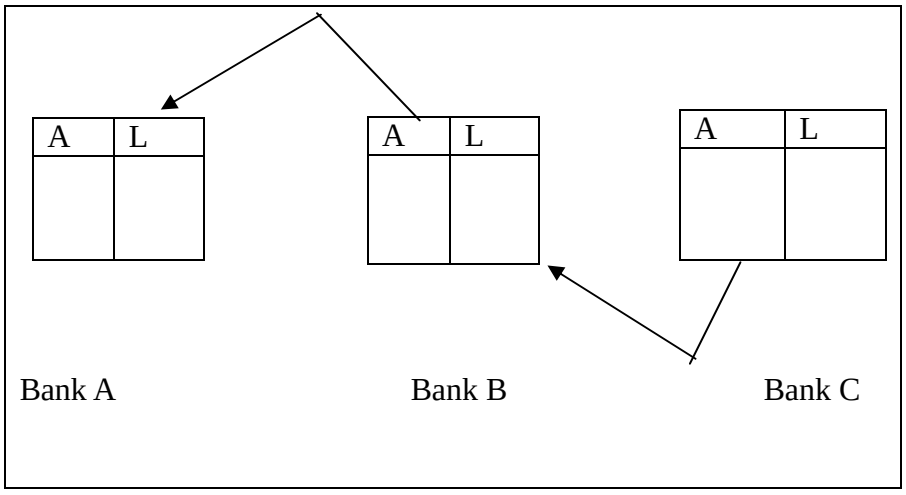
2.5 Systemic risk and cross border externalities: a new paradigm

From what explained thus far stem the main channels for contagion in case of crisis within the group: financial and non financial exposures, common ownership, payment settlement, money market disruption affecting banks' funding structure.
Theoretically, in case of crisis those features may stay at group

level, may not spread to other market participants and may be resolved accordingly. In fact, because of regulatory constraints there are maximum levels of mutual exposures banks can have (and that are relatively small compared to their balance sheet) and if the risk is idiosyncratic in nature it should not cause the failure of the LCBO's counterparties[71]. Furthermore, empirical studies show that in order for an ailing bank to be the *direct* and *immediate* consequence of other banking crisis the shock must be of implausible magnitude[72].

Nonetheless, historically contagion has always been explained as the possibility that a shock affecting one institution spreads over other banks because of the funding structure of the financial players. In fact, in its simplest scheme, bank A borrow money from bank B which in turn borrow money from bank C and so on:

Table 1: Interbank Loans



71 As explained by Helwege A., *Financial firm bankruptcy and systemic risk*, August 2009, in www.psu.edu

72 Also, must initially involve a large bank, must have caused a large decline in the value of its assets and eventually the losses imposed on creditors must be a large fraction of their assets. See Helwege (2009), p. 15. See also Jorion P., Zhang G., *Credit contagion from counterparty risk*, in Journal of Finance, 2009, 2053-2087.

Should bank C
experience a hit on its balance sheet, it may want to withdraw its credits from bank B, both to remain solvent and to comply with capital regulatory requirements. From bank B perspective, the payment to C may decrease its liquidity and may give bank B incentive to withdraw its lending to bank A. The same reasoning applies to bank A and to the overall system that may be induced to think at the existence of a problem somewhere in the net and may shrink its lending activities to other players. The consequence of a somewhat prudent behavior from a bank may be at best a funding liquidity crisis.

However this model seems to be somehow too simple, so we want to go beyond it, to have a more complete and extensive framework to understand what the main determinants of contagion between banks (also known as systemic risk[73])

73 However before proceeding we must warn the reader that the definition of systemic risk is still somehow unsettled. In fact there seems to be no clear consensus over, e.g., which event can be considered systemic, or when a negative externality can be considered as such, or whether the trigger should affect the market as a whole or only financial players. For example, systemic risk has been defined as "the probability that cumulative losses will occur from an event that ignites a series of successive losses along a chain of financial institutions or markets comprising a system" (Kaufman 1996) or as "the potential for a modest economic shock to induce substantial volatility in asset prices, significant reductions in corporate liquidity, potential bankruptcies and efficiency losses" (Kupiec, Nickerson, 2004), or "the risk that a default from one market participant will have repercussions on other participants due to the interlocking nature of financial markets" (US Commodity Futures Trading Commission, 2008), as pointed out by Schwarcz S. L., *Systemic Risk*, Duke Law School Research Paper n. 163, 2008, in www.ssrn.com, or lately as "the joint failure risk arising from the correlation of returns on asset side of banks balance sheet", (Acharya V. V., *A theory of systemic risk and design of prudential regulation*, at Journal of Financial Stability, issue 5, 2009, 224-255) or as a default correlation (Rampini A., *Default Correlation,* Northwestern University Working Paper, 1999). Nonetheless, the proposed definitions have something in common, that would be our starting point, namely the correlation of a trigger event to bad economic consequences. Furthermore we must recall that a run can occur even if the bank is fundamentally

actually are.
Hence, we must first recall banks funding structure, than understand why liquidity issues are as important as systemic concerns, and then surveying models of financial contagion to understand whether they do actually take into account some distinctive features of banks balance sheet, namely mark-to-market and VaR models. We will finally get back to our TBTF institutions to understand whether they are more "special" then other banks and lastly see if the usual model of systemic risk is suited to cross border institutions.

As we said in the previous sections, banks suffer of maturity mismatches, tend to make great use of liabilities, can have a "dynamic balance sheet" adjustable according to changes in market values, their leverage acts as an amplifier of any event (boom or bust) and its prociclicality can have an adverse impact over funding decisions.
Here we must add the concepts of margins/haircuts and liquidity shortage. When banks purchase assets, they use those as collateral to get short term money, which however cannot be entirely funded by the purchased assets, but should be marginally financed by bank's own equity. Those margins/haircuts are hence given by the difference between the amount borrowed and the amount covered by the collateral's value. Such haircuts are particularly sensitive to shocks, even if short term, because if banks cannot get more short term money, the whole previously borrowed amount becomes margin or better, should be completely payed back (rolled over) with banks' own equities.
If the problem shows up in the different funding channels of the bank, the latter may run out of liquidity since it had to use its available money to roll over its debts. Consequently, for banks heavily relying on short term transactions, a liquidity

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solvent as a run occurring in anticipation of a run, as explained by Calomiris C., Mason J., *Contagion and bank failures during the Great Depression: the June 1932 Chicago Banking panic*, at American Economic Review, issue 87, 1997, 863-883.

shortage may arise when the hit involves different funding channels (as happened to Northern Rock for example), is too costly for the bank to borrow money elsewhere and is not convenient selling off its assets due to a possible underestimation (fire sales). Besides, the same asset sale would be of little help because it would possibly happen in already illiquid markets: in fact liquidity shortages do not happen in a vacuum but involve many institutions, and -also because of mark to market adjustments -the shortage may thus have as a primary consequence a severe deterioration in the bank's balance sheet.

This is why some attribute the risk of funding liquidity to maturity mismatches and say that "it can take three forms: 1) margin/haircut funding risk, or the risk that margin/haircut will change; 2) rollover risk, or the risk that it will be more costly or impossible to roll over short term borrowings; and 3) redemption risk , or the risk that demand depositors of banks or even equity holders withdraw funds. All three incarnations of funding liquidity risk are only detrimental when assets must be sold only at fire-sale prices that is, when market liquidity is low."[74]

The above explanation hence takes indirectly account of one important channel for contagion: counterparty risk. In fact, we have explained thus far anything but the impact of a negative event over bank's accounts. What we need to understand now is how this impact would affect other institutions and the consequence of such transmission on the system as a whole. Before, however, we still have to define the kind of risk that may be relevant for our purposes.

In fact not any event may be systemic, as having knock on effects on other players: only those having shocks and propagation elements in itself have some relevance for the study of contagion effects. We would not consider, for example, failures confined to single institutions or to single

74 See Brunnermeier et al., *The fundamental principles of Financial regulation*, ICMB eds, at www.cepr.org, p. 12

market fragments that do not impact badly the market or other institutions, as well as we are not interested in those events that -although may be seen as systemic -have weak effects (no failures or crashes) on the system.
According to De Bandt and Hartmann (2000)[75], the definition of systemic events can have a narrow and a broad meaning: the narrow sense comprises the cases where "the release of bad news about a financial institution, or even its failure, or the crash of a financial market leads in a sequential fashion to considerable adverse effects on one or several other financial institutions or markets"[76] e.g. crashes or failures, whereas the broad meaning includes "not only the events described above but *also* simultaneous adverse effects on a large number of institutions or markets as a consequence of severe and widespread shock"[77].
Besides, corporate finance teaches us that shocks can be idiosyncratic or systematic. We anticipated the meaning of the former, as an event that affects the single institution or the price of a single asset category, whereas the latter is a shock that impact the financial system as a whole[78]. Usually, idiosyncratic shocks may be covered by a sort of insurance by the bank e.g. via asset or counterparties diversification, whereas systemic shocks are more difficult to insure.
Furthermore the knock on effects those events have, are increased by the endogenous fragility of the system where they realise. In fact we have seen thus far that financial sector is more vulnerable than other sectors because of the role played by information asymmetries, of the specialty of banks and of the tight interconnections between players.
To sum up, an event can be considered systemic when its realisation has had as a consequence the impairment of the

75 See De Bandt O. Hartmann P., *Systemic risk: a survey*, ECB working paper n. 35, 2000, available at www.ecb.int
76 Ivi, 10
77 Ivi, 10
78 Or the whole economy, as for example in case of business cycles fluctuation or currency crisis.

smooth functioning of the related market or institutions, it doesn't matter whether it is idiosyncratic or systemic. To give a few examples, it could be a liquidity shortage, the freezing of funding channels, a severe asset depreciation, an assets downgrade, currency crisis, cyclical downturns and so on.

In the economic literature, bank runs have been explained first as single-bank problem, and only -relatively- recently have been extended to multiple bank systems.
The most important contributions have as starting point the consideration of banks as deposit takers. To this extent, they can be divided into two categories: one that considers runs as a coordination failure among depositors and the other considers runs as the consequence of asymmetric information among depositors over the bank fundamentals.

The first stream – to whom the so called Diamond and Dybvig model[79] belongs – considers basically runs as "self fulfilling prophecies"[80].
According to this strand[81] banks have a liquidity premium over their investments whereas depositors have a pay off externality due to the possibility that no money is left to the bank when they want to withdraw. The lack of coordination arises because since depositors do not take out their money simultaneously

79 See Diamond D. V., Dybvig P., *Bank runs, deposit insurance and liquidity,*at Journal of Political Economy, issue 91(3), 1983, 401-419.

80 Before this result, runs were considered as purely random events unrelated to changes in the real economy. See Kindleberger C. P., *Manias, Panics and Crashes: a history of financial crisis*, Basic Books, New York, 1978.

81 Other contributors include, Waldo D.G., *Bank runs, the deposit currency ratio and the interest rate*, in Journal of Monetary Economics, issue 5, 1985, 269-277; Bryant J., *Model of reserves, bank runs and deposit insurance*, at Journal of banking and finance, issue 5, 1980, 335-344; Postlewaite A., Vives X., *Bank runs as an equilibrium phenomenon*, at Journal of political economy, issue 95, 1987, 485-491; Goldstayn I., Pauzner A., *Demand deposit contracts and the probability of bank runs,* at Journal of Finance, issue 60, 2005, 1293-1327.

(early and late withdrawals), the fear of early withdrawals by a too large number of depositors may trigger a run on the bank as a "sunspot" event, namely as if the uncertainty on depositors' preference creates the run.
However, those sunspot events seem to be inconsistent because they are both likely and unlikely, in the sense that depositors may or may not fear the possibility of being in the late queue, moreover, since financial contagion is usually modeled as an equilibrium phenomenon[82], in equilibrium both solutions are possible, so maybe stronger assumption may be better suited to explain the run.

The second strand is more focused on information asymmetries between players. Indeed it is a truism that information plays a crucial role in determining depositors' behaviors. If an information is released that put into question bank's viability, depositors may run to withdraw their deposits, both in case of incomplete information (where however runs may be rational but inefficient) and even more in case of complete information (where run could be rational and efficient), as shown by Gorton (1985)[83]. Other studies link the depositors' behavior to an imperfect information received, related to a risky investment made by the bank, and hence distinguish between those whose claims are based on equities and those based on deposits[84].
In any event it is useful to underline that information signals may involve depositors, and in such case the consequence may be the bank run, and markets expectations, and then asset depreciation and prices fluctuation can be experienced. Information can have as object the health of a financial

82 See Allen F., Gale D., *Financial Contagion,* in Journal of political economy, vol 108, n. 1, 2000, 1-33; Postlewaite and Vives, (1987).

83 Gorton G., *Bank suspension of convertibility,* in Journal of monetary economics, issue 5, 1985, 177-193.

84 See Jacklin C., Bhattacharya S., *Distinguishing Panics and information-based runs: welfare and policy implications*, in Journal of political economy, issue 96, 1988, 568-592.

institution, and here may take the form of a full revelation or of a noisy signal, or may be a signal that generally coordinates the expectation of investors, without being actually related to the institution's health.
However, those studies do not really consider the propagation mechanisms to other institutions.

Such possibility has been investigated first by Garber and Grilli (1989)[85] that extended the Waldo model to a two country open economy, demonstrating that a run in one country would led to fire sales of long term securities to the second country and to higher interests rates there, whereas De Bandt (1995)[86] applied Jacklin and Bhattacharya model to a multiple banking system and considered how an aggregate and idiosyncratic shock affects the return on different banks' assets, as explained by De Brandt and Hartman (2000).
Allen and Gale (2000) explain the contagion as a drawback of regional (whereby region is a metaphor for categories of banks that may differ along several dimensions) overlapping claims between banks. In fact, in principle there are constant levels of liquidity as regions with liquidity surpluses provide liquidity for regions with liquidity shortages (through interregional cross holdings of deposits). However if there is an excessive demand for liquidity banks are forced to liquidate their assets: long run ones are costly to liquidate, so banks will liquidate their claims in other regions but since this mutual liquidation of claims do not create extra liquidity but oppositely it denies liquidity to the troubled region, what begins as a financial crisis in one region can spread by contagion to other regions because of the cross holdings of deposits, thus "the financial linkages caused by these cross holdings can turn out to be a

85 See Garber P.M., Grilli V.U., *Bank runs in open economies and the international transmission of panics,* in Journal of international economics, issue 27, 1989, 165-175

86 See, De Bandt O., *Competition among financial intermediaries and the risk of contagious failures*, in Notes d'Etudes et de Recherches, no.30, 1995, at www.banquefrance.fr

disaster"[87]. Nonetheless their model can work only in incomplete markets, with strong linkages, whereas the same result (i.e. contagion) is not proved in complete markets or in incomplete ones with light tights between regions[88]. Lastly, free riding problem plays a crucial role as well in explaining the differences between complete and incomplete interbanking markets, since in the latter banks in regions other than the ones hit by the crisis pursue their own interest and refuse to liquidate their own assets until they find themselves on the front line of the contagion[89].
However the complete assumption is not realistic in nature since interconnections are not possible in all the states of the world because of transaction and information costs, because of business specialisations or geographical or political reasons.

If we go beyond those cornerstone economic papers, we see that all those that followed have identified 3 main sources of contagion among banks:

information asymmetries;
linkages between banks;
payment and settlement risk.

As far as the information asymmetries is concerned, we have already given an overview of how information effects are extremely important. Here we just want to add that the release of a bad signal related to institutions can influence the behavior of all the depositors fearing that their bank as well may be in troubles or that they be in the late queue and hence there may be no money left, so they run on their own bank, whatever it is. This eventually implies that even fundamentally solvent banks can face troubles because of a noisy signal.

87 See Allen and Gale, (2000), p. 4.
88 Complete markets are those where a given region *y* can hold deposit in every other region, whereas incomplete are those where banks in region *y* are allowed to hold deposits in some but not all of the other regions.
89 See Allen and Gale (2000), p.5.

Conversely, if the signal involves markets segments, all the institutions anyhow linked to that segment may face financial problems and the uncertainty about their counterparty exposure to that event may trigger irrational behaviors within the institutions, such as the closure of interbanking markets. In this sense, information based contagion seems to be strictly interwined with mutual confidence.
However, it is also possible that the run is caused by the disclosure of some information on a fact that has been hidden for long time to the market/counterparty, i.e., reckless lending and bad loans, (over)valuation of stock prices and fixed rate exchange levels not in line with real economic fundamentals.

As for network connections within banks, we have seen how one bank's behavior, maybe due to solvency reasons, can cause a hit on all other banks' balance sheets.
Here we must add that the above contagion model needs to be refined because it implies a static view of banks and market behavior, as if banks do not take any action to correct the problem, such as asset sales or withdrawal of other credits, and markets do not reply correspondingly.
On the contrary they do take actions, but those action are systematically (i.e. for the system) counterproductive: in fact we have seen the insurgence of sales to get more liquidity or the calling back of own exposures; we have also observed that sales may take the form of fire sales as well as of a massive recourse to short selling or repo operations: in both cases many institutions are involved.
Furthermore we have seen that markets respond to a shock either undervaluating assets, or freezing transactions within a sector: these actions as well impact many institutions, hence they may impede the restoring of all the involved banks' financial viability in the short run.
Beside we must take into account that another unintended consequence of those reactions is that (all) banks need to mark their accounts to the new market evaluation, which in turn means that they face higher margins, losses on existing

positions and they need again to make (fire) sales to have liquidity. This effect is increased even more because banks try to keep their leverage constant and this leads to a shock amplifying effect within the institutions.
Eventually banks would fall in a spiral of uncertainty on the viability of other institutions, would shrink their activities in the interbank market and hence nearly all institution in the system would be hit by the crisis.

The question now is: why are we concerned about TBTF institutions? What are the special features a smaller bank does not have in transmitting the shock to others? And finally, does the cross border nature of such group may cause greater spill over effects than what caused by a large bank located in only one country?
To explain why the "size factor" is as important, we can simply list a number of reasons whereby it can be considered the main determinant of the impact of their crisis over the system as a whole, namely the consideration that TBTF institutions are of a systemic importance. Let us list a few:

- First, because the flow of daily transaction through TBTF institutions and other –usually TBTF as well –is a large multiple of their capital, leverage acts as an amplifier for each counterparty;

- Second, because of information asymmetries between players and public that lead to liquidity problems to counterparties;

- Third, because the off balance sheet exposures need to be called in in case of crisis and this can reveal much tighter ties between TBTF organizations;

- Fourth, because a failing TBTF institution experiencing problems in clearing its position causes a massive disruption in the payment system;

- Fifth, the direct losses to shareholders, uninsured depositors, creditors, insurance funds and eventually employees would be enormous;

- Sixth, because the massive use of derivatives and securitised products between financial institutions contributes to the risk spread;

- Seventh, because large banks are at the heart of the payment settlement system, hence if they experience operational problems those could easily spread among other participants;

- Eight, since there is no legal framework in place, the global uncertainty over the resolution and intervention proceedings Authorities would follow, may determine severe spill over effects to other players, especially in the short run;

- Ninth, those banks make great use of opaque financial products such as derivatives, traded in unregulated markets, whose risk is highly underestimated;

- Tenth, in our opinion propagation mechanisms among TBTF institutions are more likely because, if we take a global view of the phenomenon, those institutions constitutes basically an oligopolistic market wherein it is more likely that the same behavior or action is taken by all of them, because they all have the same information and operates under the same conditions.

Hence, as Crockett (2005) said "thinking about the consequences of a failure at a large banking institution is the

financial equivalent of thinking the unthinkable"[90]

We now should shift our attention to cross border institutions (CBI).
Although the usual patterns of a systemic event seem to apply, and they make no exception to the contagion sources explained thus far, in our opinion in the case of a cross border bank the propagation mechanism is possibly simpler but has an even more dangerous result.
In fact somehow there is not even the need of the actual impact on other banks, because a signal over the viability of a firm spreads automatically to all the country where that CBI is located.
Let us assume that an event has hit bank A and, theoretically, has not involved any other bank. Now, as usual, depositors would run on the bank to withdraw their funding: however those depositors would run on all the subsidiaries of bank A, located in country 1, 2, 3, … This would have a greater amplifying effect on the group as a whole, but also would make depositors of country 1, 2, 3, … run on their own banks (B, C, D, …) because they would infer that their bank may not be immune to the event experienced by bank A.
In this simple example thus we see how the shock propagates *per se* both to other banks and to other countries.
In this respect we might say that in case of CBI's, shocks are more firm-oriented rather than system-oriented.
If we now add the (likely) possibility that the shock has hit other institutions, again we see how bank B, C, D, … would face greater knock on effects because the fact that bank A has experienced losses on all its subsidiaries (i.e. consolidated losses) would reduce the possibility that bank A may borrow money from other entities of the group, leading to a widespread unviability of the group, that makes even more

90 See Crockett A., *Dealing with stress at large and complex financial institutions*, in *Systemic Financial Crisis: resolving large bank insolvencies*, eds by Evanoff D.D., Kaufman G., World scientific Publishing, 2005, 17.

unlikely the ability of the bank to repay its debts.
Moreover, because banks B, C, D, may have subsidiaries or branches located in the same country as bank A' they would all face a run.

From the above stems how the cross border nature of a bank (usually coupled with size factors) impacts heavily not only the solvency of the same bank, but also the viability of different geographical markets and the speed at which the crisis spreads over many regions.
This is why is of extreme importance the existence (and the quality) of harmonised safety nets related to crisis resolution and management of cross border banking groups.

However although it is intuitive that the cross border nature of such groups adds layer of complexity to their insolvency, it would be interesting measuring the level of cross border externalities.
Schoenmaker and Oosterloo (2005)[91], tried to construct a data set on the degree of penetration of cross border institutions in Europe and found, not surprisingly though, that in recent years the cross border asset penetration is gradually increasing, moving from 13% in 1997 to 16% in 2002.
If they control for institutions, they discover that the number of banks that can be considered "European", are again increasing, though some level of consolidation appears, and that their total level of capital is getting higher during the years. This means that usually CBI's tend to be also TBTF. Table 1-3 show their results.
Unfortunately, their research is limited to 2002-2003 data and, though if new data were available they would show the same trend, much empirical research in the field is needed.

91 Schoenmaker D., Oosterloo S., *Financial Supervision in an integrating Europe: measuring cross border externalities*, in International Finance, issue 8, 2005, 1-27

Table 2: Cross Border Penetration of Banks: Interbank Assets

Table 1: Cross-Border Penetration of Banks: Interbank Assets in the Euro Area (in %)

	1997		1998		1999		2000		2001		2002	
Country	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*
Austria	56	18	63	16	65	14	61	18	61	18	61	18
Belgium	30	27	31	32	26	40	22	43	21	40	22	40
Finland	36	11	35	19	38	15	28	18	37	6	33	3
France	66	8	69	9	70	12	70	11	69	12	71	12
Germany	73	9	73	10	74	11	71	12	69	13	68	13
Greece	n.a.	n.a.	70	9	69	11	63	10	50	21	42	21
Ireland	41	17	46	23	36	29	35	29	36	25	34	26
Italy	57	16	53	24	59	22	63	20	67	17	64	19
Luxembourg	20	53	22	55	25	52	22	55	22	55	24	53
Netherlands	39	23	37	24	41	21	48	17	38	17	39	17
Portugal	43	30	43	29	52	23	39	23	37	34	37	37
Spain	71	13	71	15	72	17	68	18	71	15	69	17
Euro area	60	15	61	17	62	18	61	18	59	18	59	19

Source: Cabral et al. (2002).
Notes: Interbank assets from the 'Home' country (denoted by *h*) and 'Rest of Europe' (denoted by *e*) are measured as a percentage of the total interbank assets of a country's banking system. 'Home' is defined as domestic institutions; 'Rest of Europe' is defined as financial institutions from euro area countries exclusive of the home country. Figures for 1997–2001 are measured in the fourth quarter; figures for 2002 are measured in the first quarter. The abbreviation 'n.a.' means 'not available'.

Source: Schoenmaker and Oosterloo (2005)

Table 3: Cross border penetration of banks: Assets

Table 2: Cross-Border Penetration of Banks: Assets in the EU-15 (in %)

	1997		1998		1999		2000		2001		2002	
Country	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*	*h*	*e*
Austria	97	3	97	2	97	2	97	2	80	19	79	21
Belgium	70	23	73	21	76	20	76	22	75	23	76	22
Denmark	96	4	94	6	96	4	95	5	89	11	88	12
Finland	92	8	92	8	91	9	93	7	93	7	92	8
France	86	7	88	7	89	6	79	12	81	11	82	11
Germany	96	2	96	3	95	3	96	3	95	3	94	5
Greece	81	11	86	9	86	10	80	14	81	14	79	17
Ireland	46	46	44	47	41	50	40	50	38	49	49	37
Italy	93	6	92	8	93	7	93	6	94	5	96	4
Luxembourg	7	83	6	88	5	88	8	86	6	87	0	94
Netherlands	93	5	93	5	94	4	89	9	89	10	90	9
Portugal	85	13	79	19	85	13	78	21	75	24	75	24
Spain	88	9	88	9	91	7	91	7	91	8	90	9
Sweden	84	15	66	32	69	29	57	41	46	53	39	59
United Kingdom	46	25	45	28	48	26	47	26	48	25	53	23
EU-15	77	13	77	14	78	13	75	15	74	16	75	16

Source: Schoenmaker and Oosterloo (2005)

Table 4: Number of Subsidiaries of Credit Institution from EU and third Countries

Table 12 Number of subsidiaries of CIs from EU and third countries

	Number of subsidiaries of CIs from EU countries					Number of subsidiaries of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	21	20	23	20	21	6	6	5	5	6
Bulgaria	n.a.	14	14	16	13	n.a.	5	4	3	3
Czech Republic	18	19	17	18	18	4	3	3	3	2
Denmark	10	8	7	6	6	1	3	3	3	3
Germany	20	21	22	22	21	25	21	19	19	18
Estonia	3	3	4	4	5	0	0	0	0	0
Ireland	20	21	22	21	24	11	11	10	10	13
Greece	3	5	5	10	7	1	0	0	0	1
Spain	43	42	41	41	37	11	9	8	7	10
France	126	108	107	100	97	58	58	52	53	54
Italy	7	6	10	13	14	2	3	3	3	3
Cyprus	9	9	9	8	7	2	1	1	1	1
Latvia	3	5	6	6	6	4	3	3	4	5
Lithuania	3	5	5	5	5	2	0	0	0	0
Luxembourg	80	79	75	75	74	35	32	32	34	34
Hungary	22	20	20	20	21	3	3	3	3	3
Malta	8	8	9	9	10	1	1	2	1	3
Netherlands	13	12	12	12	13	16	16	16	16	14
Austria	12	11	14	15	15	11	8	9	8	11
Poland	35	32	33	31	32	10	8	9	9	8
Portugal	11	9	9	9	9	4	4	4	3	3
Romania	13	16	18	22	22	2	2	2	2	2
Slovenia	5	5	6	8	8	0	0	0	0	0
Slovakia	14	15	15	14	14	1	1	1	1	1
Finland	3	5	5	5	6	0	0	1	1	2
Sweden	9	9	11	8	7	3	3	3	2	1
United Kingdom	14	19	17	19	16	75	70	69	69	74
MU13	364	344	351	351	346	180	168	159	159	169
EU27	525	526	536	537	528	288	271	262	260	275

Source: ECB, EU Banking Structure, October 2008

Table 5: Total assets of subsidiaries of Credit Institutions from EU Countries and third Countries

Table 13 Total assets of subsidiaries of CIs from EU countries and third countries

(EUR millions)

	Total assets of subsidiaries of CIs from EU countries					Total assets of subsidiaries of CIs from third countries				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Belgium	150,464	167,047	191,698	212,622	227,327	6,887	3,835	3,809	4,159	4,741
Bulgaria	n.a.	9,763	12,124	16,772	23,588	n.a.	284	335	445	668
Czech Republic	63,122	70,019	83,406	94,202	115,743	4,265	4,497	4,930	6,428	*
Denmark	100,871	87,858	103,034	110,920	122,973	*	9,328	11,276	14,027	17,306
Germany	227,597	254,257	549,261	556,579	591,518	65,009	42,868	74,233	106,216	84,880
Estonia	5,622	7,557	10,573	13,620	18,047	0	0	0	0	0
Ireland	132,402	182,235	234,560	264,732	488,002	0	0	0	0	0
Greece	27,730	38,226	49,401	85,950	52,052	*	0	0	0	*
Spain	63,330	66,960	82,473	91,240	102,580	14,717	5,678	4,851	5,684	9,613
France	288,052	301,045	394,293	439,467	575,786	38,905	45,150	51,031	57,035	140,992
Italy	26,389	29,115	96,287	210,779	257,192	*	3,280	3,096	3,975	5,335
Cyprus	5,346	8,272	12,338	18,533	18,562	*	*	*	*	*
Latvia	1,857	4,432	7,795	12,248	15,661	1,694	459	481	1,056	2,209
Lithuania	3,300	6,309	9,797	13,304	18,034	*	0	0	0	0
Luxembourg	493,547	509,080	563,136	615,839	653,366	27,350	30,193	40,565	47,501	71,215
Hungary	29,400	36,287	41,628	48,783	57,216	1,641	2,027	2,230	2,800	3,285
Malta	6,959	7,854	8,803	11,400	14,090	*	*	*	*	2,003
Netherlands	126,420	150,844	176,777	205,408	292,890	18,874	19,733	23,345	26,256	39,886
Austria	107,734	116,465	133,849	141,832	181,486	4,108	2,603	3,880	4,098	47,785
Poland	64,995	81,190	93,445	109,537	136,960	10,518	12,714	14,118	15,930	19,911
Portugal	72,796	67,356	58,962	61,082	68,146	2,563	2,540	3,047	3,139	3,208
Romania	6,200	10,537	17,690	40,931	55,716	*	*	*	*	*
Slovenia	3,937	4,656	6,230	10,075	12,155	0	0	0	0	0
Slovakia	19,126	24,291	27,244	32,212	38,384	*	*	*	*	*
Finland	716	111,950	124,034	130,436	172,567	0	0	*	*	*
Sweden	1,109	1,561	2,011	2,500	2,653	909	974	1,666	*	*
United Kingdom	60,777	294,869	315,490	367,051	311,113	543,044	572,305	734,355	842,324	807,339
MU13	1,721,114	1,999,236	2,660,961	3,026,041	3,675,067	180,414	155,880	207,998	258,292	468,508
EU27	2,089,800	2,650,035	3,406,338	3,918,054	4,623,807	747,335	761,859	983,329	1,149,404	1,335,844

Source: ECB, EU Banking Structure, October 2008

Chapter 3

Layers of complexity in cross border crisis management. Legal differences and early intervention tools

3.1. The EU Insolvency Regime and the agency conflicts among Authorities

Managing the insolvency of cross border banks in Europe is not an easy task.
In fact, against the backdrop of a fast penetration of those institutions, encouraged also by EU policies, there is yet no common legal framework in place to deal with the issue.
The current EU insolvency regime consists of three main norms: the Council Regulation 1346/2000 on Insolvency Proceedings[92], Directive 2001/24/EC on the Reorganisation and the winding up of credit institutions[93] and Directive 2001/17/EC on the Reorganisation and winding up of insurance undertakings[94].
Since the latter is outside the scope of our analysis, we will focus on Regulation 1346/2000, and Directive 2001/24.
Unfortunately, none of the two's does apply in the case of cross border credit institutions: Regulation 1346 recognises the increasing nature of the cross border activities and effects carried on by undertakings and ask for a community act to coordinate the measures to be taken regarding an insolvent

92 Council Regulation (EC) No 1346/2000 of 29 May 2000 on insolvency proceedings, in OJ L 160/1 of 30.6.2000

93 Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions, in OJ L 125 of 5.5.2001

94 Directive 2001/17/EC of the European Parliament and of the Council of 19 March 2001 on the Reorganisation and Winding up of insurance undertakings, in OJ L 110 of 20.4.2001

debtor's assets as well as to avoid forum shopping. The matter is of such importance that the Commission gave it the dignity of an act directly applicable to all member states, as they said "in order to achieve the aim of improving the efficiency and effectiveness of insolvency proceedings having cross border effects it is necessary, and appropriate, that the provisions on jurisdiction, recognition and applicable law in this area should be contained in a Community law measure which is binding and directly applicable in member states".[95] Nonetheless the regulation does not apply to (insurance undertakings) credit institutions, investment undertakings which provide services involving the holding of funds or securities for third parties and collective investment undertakings.

Moving to Directive 2001/2004, it expresses the importance of protecting creditors, workers and third parties involved in the failure of a credit institutions as well as the need of orderly resolute an ailing bank when many States are involved. But it applies only to credit institutions with *branches* –mere articulations of the parent company, not legally independent – in other member states, not to subsidiaries. For the latter thus it holds that insolvency proceedings can be initiated autonomously in each country of incorporation and its resolution remains the responsibility of each authority.

Nonetheless those acts are of a certain importance to our analysis because they express two concepts that may be fundamental in resolving a crisis: 1) mutual recognition of proceedings (universality) and 2) unity of the group. We will investigate them further in the following sections, when dealing with the *ex post* resolution possibilities to tackle a crisis.

Today the crisis management is hence left to memoranda of understanding between member States that are basically private agreements[96] on information sharing between

95 Regulation 1346/2001, considerandum 8.

96 Despite a few exceptions that will be investigated further, they are not

competent authorities in relation to the banking organizations with subsidiaries chartered in each country.
In fact, in principle each State where a subsidiary is incorporated has the authority to supervise the company. However, this institutional arrangement is mitigated by the fact that the primary responsibility over the bank supervision remains on the Authority where the parent company is located. This principle is known as the home country control, and it is expressed in the Capital Requirement Directive, art. 40 and 41, wherein the prudential supervision of a credit institution is assigned to the competent authorities of the home member state (consolidated supervision), whereas to the host member states is left the responsibility –in cooperation with the competent authorities of the home member state –for the supervision of the subsidiary's liquidity and compliance with regulatory standards (solo supervision).
This structure has been thought to give efficiency and effectiveness to the supervisory' goals, and is needed because, since the subsidiary is an independent legal entity, in case of run, it is the host authority that should act as a lender of last resort and should provide deposit protection. On the other hand the home Authority can have more easily access to the parent's activities and may request the undertaking all the information needed to reach the opinion on the financial health of the group as a whole, but since financial stability is the remit of each country, home supervisor cannot be in charge of the stability of the host country. The complement to this structure is given by art. 129 of the CRD which states the duty to cooperate and coordinate their activities between home and host authorities, or better that the consolidated authority shall coordinate the gathering and dissemination of relevant and essential information in going concern and emergency situations and plan and coordinate supervisory activities in going concern as well as in emergency situation in cooperation

public indeed.

with the other competent authorities involved[97]. Furthermore, art. 130 states that where an emergency situation arises within a banking group which potentially jeopardizes the stability of the financial system in any of the member states where entities of a group have been authorized, the competent authority responsible for the exercise of supervision on a consolidated basis shall alert as soon as it is practicable the other authorities involved.

Two trends in the industry should be added to the framework: the centralization of risk management (i.e. liquidity and asset management) functions and the cross border penetration of LCBO's.

The foremost consequence of the first trend is that it may question the effectiveness of host country supervision of liquidity risk in branches and subsidiaries. In fact, host supervisor may not be able to control how the liquidity is managed by the parent company as well as centralized liquidity management may weaken the legal protection arising from the subsidiary structure, since it may create features that make the group resemble one with a branch structure[98]. Eventually this would reinforce the role of home supervisor to control the group wide activities.

Furthermore, the general operational settings of a cross border group may hamper/alter both supervisors' ability to monitor bank's activities and health. Nowadays many banking groups are organized through business lines (e.g. retail banking, merchant banking and so on), thus there is an implicit transfer

97 On the shortfalls of not having in place a single supervisor, see the model by Schuler M., Heinemann F., *The costs of supervisory fragmentation in Europe*, Centre for European Economic Research (ZEW) discussion paper 05/01, 2005, wherein Authors applies the usual cost of financial regulation (i.e. institutional costs of running supervisory agencies which arise inthe state sector; costs of compliance that can be attributed to the regulated firms; and structural distorsion of costs which arise in the financial markets) to the European supervisory architecture.

98 See Nguyen G., Praet P., *Cross border crisis management: a race against the clock or a hurdle race?*, in Financial Stability Review, 2006, Central Bank of Belgium, 151-173, 165.

of decision powers from the national entity of the group to a centralized business-line manager who will not necessary be in the home country. This cross border business line integration means that there may be a higher possibility of intra group, cross border contagion that may not be caught in due time by the responsible supervisor.

Whereas where they centralize operational function, again host supervisor may be unable to supervise those functions as well as it may be unable to assist a sound subsidiary if the parent company that houses the key operational functions goes bankrupt[99].

Kuritzkes, Schuermann and Weiner (2003), call this organisation as "hub and spoke" model. Spokes are responsible for risk management within business lines, whereas hubs provide centralized oversight of risk and capital at the group level[100].

Similarly, LCBO's cross border penetration weaken the ability of the host authority to keep under control financial stability in its country[101].

This is why the main arguments are in favor of the only home country supervision, seen as the most effective because it is able to make a group wide assessment of the risk profile and

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99 See Nguyen and Praet, (2006), 164.

100 Activities at the spoke include the credit function within a bank serving as front line managers for most trading decision making. Those at the hub usually include assuming responsibility for group level risk reporting; participating in decision about group capital structure, funding practices, and target debt rating; liaising with regulators and rating agencies, advising of major risk transfer transaction, such as collateralized loan obligation and securitization; and sometimes even managing the balance sheet. Centralization implies that strategic decision-making is transferred from the functional or sectoral entities of the group to the level of the group as a whole. See, Kuritzkes A., Schuermann T., Weiner S., *Risk measurement, risk management and capital adeguacy in financial conglomerates*, in Brookings-Wharton papers on financial services, eds by Herrig and Litan, Brookings institution, 2003.

101 See Schoenmaker D., Oosterloo S., *Financial supervision in Europe: a proposal for a new architecture*, in *Building the financial foundations of the euro experiences and challenges*, eds by Jonung L., Walkner C., Watson M., 2008.

the capital needed and as the most efficient since it eliminates duplication in regulatory costs and burdens.

Despite the regulatory efforts in designing the most appropriate system, such structure has important drawbacks on the legal structure of a banking group: in fact when it is articulated into cross border branches these can benefit from a centralized liquidity and supervisory management whereas in case of subsidiaries, these may be subjected to different regulatory regimes and standards (i.e. on accepted collateral) and may not be entitled by their national law to claim the support of a parent company or conversely may be subjected to regulatory intervention at an earlier stage than their parent company. The former phenomenon is also known as "liquidity trap": each subsidiary must comply with national supervisory requirements on liquidity computed on a stand alone basis which makes the liquidity management of a cross border group with subsidiaries much more expensive than in case of branches only[102].

Oppositely however, as Calzolari and Loranth (2005) have shown in their empirical model[103], regulatory incentive to intervene is affected by the liability structure of the group (i.e. whether organized through subsidiaries or branches) and hence by the assets available to compensate depositors[104].

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102 See Lamandini M., *Written testimony to the European Parliament on CRD and liquidity*, 5 December 2008.

103 See Calzolari G., Loranth G., *Regulation of multinational banks. A theoretical inquiry*, ECB working paper, n. 431, January 2005, in www.ecb.int

104 More specifically, Authors' conclusions may be summarised as follows: 1) when the LCBO is set up via a subsidiary, the home unit regulator has a stronger incentive in restructuring LCBO's activities than the foreign regulator, because the former both benefits from the foreign unit's residual assets and is shielded from foreign losses. The host regulator instead, is not confronted with this effect; 2) home units fall under soft regulation in branch LCBOs than with subsidiary LCBO. This comes as a consequence of different regulatory responsibility towards foreign depositors: the home regulators can access foreign assets regardless of the representation form, whereas she has to repay foreign depositors only when facing a branch LCBO. Home assets (possibly

In particular, in case of branches (i.e. shared liability between the group' units) cost of intervention is reduced in any of the units then when they are legally distinct (i.e. in case of subsidiaries), since the regulator can take advantage of intra group assets transfer. At the same time, should the regulator face depositors' protection responsibility in both countries (as in the case with branches), it decreases incentives to intervene in a given unit as compared with the case in which the regulator only has to compensate local depositors.
Strangely enough, from the above we can infer that in this specific context, industry and authority's interests are not conflicting. In fact, the former seems to prefer a centralized supervision, whereas the latter have greater incentive to supervise when it has the power over the group wide activities: both situations realize when a group is organized through branches.

Since the last decade policy and voluntary (i.e. at BIS level) initiatives have been taken to address the problem, unsuccessfully though. They have intensified recently because of the financial meltdown that put into question the current state of play and asked for more coordination and agreement on the actions to take in case of crisis. In fact it is a truism that home/host authorities face different incentive when dealing with the problem.

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available only if the home unit is not intervened) are therefore more valuable in branch LCBOs than with subsidiary representation; 3) when the home unit's activities are not very safe, branch representation is preferred by the LCBO as it induces more lenient regulation over all units; 4) as far as regulators' incentives to collect information on the group, authorities are influenced by some form of strategic behavior for monitoring, such as postponing information acquisition on the local unit; 5) in case of subsidiaries, the host regulator has more incentive to monitor foreign units than the home regulator regarding the home unit; and 6) incentive to monitor the group are maximal when it is organized only with branches than with subsidiaries. See Calzolari and Loranth, (2005), 6 f.

It has been noted[105] that there is always a potential for conflicts among supervisors that increases as banks' financial health weakens. According to the Author, the main feature of cross border crisis resolution is characterized by conflict rather than cooperation between authorities and that this non cooperative behavior delays the implementation of an efficient solution, which in turn increases the crisis magnitude, i.e. converting it into a systemic problem.

Such conflicts can be framed in the agency relationship between supervisors and taxpayers as well as between divergent interests among home and host supervisors, influenced also by the national institutional architecture of supervision (i.e. whether integrated or not, at central bank level or not)[106].

Shuler (2003)[107] investigated the problem both at national and at international (cross border) level and depicted the situation in table 1.

As far as the internal dimension is concerned, the Author started considering the incentive problems of each player (banking industry, supervisor, taxpayers) showing that industry's profits depend on the level of supervision and the earning from their loan portfolio, thereby banks prefer low level of supervision and have incentive to take on excessive risk, favored by the fact that the regulator is not able to observe the quality of banks' portfolios and that banks may try to disinform regulators and taxpayers contributing to increase the normal information asymmetry.

Taxpayers instead -considered as usual as the benevolent social

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105 See Baxter T. C., *Cross border challenges in resolving financial groups*, Federal Reserve Bank of Chicago discussion paper, 2004

106 See Masciandaro D., *Politician and financial supervision unification outside the central bank: Why they do it?*, in Journal of Financial Stability, 2009, Issue 5, 124-146, for an explanation on the recent trend towards a certain degree of consolidation of powers in financial supervision, which resulted in the establisment of unified supervisors, different from central banks.

107 Schuler M., *Incentive problems in banking supervision- The European case*, Centre for European economic research (ZEW), Mannheim, November 2003.

welfare maximising principal – want a stable financial system but are not able to monitor banks' portfolio, hence they delegate this function to supervisors -acting as agent- which are expected to take into account also cross border externalities deriving from banks' risk taking behavior in different countries. Nevertheless, taxpayers are not able either to observe supervisory efforts of the home and of the host regulators.

Lastly regulators are appointed to serve as taxpayers' agents to safeguard financial stability that can be seen as a function of their efforts in supervising banks. However they face different conflicts in pursuing solely taxpayers' interests: they can be captured by the industry, they may pursue self interests, they may underestimate banking problems to avoid to incur in blame for poor supervision (situation known as bureaucratic gambling), may tend to protect their activities in front of politicians or to favor their interests and eventually they may even be tempted by the banking industry career. Eventually those conflicts may translate into more accommodating policies (forbearance) and into greater information asymmetries between players that not even the contract à la Jensen and Meckling between them can overcome.

At cross border level, the misalignment of interests remains somehow the same, although is more intense in case of branches where the host supervisor has barely no power over their supervision, thus the potential threat from this entities for the stability of the domestic financial market may be disregarded, leading to a suboptimal level of supervision to the host country taxpayers since the home supervisor would tend not to take in great account cross border externalities.

Furthermore from the home regulator's perspective, the tendency to forbearance applies especially if the branch is relatively small and the adverse consequences of its failure may be negligible, from the home country's perspective though.

An additional problem is given by the poor incentive of the home country supervisor to share information with the host

supervisor, especially when they would illustrate poor regulatory performance. Similarly, the host supervisor may as well lack the incentive to keep the home authority informed since it has limited formal responsibility[108].

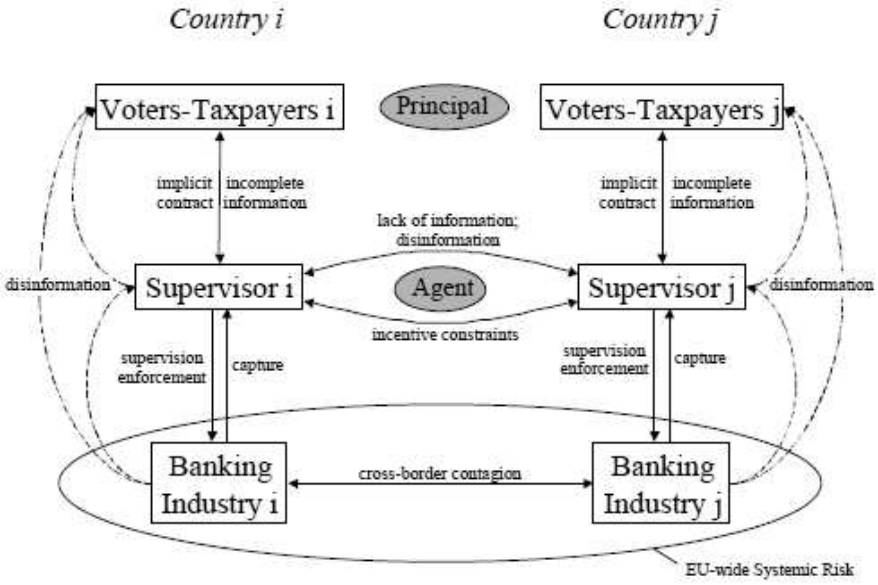
In case of subsidiaries however the supervision remains basically at host level so we would not observe the forbearance problems, but we could still apply Schuler model to them as for the information sharing disincentive.

In fact it is a truism that supervisors tend to be country focused, and to be more concerned on their internal market, leading to home country bias, as in the case of preserving national championships as the recent Italian experience showed, or in those cases when authorities ring fence assets.

108 See also Eisenbeis R., *Home country versus cross border negative externalities in large banking organization failures and how to avoid them*, Federal Reserve Bank of Atlanta working paper, n. 18, 2006, 8 ff; Eisenbeis R., Kaufman G., *Cross border banking and financial stability in the EU*, at Journal of Financial Stability, 4, 2008, 168-204

Table 6: The European incentive problem

Figure 1: The European incentive problem



Source: Schuler (2003).

Furthermore, host countries may face monitoring difficulties especially in case of non systemically significant subsidiaries. In fact, according to a research conducted by the Committee on the Global Financial System in 2004[109], host regulators and markets are less able to obtain useful information from foreign owned institutions than they are from domestically owned banks and this makes the monitoring of those banks more difficult especially when the subsidiary is not particularly relevant for the group as a whole. However that institution may be of a certain importance in the host market but home regulators may not have great incentive to collaborate with host authorities, since they would not even bear the final

109 Committee on the Global Financial System, *Foreign direct investment in the financial sector of emerging market economies*, BIS working paper, 2004.

consequences of their bail out (i.e. liquidity provision and deposit protection). Because of those information disincentives, both regulators may face problems in efficiently supervising their institutions given the impossibility of understanding the group wide financial health.
Going back to Schuler model, we may say that this difficulty could be increased as well by the tendency of supervised banks to conceal unfavorable information about their performance.

Eventually we could stem few conclusions:

1) supervisors' incentive to obtain information is a function of their responsibilities;
2) they may find advantageous not to share information with other regulators; and
3) they may have poor or no incentive to take cross border externalities into account;

The first conclusion is reinforced by a paper from Stoltz (2002)[110] where the Author shows that supervisors will not take cross border contagion effects into accounts if they are accountable only to their jurisdiction, whereas Kane (2005)[111], considers another factor that is of a certain relevance to our scope: the idea of regulatory culture. In fact, according to him,

110 Stoltz S., *Banking Supervision in integrated financial markets: implication for the EU*, CESifo Working paper series no. 812, 2002

111 Kane E. J., *Confronting divergent interests in cross country regulatory arrangements*, NBER working Paper no. 11865, 2005. Carretta, Farina and Schwizer (2005), point at the cultural gaps as a possible stumbling block in the efficient exchange of information and the sharing of problems and goals among regulators and the industry. They developed a cultural survey based on the application of a text analysis model to a corpus of reference texts produced by two samples, drawn from the supervisory bodies and supervised entities. Their empirical findings "reveal numerous field of cultural differentiation, alongside several important areas in which the orientation of the two parts tend to overlap". See, Carretta A., Farina V., Schwizer P., *Banking regulation towards advisory: the "culture compliance" of banks and supervisory authorities*, 2005, mimeo

regulatory (and private) efforts to monitor, deter and bond banks may differ within countries, leading to idiosyncratic features to resolve incentive conflicts with reasonable efficiency.
His argument is interesting because he defines regulatory culture as more than a system of rules and enforcement but includes higher order norms about how officials should comport themselves.
As he puts it:

> "(Regulatory culture) includes a matrix of attitudes and beliefs that defines what it means for a regulator to use its investigative and disciplinary authority honorably. These attitudes and beliefs set standards for the fair use of government power. Checks and balances that bound each agency's jurisdiction express a distrust in government power that often traces back to abuses observed in a distant past when the country was occupied, colonized or run by a one party government. Underlying every formal regulatory structure is a set of higher order social norms that penetrate and shape the policy making process and the political and legal environments within which intersectoral bargaining takes place. These underlying standards, taboos, and traditions are normative in two senses. They simultaneously define what behaviors are normal and what behaviors regulators should mimic to avoid criticism or shame."

He then identifies six specific components that contribute to the actual behavior of supervisors to stop excessive risk taking, and to find and resolve hidden individual bank insolvencies in timely fashion:

- legal authority and reporting obligations;
- formulation and promulgation of specific rules;
- technology of monitoring for violations and compliance;
- penalties for material violations;
- the regulator's duty of consultation: to guarantee fairness regulated parties have a right to participation and due

process which imposes substantial burdens on proof on the regulator;

- regulatees' rights to judicial review: intervened parties have an access to appeals procedures that bond the fairness guarantee.

Eventually, in our opinion regulatory culture can contribute in making the difference both in the way institutions are supervised (i.e. there may be higher or lower degrees of regulatory capture) and in the way they are resolved (i.e. there may be greater tendency to grant them financial support rather than liquidate them). In effect, if we take as examples the UK, Italy, Germany and France, it is fairly intuitive that Italy and France would tend to save the ailing bank maybe starting dialogues with other (national) banks to favor mergers, whereas Germany would tend to even directly intervene in their capital (given the long tradition of state intervention in banks' governance), whereas we may expect from the UK the adoption of a more market oriented solution and a lessen degree of regulatory capture.
A good mean to reduce those differences when dealing with distressed cross border groups may be burden sharing agreements that will be investigated in the next paragraph.

Such misalignment of incentive among supervisors can be reduced in two ways: adherence to mou's and by virtue of the mediation of supranational committees such as the Committee of European Banking Supervisors and the European Banking Committee notwithstanding the same Basel committee[112].

3.1.1. Memoranda of understanding

These are statement of intent, not legally binding given their

112 http://www.bis.org/list/bcbs/tid_24/index.htm

voluntary nature, that determine a duty to cooperate and consult between authorities or establish practical provisions in relation to supervision of subsidiaries, or in relation to information sharing on parent and subsidiaries' activities as well as external information with media in case of crisis or on which national Authority should coordinate actions to take in the latter event. They may also establish common principles regarding the resolution of firms with cross border activities and make provisions over the permissible use and confidentiality of information received. Lastly, they can be general or banking group specific, as in the case of the memorandum of understanding between Banca d'Italia and BaFin concerning the supervision of Unicredit group[113].

The prototype of every MOU can be considered the *Memorandum of understanding on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross border financial stability*[114], including common practical guidelines and a template for a systemic assessment framework.
This document establishes comprehensive principles the Parties should comply with in case of crisis plus a clear division of labor between authorities.

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113 See *Side letter to the memorandum of Understanding of 16August 1993 between the Banca d'Italia and the Bundesanstalt für Finanzdienstleistungsaufsicht ("BaFin"), legal successor to the Bundesaufsuchtsamt für das Kreditwesen concerning the supervision of the Unicredit Group*, in www.bafin.de

114 *Memorandum of understanding on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross border financial stability*, 1 June 2008, in www.ecb.int. See also, *Memorandum of Understanding on high- level principles between the banking supervisors and central banks of the European Union in crisis management situations*, 1 March 2003; *Memorandum of Understanding on the exchange of information among national credit registers for the benefit of reporting institutions*, 30 March 2003; *Memorandum of Understanding on co-operation between payment systems overseers and banking supervisors in the Stage Three of Economic and Monetary Union* 2 April 2001, all available at www.ecb.int

First of all it states the final aims of crisis management: financial stability protection, primacy of private sector solution, limitation of the use of public money -that anyway should be used under strict and uniform conditions -fiscal burden sharing, prompt assessment of the systemic nature of the crisis, coordinating role of the home country supervisory authorities, compliance with EU competition and state aid rules.

Second, as far as the division of labor between authorities is concerned, the MOU assigns the National coordinator[115] of the home country the role of cross border coordinator. The actual coordinator may be each authority involved, depending on the type of crisis: in case of crisis affecting a cross border financial group it will be the group supervisor, in case of crisis affecting the performances of central banking functions it will be the relevant central bank of the home country, whereas in case of systemic implication which may imply the use of public funds, that would be the Finance minister of the home country. However, in our opinion, this distinction does not seem really feasible due to the difficulty of distinguishing a crisis "affecting the performance of central banks" from a crisis "with a potential for systemic implication". In such cases then, especially because it would be inapplicable a "prevalence criterion", it seems reasonable identify a determined Authority to act always as a National coordinator, and leave to its responsibility the decision of the actions to take.

Third, as for information sharing, there should constantly be a flow of available and relevant information between respective counterparties authorities both in normal times and in crisis situation and, under exceptional circumstances though, information may be transmitted directly at the cross border level between different types of Authorities. Furthermore, in

115 The national coordinator would normally be the National authority chosen by the involved authorities, in charge of the overall coordination of activities in order to enhance preparedness in normal times and facilitate the management and resolution of a crisis at the national level. See *Memorandum of understanding*, key definitions, p. 3.

case of a wide disturbance in the economy, information sharing may be encouraged and facilitated by means of existing EU committee infrastructures and facilities.

A common database should be designed including at least the following information: *a*) a concise description of the ownership, legal structure, management structure and key business areas; *b*) a list of all the relevant mayor payment, clearing and settlement systems and *c*) the financial position of at least the last five years, of all the relevant financial groups. Besides, a template for crisis data of the relevant financial group would include –possibly in line with CRD requirements –at least: *aa*) the relevant supervisor's assessment of the projections of revenue and costs; *bb*) the relevant supervisor's assessment of the quality of assets and liabilities; *cc*) the liquidity position, including relevant cash flow projections, funding structure, collateral buffers, and intra-group lending; *dd*) the size of large exposures, at least according to region, collateral used, type of customer and currency; *ee*) the size, nature and extent of the problem at hand, e.g. bad loans; and *ff*) the legal domicile of the major assets and off balance sheet items.

Since few are public, here we would briefly consider the contents of some of them, specifically: the MOU between the central Banks of Denmark, Finland, Iceland, Norway and Sweden, the MOU among the banking supervisors of South Eastern union and, as far mou's across European borders, those between the US and the United Kingdom, and between Estonia and Russia[116].

1.1.2. The *Nordisk* mou

116 Outside the EU member States, see for instance, *The Memorandum of Understanding and co-operation in banking supervision* between the Croatian National Bank and the Central Bank of Bosnia and Herzegovina, Banking Agency of the Federation of Bosnia and Herzegovina and Banking Agency of RepubliKa Srpska, dono on 5 November 2003 in Sarajevo, available at www???

In June 2003, as a general framework, the central banks of Denmark, Finland, Iceland, Norway and Sweden have agreed upon a memorandum over the management of a financial crisis in banks with cross border establishments, keeping the freedom of entering into separate MOU's within each other where deemed necessary[117]. However, in cases where the Nordic central banks draw up a separate MoU in respect of a specified financial group, one of the central banks shall be made responsible for ensuring that a fact book containing relevant public information about the group is updated regularly. The purpose of the fact book is to give the central banks a common body of knowledge about the structure of the group's business activities and balance sheet.

The mou is a specification of the EU agreement and is based on two main principles: speed and efficiency in cooperation among authorities in the event of a crisis and no constraints over their flexibility as independent institutions[118].

In order to limit the extent of public intervention to the minimum, the mou strongly advocates down-streaming of funds from the parent company to the ailing subsidiary. Where this effort proves unsuccessfully, emergency liquidity assistance from the central bank could be provided only if the bank is still solvent, though no formal definition of insolvency is given. Nonetheless, if the parent is insolvent, the first preferred option is the sale of its solvent subsidiary bank, in order for the parent to be able to pay its debts. As for the crisis management, to the central banks is required the establishment of a crisis organisation that enables the efficient acquisition and analysis of information to allow a quick assessment of the necessary policy measures, through a crisis management

117 See indeed, the *Memorandum of understanding between the central banks of Sweden and Finland on co-operation in the oversight of the central securities depositories VPC AB ans Suomen Arvopaperikeskus Oy*, January 2006, in www.bof.fi

118 The mou is of a certein relevance because of the particular arrangements in place for the supervision of Nordea, where authorities have overlapping responsibilities.

group whose representatives shall be able to communicate directly with their respective central bank executive board. Besides, such group should be immediately activated by the NCB that first identify a crisis, and its main task would be the provision of all central bank with quick access to the same information and the enabling of direct discussion and coordination of potential measures by producing background material on available information related to the possible bank' solvency . To this end it should ascertain the bank's liquidity and solvency situation and other relevant factor through direct communication with the management of the banking group and with any other significant party.
Lastly, the mou defines obligations related to information sharing and basically assigns the crisis group the role of "information manager" both to the media and within authorities.

3.1.3. The South Eastern Europe mou

On July 2007, the Bank of Albania, the Bank of Greece, the Bulgarian National bank , the Central bank of Cyprus, the National Bank of Republic of Macedonia, the National Bank of Romania and the National Bank of Serbia, entered into a Memorandum of understanding on high level principles of co-operation and co-ordination in the field of banking supervision[119] .
Against the background of EU legislation and best practices, the agreement aims essentially at facilitating the exchange of information and at harmonising as much as possible legal differences within countries as well as at trying to eliminate legal obstacles and different supervisory practices to the smooth functioning of cross border banking groups' risks management.

119 See, *Memorandum of understanding on high level principles of co-operation and co-ordination among the banking supervisors of south eastern europe*, in www.bankofalbania.org

It focuses on home-host cooperation, information exchange, convergence of supervisory practices, monitoring banking groups' system and controls, financial stability and macro prudential issues, crisis management, anti-laundering and terrorist financing risks, implementation and confidentiality of information.

In order to foster harmonization, parties have agreed to communicate to each other, on a semi annual basis, major changes in their legal framework pertinent to supervision, whereas special consideration should be given to the identification and treatment of any legal obstacles in sharing information with other supervisory authorities. Furthermore in order to ensure that both at consolidated level and on a solo basis banks are adequately supervised, home-host authorities should list the issues that warrant an allocation of tasks – without depriving supervisory authorities of their natural/regular powers though, and to examine in the long run the possibility and the appropriateness of gradual allocation of tasks aiming at a more effective and efficient supervision of banking groups, operating on a cross border basis. Drawing upon the Basel document on *Home Host information sharing for effective Basel II implementation and the CEBS' Guidelines on supervisory cooperation for cross border banking and investment firm groups,* they would also draw a list of information to be shared useful for both supervisors.

Convergence in supervisory practices may be achieved encouraging the developments of networks between line supervisors of different entities within a group, setting up experts teams to deal with specific issues, enabling joint inspections to be carried out by the home and host authorities involved, exchanging views in order to understand different practices and cultures and to develop a common supervisory culture, exchanging staff and consulting with market participants. Harmonisation of national reporting requirements would be an asset. In order to obtain a shared monitoring of banking groups, parties agreed to exchange views on the degree of convergence reached by testing the

performance of specific centralised functions in all the units of major banking groups operating in the region and enabling authorities directly involved with the supervision of a specific banking group and its individual units, to assess jointly the risk profile of this group. To guarantee financial stability, parties committed themselves to share information of macroeconomic and financial market developments; banks condition and outlook; conditions of non financial corporates and households linked with banks' asset quality; market risks and regulatory developments.
In the event of crisis, parties will closely cooperate to develop gradually suitable intraregional arrangement, allowing for a clear understanding of the respective roles of home and host country authorities; a more concrete cross border cooperation, comprising a crisis management group, contact lists and communication procedures; a prearranged process for exchanging views and information with authorities likely to be involved as well; an effective coordination of crisis management actions; a joint communication policy to the public and for the regular review of the crisis management arrangements. Furthermore in order to avoid moral hazard they agreed not to publicise or communicate to the markets o publish any crisis management arrangement concluded within the framework of the mou.
Although some provisions, especially those on crisis management, do not seem particularly consistent and seem too vague, it is appreciable the effort of countries with deep regulatory and legal differences to develop a common framework also by means of the creation of networks of line supervisors, college of supervision heads and ad hoc experts working groups.

3.1.4. The Russia-Estonia mou

In august 2008 the central bank of the Russian federation and

the Estonian financial supervision authority, have signed up a memorandum of understanding to exchange information for the effective fulfilment of their functions and to assist the reliability and stability of banking systems in their countries[120]. Therein they decided to co-operate and exchange information in the areas of licensing, owner control, on going supervision (off site and on site inspections), anti money laundering and counter terrorism financing. Co-operation should take place under the initiative of one of the supervisory Authorities as well as unilaterally, providing the other Authority with information that according to the estimation of the providing Authority may deem necessary to the receiver for the supervisory purposes. As far as licensing is concerned, upon the receipt of the application the host supervisor shall inform the home supervisor about its contents, and after consideration of the application shall inform in writing about its results. Conversely, the home supervisor shall inform the host supervisor on the basis of a relevant request whether the applicant supervised institution complies with the national legislation as well as about the state of corporate governance, risk management and internal control system of the applicant institution[121].

As far as the cooperative duties is concerned, the supervisory authorities shall consult before granting permission with regard to the acquisition of shares by a single or a group of legal entities or private single and groups individuals in a supervised institution registered in other country. Besides, they should inform each other about concerns on the financial soundness of supervised institutions having cross border establishments in the respective other country and they have a duty to notify each other of any action taken or of any relevant information gained in respect to the supervised institution (whether parent or subsidiary). By relevant information they

120 Memorandum of understanding between the central bank of the russian federation and the estonian financial supervisdion authority, August 2008, in www.cbr.ru

121 See *ibidem*, § 5.1-5.3

mean: concerns about the financial soundness of a supervised institution (i.e. failure to meet capital adequacy or other financial requirements, significant losses, rapid decline in profits or a deterioration in profitability), concerns relating to banking supervision both on a solo and consolidated basis, concerns arising from the results of inspections, or from reports and meetings and other communications with a supervised institution, concerns arising from late and/or unreliable reporting, information about the breaches of anti-money laundering and counter terrorist financing legislation made by supervised parent institutions and cross border establishments.
Furthermore, Authorities shall assist each other in carrying out on site inspections, providing possible full informational and consultative support to their colleagues in such inspection; where allowed by national legislation they should also communicate the results of the inspection.
To guarantee a smooth functioning of the agreement, the involved authorities have set up provisions related to expenses, list of contact persons, availability of respective regulations and electronic means of communication.

3.1.5. The UK-US Mou

The agreement reached between the United States Federal Deposit Insurance Corporation and the United Kingdom Bank of England on the 10th of January 2010, is related on the exchange of information and cooperation in resolving troubled cross-border insured depository institutions[122].
Scope of the mou is therefore the enhancement and strengthening of Authorities' cooperation and consultation' intents in mutually understanding the complexities inherent in

122 See, *Memorandum of Understanding concerning consultation, cooperation and the exchange of information related to the resolution of insured depository institutions with cross border operations in the United States and the United Kingdom*, of 10th of January 2010, available at www.boe.co.uk

cross border banking operations by firms in the UK and in the US, in conducting cooperative analyses of the challenges in resolution of such firms and in contingency planning for such challenges and resolutions.

Thereby, after the usual disclaimers on independency of each authority, on the adaptation to the normative framework of each jurisdiction, on the division of responsibilities between authorities, on the fact that there should be no prejudice of their own roles and so on, the Authorities agreed to adhere to common principles to be followed in case of resolution of banks with cross border activities, namely: careful ex ante preparation to establish optimal processes and steps to ensure effective coordination and implementation of possible resolution strategies; flexibility to adapting to the specific features of a crisis and of the institution involved; ability to promptly assess the broader effects of any banking crisis and its cross-border implications based on common terminology and analysis; consistency with national supervision and crisis prevention.

As far as the mechanisms and scope of resolution, consultation, cooperation and exchange of information is concerned, they intend to endeavour to inform the other Authority in advance of regulatory changes taking place and which may accordingly have a significant impact on the operations and activities of the regulated firms. They also recognised the importance of ex ante coordination, hence they committed themselves to enhance cooperation in the analysis of cross border banking resolution issues, planning for potential resolution scenarios and appropriate simulation, contingency planning or other work deemed necessary. Furthermore they decided to work with the firms to plan the development of appropriate (going concern) recovery plans and (gone concern) resolution plans by firms and ensuring that such plans stay up to date.

They agreed also on staff exchange and on the need of clearly identify a contact person. In committing to assist each other, FDIC and BOE should respectively share information related to the financial and operational conditions of the firm,

including capital structure, liquidity and funding profiles, internal controls procedures, external market or ratings information, entities providing important operational capabilities, identification of materially significant subsidiaries and affiliates, and to other confidential supervisory information. Lastly it shall be provided any needed form of assistance.
Actually, over information exchange there are few exceptions related to the degree of confidentiality, reasonability and restricting disclosure on grounds of public interest or national security or interference with on going investigation.

Despite what we said above, according to Enria and Vesala (2003)[123], that draw on mechanism design and incomplete contract theory, MOU are not yet able to diminish incentive conflicts between supervisors because they do not address explicitly the areas where incentive constraints could hamper the effective exchange of information nor are able to achieve efficient supervision and systemic stability surveillance from the perspective of an overall optimum[124].
In fact, they highlight that[125]: a) MOU's do not provide for the routine transfer of "market surveillance" information among supervisors; b) they do not explicitly deal with the exchange of concerns about individual institutions and they do not contain instructions on the content and timing of communication in crisis situations; c) they do not address the issue of coordination in crisis situations, for example stipulating consultations between the home and host authorities in order to address the issue of externalities.
Furthermore, they seem to be quite pessimistic in warning that there are needs for cooperation that cannot be resolved even

123 Enria A., Vesala J., *Externalities in Supervision: the European case*, in Financial Supervision in Europe, eds by Kremers, Shoenmaker, Wierts, Edward Elgar Publishing, 2003, 60

124 Op.loc.ult. cit. p. 61

125 Op. Loc. Ult. Cit. p. 71

via optimally functioning bilateral relations or disclosure.
However, we may partly disagree with the Authors' conclusions since our specific description of MOU's contents shows exactly the opposite, namely that mou's are detailed as for types of information to be shared, cooperation ex ante and during the crisis, set up of ad hoc units, division of labor within authorities and warning alerts on the financial situation of supervised entities.
Nonetheless we must acknowledge what the recent crisis has shown: Enria and Vesala's concerns about conflicts between supervisors proved to be right since MOU's in place have not been followed, most probably because the accountability to national governments and the primacy given to local interests have played a more crucial role.
Furthermore we must note that one strong weakness of Mou's is due to their main feature: as they are not legally binding there is neither enforceability nor sanction in case of infringement. This gives parties poor incentive to implement the agreement.

3.2 The European Banking Committee (EBC)

The European Banking Committee (EBC), is the successor to the Banking Advisory Committee and it is now run by the European Commission. The Committee fulfils both comitology and advisory functions. It assists the Commission in adopting implementing measures for EU Directives and provides advice on policy issues related to banking activities. The EBC is composed of high level representatives from the Member States and chaired by a representative of the Commission. Observers from the European Central Bank, the Committee of European Supervisors as well as from EFTA countries and candidate countries are also invited to attend.
It is well known how the legislation path in the field of

banking, securities and insurance is organized at 4 levels[126]. The EBC is a so-called "Level 2" Committee under the four level "Lamfalussy" framework.

3.2.1. The Committee of European Banking Supervisors (CEBS)

Cebs[127] as well is part of the Lamfalussy procedure on the financial regulatory architecture. It is a L3 committee, whose main task is the convergence of supervisory practices among member states and especially between supervisory colleges. It gives advice to the Commission both upon request and autonomously in the preparation of drafts implementing measures in the field of banking activities. Besides, it

126 At the first level there is the legislative initiative by the Parliament, the Council or the commission: they set up the core principles to be implemented at level 2; at the second level the measuer is updated with technicalities and details deriving from EBC, EIOPC, ESC–namely the European committees made up of the competent ministres. The level three committees –CEBS, CEIOPS, CESR –advice the regulatory committees and contribute to consistent and convergent implementation of EU laws, by fostering cooperation and information exchange between national supervisors. Lastly level 4 of the procedure is where the Commission enforces and monitors the timely and correct transposition of EU legislation into national law. There is wide consensus over the necessity to change this framework. One main point is the powers the not legally binding decisions attributed to L3 committees. See for example, Communication from the Commission, *Review of the Lamfalussy process. Strenghtening supervisory convergence*, 2007, in www.ec.europa.eu; CEBS, *CEBS Contribution to the Lamfalussy review*, 12 November 2007, in www.c-ebs.org. However this scenario is changing at a fast pace since the plans to introduce a new EU financial architecture, which is trasforming L3 Committees granting them more powers and tasks. See Communication from the Commission, *European Financial Supervision*, COM 2009(252), of 27/05/2009, available at www.ec.europa.eu

127 See Decision 2004/5/EC of 5 November 2003; and Commission Decision C(2009)177 establishing the Committee of European Banking Supervisors, both available at www.ec.europa.eu. According to the de Laroisiere approach, CEBS will became the European Banking Authority (EBA).

contributes to the implementation of the related EC body of laws. It is composed of representatives of national supervisors and central banks of the EU.
As far as our analysis is concerned, we must acknowledge that CEBS has been particularly proactive in developing a common set of supervisory guidelines and, according to CRD requirements related to home-host cooperation, it has implemented back to 2006 Guidelines on supervisory cooperation for cross border banking and investment firms group: CEBS opinion has been recently updated in the light of the current turmoil through a piece of advice to the EC commission on the information that may be exchanged between home and host supervisors under art. 42 of the CRD.
Relevant documents have been issued also in relation to the cooperation between colleges of supervisors of cross border banking groups, to their operational functioning, good practices to be followed, and a template for their written agreements has been issued[128].

3.2.2. The Basel committee on Banking Supervision

The Basel committee on banking supervision is an institution created by the Central Bank Governors of the Group of ten in 1974.
Its work is on the formulation of standards, best practices and

128 See CEBS, *Guidelines on supervisory cooperation for cross-border banking and investment firm groups*, of 25 January 2006; ID., *Range of practices on supervisory colleges and home-host cooperation*, of 27 December 2007; ID., *Multilateral co-operation and co-ordination agreement,* of 27 December 2007; CEBS-CEIOPS, *Ten principles for the functioning of supervisory colleges*, of 27 January 2009; CEBS, *Template for written agreements between supervisors for the functioning of colleges*, of 27 January 2009; ID., *Good practices on the functioning of college of supervisors for cross border banking groups*, of 2 April 2009; ID., *Advice on the information that may be exchanged between home and host supervisors of branches under art. 42 of the CRD*, of 3 June 2009; ID., *Draft Guidelines for the operational functioning of colleges*, of 17 December 2009. All are available at www.c-ebs.org

guidelines in relation to banking supervision, as well as it promotes regular cooperation among supervisors.
Although its documents are not binding in Member States since they can be seen as soft law provisions, nonetheless they are widely accepted by the Community and in some instances are even translated into EC Directives (see the CRD that mirrors the Basel Accord). Further some of them , as the principle of sound corporate governance in banks, are widely recognised and taken as a point of reference for national legislators.
Its main purpose is to encourage convergence and to enhance understanding of key supervisory issues in the field of banking regulation and supervision.

3.2.3. The Financial Stability Board (ex FSF)

The Financial Stability Board shall be considered among the supranational organizations entrusted with the task of finding common consensus and agreed solutions between member states in relation to financial stability issues. It is composed of worldwide authorities responsible for financial stability, sector specifics international groupings of regulators and supervisors and committees of central bank experts. In the wake of the crisis it enacted a Decalogue on cross border cooperation on crisis management, which defines the scope of crisis management and gives competent Authorities instructions on how to prepare and manage financial crisis.
As they define the final aim of those crisis as the prevention of serious domestic or international instability that would have an adverse impact on the real economy. In so doing they should 1) maintain incentives for financial institutions to behave prudently; 2) promote private sector solutions and use public sector intervention only when this is necessary to preserve financial stability; and 3) maintain a level competitive

international playing field in the spirit of the Basel accord.
As far as home –host coordination is concerned it is recommended that home authorities should lead work with the key host authorities to look at the practical barriers to achieving coordinated action in the event of a financial crisis involving specific firms, for every cross-border bank identified by the FSB as having or going to have a core supervisory college.
To prepare for a crisis, Authorities should develop common support tools for managing a cross border financial crisis, meet at least annually to consider together the specific issues and barriers to coordinated actions under the guide of home supervisors, which is also given the task to keep interested authorities informed on the arrangements for crisis management. Besides, they should share a minimum defined set of information (e.g. on group structure, interlinkages between the firm and the financial system, contingency funding arrangements, etc.) and ensure that firms are capable of supplying them on a timely fashion.
In managing a crisis Authorities should strive to find internationally coordinated solutions that take into account negative externalities on other countries, share national assessment of systemic implications, share information as freely as practicable with relevant authorities from an early stage preserving confidentiality though and where a fully coordinated solution is not applicable, they should discuss national measures with other relevant authorities.
We can see how this set of soft laws implicitly underlines both coordination problems and information sharing as we have highlighted thus far. Nonetheless, although such rules can be considered more “prominent” than mous and so there may be grater incentive to obey, they have the same limitations as the latter: they lack of enforceability and control over their actual application.

3.3. The rationale behind bank insolvency regulation. The case for a *lex specialis*

Scope of bank[129] insolvency regulation is manifold.
In fact, in implementing early and late intervention tools, competent authorities should bear in mind depositor protection and public confidence in the system, as well as should maintain financial stability, preserve critical banking functions and protect competition in the sense of ensuring that banks' claimholders are not treated more favorably than other non banking entities. Furthermore they should be designed in such a way to mimimise the overall resolution costs, the actual cost for taxpayers and to avoid moral hazard.
In fact, bankers who are aware that their position, reputation and wage would be put at stake should their bank fail, may have little incentive to engage on risky transactions; similarly, if depositors and creditors know they would bear severe losses in case of crisis they would tend to take extra care in monitoring bank's management. But if both parties know that losses and adverse consequences would be borne by taxpayers and the government, they won't have incentive to behave. This means, at least as far as moral hazard is concerned, that the regulatory framework would work at its best if it is able to share losses between equity shareholders, insiders, investors, capital providers and unsecured creditors of the bank, and then to avoid any expectations on likely bailouts, irrespectively of the bank's size.
Depositor protection on the other hand, can be explained

129 As for corporate insolvency law objectives, according to Shiffman, those should aim at fulfilling the fair and predictable treatment of creditors and the maximisation of assets of the debtor in the interests of creditors, see Shiffman H., *Legal measures to manage bank insolvency*, in «Bank Failures and Bank insolvency Law in economies in transition», eds by Lastra and Shiffman, Kluwer Law, 1999, *passim*. For a thorough analysis of corporate insolvency law, see Schwartz A., *A normative theory of business bankruptcy*, at Virginia Law Review, vol. 91, issue 5, 2005, 1199-1265

because of the information asymmetries between savers and banks: the former do not have the means to evaluate bank's financial health nor they could exert any form of real monitoring to the banks. Besides, protecting depositors means also protecting the public confidence and the economic stability, although most of the times depositors are not even informed on the existence of this safety net and therefore run anyway on their bank[130]. Depositor protection can also be seen as a form of political choice since the opposite could come at a politically high cost as it could be viewed as an unpopular decision[131].

To preserve the other goals, we expect insolvency system to be able to meet some other critical requirements, such as *i*) clearly defined grounds for intervention, so that ailing banks cannot free ride on authorities' disorganization and normative lacunae; *ii*) ability to promptly correct the situation before it gets too severe; *iii*) a well defined deposit insurance system, so that depositors are quickly and fully repaid; however, to avoid

130 Some attribute the need to protect depositors to the payment services provision by banks. They say that "the reduction of transaction costs by the generalized use of the payment system can only be attained if depositors are confident that their deposits are safe in the bank. This means that banking regulation should provide guarantees that create sufficient incentive for potential depositors to open a bank account and to access the payment system". See CEPR, *Bailing out the banks: reconciling stability and competition*, 2009, at www.cepr.org, 10.

131 In the aftermath of the Argentinian crisis of the early ninetines, argentinian government actually abolished depositor protecion and forbidden central bank to give financial help to banks in difficulties. The main results were the diversification of interest rates among depositors, reflecting different risk premia, the establishemnt of interbank rating agencies, the organisation of mutual support in the event of financial crisis and other form of private arrangements. Eventually however, government had to step back on its decision and to re introduce a form of deposit insrance, to cope with the so called "tequila effect" due to the currency crisis being experienced by Mexico at the time. For a very interesting and detalied analisis of the issue, see Miller G., *Is deposit insurance inevitable? Lessons from Argentina*, at International review of law and economics, 16, 1996, 211-232.

moral hazard, the system shall be designed not to result in a form of blanket guarantee to bank's losses; *iv*) insolvency law should give the competent authorities full, unconditional and immediate power to access and dispose of bank's assets and accounts, to have the clearest idea possible of bank's health and finally, *v*) resolution Authority should have adequate powers to maximize recoveries and minimize third parties interferences[132]. Basically once crisis' intensity has been carefully assessed, competent Authority shall have all the needed powers to efficiently tailoring their response.

Anticipating here what will be described throughout further, when the crisis has cross border aspects, legal, regulatory and operational problems must be addressed as noted by Krimminger (2005)[133].

In fact, legal issues stem from the imperfect and sometimes conflicting interaction of legal systems, whereas regulatory problems arise because of domestic regulators having to coordinate their actions (take the Northern Rock case as an example) and operational issues since, as we have seen analyzing mou's and conflict of interests, there is no binding agreement in place and because involved states may take a different approach to the crisis, due to their perception of bank's importance.

Besides, applicable law should fulfill other components, such as clear *ex ante* responsible authority identification, role assigned to the supervisor(s) without primary responsibility, coordination between different regulatory and supervisory infrastructures, LOLR arrangements, different legal treatment of corporate structure, to cite a few.

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132 See Krimminger M., *The resolution of cross border banks: issues for deposit insurers and proposal for cooperation*, in Journal of Financial Stability, 4, 2008, 376-390.

133 See Krimminger M., *Banking in a changing world: Issues and questions in the resolution of cross border banks*, paper presented at the Federal Reserve bank of Chicago conference on Cross Border banking: Regulatory Challenges, October 6-7- 2005, mimeo.

Before proceeding though, we shall preface that in our analysis we are of the opinion that multinational banking groups need a special resolution regime and cannot be confined into national law or EU law related to corporate insolvency, as for example Regulation 1346/2000.
Nonetheless, it may be useful just to give a glimpse on the related debate.
The main point is whether or not common insolvency rules (*lex generalis*) can be applied to banks.
In principle, no apparent reasons justify the negative opinion, indeed this is what happens in some jurisdictions (Spain, Ireland and, until some times ago, UK) though few *ad hoc* provisions apply in case of credit institution (e.g. in case of setting off and netting of financial claims) or, wherein special law applies, it may be established that for any unregulated aspect, general insolvency provisions apply, insofar as they are compatible or appropriate. Moreover, since banks in crisis are no longer performing banking functions, one may say that there is no need to carry on subjecting them to the banking supervisor/regulator and therefore there is scope to leave their resolution to courts.
However, as we highlighted in the first chapter, banks are special under many perspectives, both because of the "functions" pursued, and because they are already treated differently from corporate legislation. Banks are hence submitted to the supervision and regulation of an ad hoc authority[134].

134 On the other side of the spectrum tough, there is the high opacity of banks, which calls for regulatory intervention because debt and equity holders may find very difficult monitoring bank's managers, controlling banks from risk shifting, designing contracts that align the interests of managers and shareholders and makes it easier for insiders to exploit outside investors. Furthermore it reduces two fundamental forces, usually present in commercial firms: product market and takeover. See Levine R., *The Corporate governance of banks: a concise discussion of concepts and evidence*, 2003, at www.ssrn.com; and Caprio G., Levine R., *Corporate governance in finance: concepts and international observation*, in Financial Sector governance: the roles of the public and

Banks are different from other companies[135] even in respect to the triggering event of a crisis[136]. While the latter go bust basically for market events and internal management and/or accounting problems, banks are subjected to wider and most sensitive causes that need to be handled with extra care than a commercial company. Nonetheless insolvency proceedings are usually administered or coordinated by a public authority, such as the competent Minister, even in the case of non-financial firms, when these are of big dimensions.

Banks' specificity thus translates into characteristic features of banking law compared to general insolvency law.

As we highlighted in the previous chapter, not only the triggering event but the triggers for supervisory action are different, because watchdogs can intervene long before the bank gets insolvent and even if it is not insolvent at all. We have seen in fact that in common insolvency law, creditors intervene when the firm is not able to fulfill its obligation when they fall due. Banking law oppositely gives authorities powers to intervene whenever they retain it necessary.

This means that, as it has been noted by Hupkes (2003), «the insolvency concept under general law proves somewhat dysfunctional for banks»[137].

To give more strength to the argument, we may add that *lex*

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private sectors, eds by Litan, Pomerleano, Sundararajan, 2002.

135 Obviously banks are corporations its elves, which under some regards face the same corporate governance issues than commercial companies. Nonetheless in relation to this, the existing strands of studies reach opposite conclusions: the first argues that the same corporate control mechanisms that influence the governance of non-financial firms also influence bank operations whereas the second confirm the specificity of banks to this regard. See, Polo A., *Corporate governance of banks: the current state of the debate*, 2007, working paper available at www.ssrn.com.

136 On the differences between insolvency of financial and non financial firms see also, Caprio G., Klingebiel D., *Bank Insolvency: bad luck, bad policy or bad banking*?, in Proceedings of the annual world bank conference on development economics, 1996, at www.worlbank.org

137 P. 10

generalis deals with mortician firms, but banks cannot be considered as such since they are yet able to paying creditors even when in financial difficulties. This is due to the maturity mismatch liability structure that characterizes them. This reinforces the opinion that insolvency is not always a trigger for intervention, oppositely to what happens to non financial companies: as we said in the previous chapter, we can differentiate between the failure of a bank and its insolvency, and we can say that banking insolvency law aims at promptly intervening at any point before a failure occurs, creditors incur losses and bank becomes over indebted.

Triggers are also related to financial stability and soundness, whereas in corporate insolvency law these are initiated by creditors' impulse: this means that at the core of common insolvency law is the protection of private interests rather than mixed ones and we may suppose that the law is designed accordingly. Should this be the case, we have found another proof for the advocacy of a special resolution mechanism for banks.

If we move to stakeholders, these are given different powers and possibilities in relation to the underlying different grounds for intervention.

Under *lex generalis* they can initiate proceedings, they may constitute a consortium to protect their interests in front of a judge, they can have their say and they can suggest actions to be taken by the court appointed person. This function cannot be met by special law because we saw how scope of bank's resolution cannot only be the asset maximization, as it would be the case for commercial firms, and hence banking law needs to give powers to a public authority whose statutory objective is financial stability protection. Besides, it is a matter of fact that creditor participation to insolvency proceedings usually slows down final decisions and settlement, whereas in bank insolvency law time is an asset.

Furthermore only a procedure administrated by the supervisor seems to have the normative legitimacy to act irrespectively of the existing company law.

In fact, keeping in mind that timeframe is essential, that a greater number of objectives must be preserved and that stakeholders' control over bank management is confined to the minimum, it may be vital having the possibility of blocking, avoiding or somehow strongly and timely contrasting management or shareholders' decisions that may threaten even more the institute's (and *de relato* system's) stability, and that may be detrimental to the satisfaction of third parties. Moreover those harmful decisions are usually taken in the meanwhile just before the crisis comes out, hence the presence of a third authority empowered to take prompt control over actions or decisions such as bonus payments made to managers and high level employees, or elargition of large dividend payment to existing shareholders, or any other action that threats to shift away value and resources or to increase risk in a final rush to catch all the gains. On the other hand supervisors may impose asset transferability within the group, as a source of strength to the ailing subsidiary[138].

A special law for bank's insolvency may also give supervisors the ability to change management, and to cross over legal obstacles on certain decisions that need shareholders approval as when mergers or taking over are encouraged or other form of private/public solution would be the optimal solution.

However, conferring those powers to Authorities comes at a cost for shareholders, whose rights are protected not only by the related body of EU laws (e.g., second company law directive, shareholders' rights directive, third company law directive, directive on cross border mergers, sixth company law directive), but also by the European Convention of Human Rights. Under art. 1 of the Protocol, in case of transfer of ownership or assets of an ailing bank, shareholders' rights must be considered as to guarantee their peaceful enjoyment of possessions. In fact, the related interference must strike a "fair balance between the demands of the protection of the general interest of the community and the requirements of the

138 On the source of strength doctrine, see *infra*.

protection of the individual's fundamental rights", such as the privation of their own shares, or the suffering of a diminution of their value.
It is not by chance then that laws allowing for public intervention, admit the pari passu principle or imply only a partial reduction to their rights, such as the one to call the general meeting or to take certain decisions. However, more clarification is needed in the to be implemented framework.

Finally, from the above derives that the agenda on special resolution should:

- Allow the authorities to take control of the financial institutions at an early stage of its financial difficulties;
- Empower the authorities to use a wide range of tools to deal with a failing financial institution, without the consent of shareholders or creditors;
- Establish an effective and specialized framework for liquidation of the institution that assigns a central role to the authorities;
- Ensure clarity as to the objectives of the regime and define clearly the scope of judicial review[139];
- Promote information sharing and coordination among all authorities involved in supervision and resolution;
- Modify company law directives to allow for a restriction of shareholder rights in case of public interest and preservation of financial stability, designing appropriate safeguards to redress and compensate their claims;
- Reduce the total costs of failure to taxpayers.

139 See Cihak M., Nier E., *The need for special resolution regimes for financial institutions –the case of the European Union*, IMF working paper, n. 200, 2009, at www.imf.org, p. 11.

3.4. **Cross border crisis management issues.**

When it involves cross border features, crisis management and resolution is even more critical.
As far as the operational difficulties is concerned, we have already seen what the division of labor between home and host authority shall be and how the misalignment of interests among supervisors play a crucial role in the feasibility of coordination and collaboration.
We concluded that the mismatch among supervisory responsibility, availability of information, legal authority to intervene and different consideration of branch/subsidiary importance may lead to a suboptimal level of crisis management.

In this paragraph we want to focus on the legal and regulatory differences mentioned above.
In fact, another layer of complexity in managing the failure of a group is given by the –sometimes profound –differences between supervisory architecture, triggers for intervention, types of procedures, power attributed to authorities, deposit insurance and lender of last resort functioning.
We want investigate each of them giving a general overview of EU member States and then focusing on those States where the highest concentration of cross border banking groups is headquartered, namely Italy, Spain, France, Germany and UK.
Our analysis will be based basically on the survey conducted by CEBS in 2008, on the mapping of supervisory powers in Europe[140].

140 See, CEBS, *Mapping of Supervisory objectives and powers, including early intervention measures and sanctioning powers*, Report n. 47, March 2009

3.4.1. Supervisory architecture and objectives

Supervision may be integrated, not integrated and partially integrated[141].

By the first we mean that the same authority is responsible for banking, insurance and securities sector. This is the case in the UK, Austria, Belgium, Germany, Denmark, Estonia, Finland, Hungary, Ireland, Luxemburg, Latvia, Malta, Poland and Sweden.

In a non integrated supervisory architecture, three different authorities are competent for each sector. Usually in this case, banks' supervision is a task of the central bank, as in Italy, Bulgaria, Cyprus, Czech Republic, Spain, Greece, Lithuania, the Netherlands, Portugal, Romania, Slovenia and Slovakia.

Lastly, partially integrated supervision realizes when the same authority is in charge of monitoring banks and one other sectoral institution. In Europe a stand alone banking supervisor is in France[142].

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141 See FSI, *Institutional arrangements for financial sector supervision. Results of the 2006 FSI Survey*, BIS occasional working paper, 2007. The report takes into account major changes of supervisory environment worldwide. Its main findings are that although central bank is the dominant domicile for supervisory authorities, controlling for "major changes" there is a decline in authorities domicile din government departments, an increase in authorities domiciled in separate agencies, and a small decline in authorities domiciled in central banks. As far as the level of integration is concerned, non integrated authorities are and remain the dominant category, but, again, controlling for the major changes in the level of integration appears a decline in the number of non integrated authorities, an increase both in the number of partially integrated and integrated categories and a movement towards more integrated supervisory structures. Lastly, the cross category analysis shows how, controlling for the major changes, there has been an increase in the number of central banking authorities fully integrated, an even higher increase in the same direction there has been in the authorities domiciled in separate agencies, which would confirm the tendency towards a fully integrated supervisory arrangement.

142 See CEBS, Mapping *of supervisory objective and powers, including early intervention measures and sanctioning powers*, March 2009, available at

It shall be kept in mind that national differences on supervisory architecture, gives rise to divergent policy choices, incentives and mandates and that in such a case the possibility of inefficient and not timely exchange of information and cooperation increases.

As far as the policy objective is concerned, not all the member States share the same goals.
In fact, only the banking regulation compliance, the duty to cooperate among supervisors and the maintenance of financial stability (with the exception of Malta) are shared objectives.
Many States have in common the duty to protect banks' client from bad business practices, or to prevent financial crime (all Authorities have this responsibility except Malta and Spain), while differences appear in relation to the enforcement powers.
Only some member States (five) have the express mandate to promote convergence of supervisory practices: to this regard, however, some are amending their laws whereas others consider it as an implicit function. In two member states the enforcement of competition rules is a task, while in many others there is an ad hoc authority; as far as promoting access to banking services, this responsibility is common only to four authorities.
Supervisory objective is particularly important since the lack of the appropriate goal may lead to an inability of the institution to take a decision or to timely react as needed. A clear example of this situation has happened during the crisis of the British bank "Northern Rock", where the FSA was not statutory entrusted with financial stability and therefore could not act promptly to stop the run. Furthermore, none of the other British supervisory authorities had formally such power and eventually none of them was willing (maybe because of political implications) to take the lead to prevent greater damages.

3.4.2 Supervisory powers

Supervisory powers entail the range of possibilities and competences an Authority has over the regulated entities.
Our aim here is to show how many times supervisors are not in charge of the same powers and even where this happens they may not have the same enforcement powers to counteract the related infringement. Following our reasoning path, this means that there may be a differentiated treatment among subsidiaries within the group depending on where they are incorporated.
This in turn implies a certain percentage of regulatory arbitrage in deciding where to set up a subsidiary or the same holding company and which legal form may be more convenient.
We can now take into account licensing, information gathering and inspections, and rule making powers, since those are the powers that a firm may want to look at before establish subsidiaries.
Although all member States submit banking activity upon authorisation, only fifteen of them have direct enforcement powers, such as imposing fines, issuing orders to close down the business or seizing premises, whereas four have more general powers to impose pecuniary sanctions and require closure of unauthorized activities. As far as licensing is concerned, the related power is mostly granted to competent authorities, but it may also be allocated to the minister of finance (Spain) and Treasury (Luxemburg) or to an ad hoc licensing agency, as in the case of France.
All authorities have powers to conduct on site inspection, either directly or by delegating the task as well as have great information requiring powers. Nonetheless, not all of them have the same powers in relation to the possibility to carry inspection or to require information to companies performing

outsourced functions. Rule making power, in the form of regulations or instructions is common to mostly all member states, though three of them (Estonia, France, Hungary) have no powers to issue binding rules or principles, whilst other have regulatory powers that go beyond prudential regulation, such as in the area of accounting standards, anti money laundering, price stabilization, financial promotion or control of information.

As far as the intervention in case of financial difficulties is concerned, this has been divided by CEBS into different categories: i) measures aimed at restoring compliance, capital adequacy and soundness of an institution; ii) sanctioning powers that operate through public notices; iii) intervention and sanctioning powers; iv) measures directed at the management body of the institution; v) measures directed at the shareholders; vi) capital related measures; vii) measures related to pre-insolvency situations and insolvency proceedings, and viii) powers to trigger deposit guarantee schemes.

Among the measures aimed at restoring compliance and soundness, we are mostly interested into the possibility of limiting intra group and outside the group asset transfers and transactions and to exercise supervisory forbearance. The limitation on intra group asset transferability is not always expressly provided for in the legal framework, nonetheless these can be imposed by all authorities but Estonia, Finland and Ireland whilst those outside the group by every authority but Finland, Romania and Slovenia.

Powers to forbearance, namely to grant temporary exception to the application of a legal requirement in exceptional circumstances, are not uniformly distributed among member states. In fact, even where this possibility is admitted, the preconditions or the scope of prudential requirements that can be waived differs. As well as such power may be limited to targeted cases expressly provided for in the legislation.

Measures directed at the management body may vary from the opposition to the nomination of a director or of a board

member, to management replace, to the manager appointment from the authority to the control over remunerations. However, although those powers are theoretically common to all member states, triggers for intervention differ widely. In some instances they can be exercised in case of lack of fit and proper qualities, in others in case of liquidity or stability problems, as well as a distinction appears in business as usual case or in case of crisis. The latter situation is true especially when an ad hoc administrator shall be appointed. In fact, we can observe that in business as usual situations (i.e. simple vacancy) the power is generally attributed to shareholders, while only three authorities have the power to make an application to the national court in order to appoint an administrator. Whereas, in times of difficulties for a bank, though not severe, twenty authorities have the possibility to directly appoint a person or body possessing general or specific powers to authorise acts or to take decisions on behalf of banks, whilst two have the power to petition the courts to appoint an administrator or examiner. Differences arise also in the type of person that can be appointed, the preconditions necessary, the appointment process and the range of powers the appointed person has.

As we said, the exercise of powers may imply a restriction and also a violation of shareholders' rights, and it is therefore needed only in case of severe distress of the institution and to protect financial stability and depositors' interests. To this end, measures may vary from the suspension of voting rights, to the power to require the transfer of the shares or shares certificate, the power to require a change in ownership and to prohibit or limit the distribution of profits and finally the power to require commitments/actions from shareholders to support the institution if needed, with cash or equity.

We therefore see that all authorities, but Netherlands and France, have the power to suspend the voting rights attached to specific shareholders, although the categories of shareholders and the triggers vary among countries, as well as the exercise of those powers may be autonomous or shall be

conducted in collaboration with other entities (i.e. competent Minister). Beside, also the grounds upon which the suspension of profits may be exercised vary among authorities, ranking from the failure to comply with legal requirements, to the impairment of the liquidity position to the threat to become insolvent.

The possibility to ask for a transfer of shares is admitted only in nine countries whereas few have the possibility to exercise this power only over shareholders with qualifying holdings and when the authorisation to obtain a qualifying holding has been withdrawn.

Those authorities that cannot require a transfer of shares or change in ownership may nonethelss obtain the same result by suspending voting rights to bring about a transfer or a change in ownership, or asking for a capital increase.

Only eleven authorities can oblige shareholders to pump money in the company by injecting cash, although differences arise with regard to the pre-conditions needed.

As concerns measures related with capital, those may be of three types: i) limitation or prohibition of the principal or interests payments on subordinated debt, that can be required by eighteen authorities; ii) request of conversion of subordinated debt into preferential or new equity, that can be asked by only six autorities; and iii) the limitation or prohibition of any major capital expenditure that can be fully requested by eighteen autorities.

3.4.3. Supervisory powers in relation to pre-insolvency situation and insolvency proceedings

We have seen how the lack of coordination among authorities arises also because they shall act under different grounds and circumstances. Furthermore, the consequent powers are also different as well as the proceedings. Here we want to take into account the role played by the competent authorities in initiating insolvency proceedings, in the reorganisation or

winding up and their possibility to coordinate a rescue plan before insolvency occurs.

Whilst all authorities, except in Belgium, Spain, Finland and Sweden, have the power to initiate insolvency proceedings aimed at restructuring or winding up the bank, only sixteen of them[143] have the power to coordinate a rescue plan, and even where this is possible, different abilities are attached to the Authorities. In fact, if we consider the possibility of setting up a bridge bank, creating a new bank or favouring a take over, very few authorities can set up a bridge bank or a new bank, although this can be the indirectly achieved by favouring mergers or takeovers. Furthermore, the role of coordinator can vary from having direct powers of intervention to being only involved without enforceable powers.

Some authorities (i.e. France, Finland and Czech Republic) have no direct responsibility in coordinating a rescue plan: in some cases coordination is left to the Ministry of Finance, under the technical assistance of the Authority, whereas in other instances, the Authorities are involved through the conservatorship and special administration regime. In the remaining countries such role simply doesn't exist.

As for winding up and reorganisation procedures, the former is generally initiated when the bank is facing an irreversible crisis and bank's closure is inevitable, whilst the latter may be commenced if the crisis appears to be temporary and/or reversible. Where a lex specialis is in place, those procedures are generally conducted by the administrative Authority, whereas under the lex generalis framework, proceedings are judicial in nature; competent authorities have anyway a role in the crisis resolution or/and management (except tough in some eastern European countries).

Authorities' powers differ according to the type of procedure, ranging from the whole responsibility for reorganisation to

143 Belgium, Bulgaria, Cyprus, Germany, Denmark, Estonia, France, Hungary, Finland, Irelan, Italy, Lituania, Luxemburg, Malta, Purtugal, United Kingdom and Sweden

involvement in the winding up(that usually belongs to judicial authorities); from an advisory role to the possibility of applying to the court to convene a meeting of the bank's creditors that may be ratified by the judge; from the possibility to directly appoint a liquidator or a receiver, to the possibility of proposing it; from the possibility of issuing orders to the liquidator to the consultative role with it to the possibility of automatically act as an administrator. In Poland the supervisory Authority has the power to appoint a receiver, arrange a takeover, reorganise and liquidate a credit institution.

To give a concrete examples of the supervisory's powers patchwork, it is worth noting the differences among the "big five" EU countries (UK, France, Germany, Italy and Spain).

According to the Banking Bill 2009, British Tripartite Authorities have the power to decide whether the set up of a bridge bank would be beneficial or whether a private sector solution or the nationalisation may obtain greater results. The decision is taken when public interests and depositors' protection come at stake. It is the Bank of England that decides the transfer, upon Treasury autorisation in case this implies fiscal costs, but in any event the Central bank must consult with the FSA: the latter indeed shall evaluate whether the bank can be considered insolvent or not.

If a stabilization power other than a public ownership option is exercised, and if the BoE is satisfied that the residual bank is—or is likely to become—unable to pay its debts, the Court would appoint an administrator. Its main objectives are supporting the commercial purchaser or bridge bank, by cooperatively providing services and facilities, to satisfy BoE's requests and to avoid any action that is likely to prejudice performance by the residual bank. Indeed, the administrator's main task is to manage what is still in place in the failing institution, namely the part of the ailing bank that has not been sold or not been transferred to the private purchaser.

The bank's administrator has a wide range of powers to sustain the bank in respect to the creditors, payments, custody of

properties, and court applications. The option of last resort which can be used by the BoE, FSA, or the Secretary of State, is seeking a bank insolvency order. This could be an appropriate course of action when the bank is unable to repay its debts, winding up the bank would be in the public interest, or it would be fair and the bank has eligible depositors under the terms of the Financial Services Compensation Scheme (FSCS). If such an order was sought, the court would appoint a bank liquidator, who would be responsible for working with the FSCS to ensure that either the accounts of eligible depositors are transferred to another institution, or that they get paid promptly. When compensation payments cannot be funded from the assets of the failing bank, they are made by the FSCS. Where transfers of deposits have been made to other banks, the FSCS can make monies available to fund that transfer[144].

Liquidators are also obliged to wind up the affairs of a failed bank in the interests of the creditors generally. Its powers are essentially the same as those of a bank administrator, which in turn mimic the powers given to the insolvency administrator in the *Insolvency Act 1986*. If necessary, the BoE can make supplemental, reverse and onward transfer instruments in relation to property or securities.

In France, the *Commission Bancaire* can only appoint a special administrator who is in charge of all the relevant decisions, is supervised by the Commission and it works in close cooperation with the Deposit Guarantee Fund and the Bank of France, to coordinate actions in case of difficulties. Liquidation is a proceeding with separate liquidators acting under the control of the Court pursuant to the commercial code.

The German *BaFin* can coordinate private sector solutions before insolvency occurs, can set up a "bad" bank and favour the orderly transfer of business in case of crisis. It can participate in the further nationalisation of the bank that is

144 For further references, please see, Russo C., *The Uk Banking Act, 2009: new laws, old problems*, in «Bulletin of international legal developments», issue 04, 2009.

permitted only if the expropriation authority – the Federal Ministry of Finance – has previously made an unsuccessful attempt at an alternative acquisition or if such an attempt, in view of the urgency, lacks sufficient prospects of success. Nationalisation assumes that the required majority in the company's general shareholders' meeting for such a capital measure was not achieved, or that the resolution was not registered in a timely manner. It takes place by means of an order from the federal government without the consent of the Federal Council.

In Italy, the consolidated banking law gives great powers to the Bank of Italy to decide which procedure is most suited for the ailing bank, whether a special administration (SA) or a compulsory liquidation (CL). In fact, while those procedures are formally initiated by the ministry of finance, under BdI proposal, the Bank is in charge of the supervision and direction of the procedures and appoints the bodies governing the proceedings. By means of the Special administration, reorganization of the bank is possible. In fact, it has a preventive nature and is adopted at an early stage of the crisis. During this procedure rescue plans may be adopted by the special administrator in strict connection and under the approval of the central bank. If is under the SA, board of directors and auditors are substituted by special bodies and the general shareholders meeting is suspended. The final outcomes of the special administration might be: i) the bank restructuring and the return to ordinary administration (appointment of a new board of directors and auditors by the shareholders); ii) the combination (merger or acquisition) with a sound bank; iii) the initiation of CL. When there is an emergency situation and the conditions for initiating a SA are fulfilled, the BI can arrange directly for one or more special administrators to take over the management of the bank for a period of no more than two months, while the functions of directors are suspended and shareholders' meeting is not affected at all (so called, Provisional Administration).

Under Compulsory Administrative Liquidation (CL), the bank

is wound up. In fact, preconditions for the application of such procedure are that the bank is not able to repay its liabilities and fulfil its obligation. This may imply an assignment of assets and liabilities to another bank, in the form of purchase and assumption, without nonetheless any interruption of business to minimise the impact on involved stakeholders. The decision is taken by the liquidators, under the autorisation of the Bank of Italy.

Lastly, the Spanish system provides for a role for the Deposit Funds in deciding whether to act or not. In fact, while the BdE decides to replace the management, appointing *interventores* when the funds, the stability or liquidity of the bank are in danger, it then acts in coordination with the Deposit funds (DGF). In fact, the BoE informs the DGF about troubled institutions and the latter decides if an action plan is to be undertaken, with the approval of the BdE, to facilitate the rehabilitation of the institution. DGF's may adopt a wide range of preventive and reorganisation measures aimed at improving the institution's viability to overcome a crisis situation: direct financial assistance (loans under favourable conditions, the purchase of impaired assets, etc.), capital restructuring (capital subscribed by the DGFs) and measures aimed at favouring a merger with or acquisition by a sound institution. The efficiency of such measures must be previously assessed compared to that of the restitution of depositors. As stated in Insolvency Law, in the case of insolvency of a credit institution, the corresponding Deposit Guarantee Fund shall be appointed as one of the trustees in insolvency instead of the creditor, the other two members of the insolvency administration body shall be appointed among those proposed by the Deposit Guarantee Fund. In the event a credit institution may decide its dissolution and corresponding voluntary liquidation, it must inform BdE, which can impose conditions to such decision. The Minister of Economy and Finance is empowered to decide the intervention of the liquidation process of a bank.

Nonetheless the BdE cannot initiate insolvency proceedings, given that those are competence of the judicial authority: it

shall be informed but its main role is pre emptive. Indeed, although the BoE intervention is not automatic to the existence of a trigger, it has a wide range of tools at its disposal including: i) issuance of requirements or binding instructions coupled with actions plans including reporting requirements and special audits for its monitoring; ii) approval by the BoE of a plan submitted by the ailing bank to restore prudential requirements infringement; iii) autorisation to distribute dividends and to open new branches. The plan under ii) may include limitation of activities, disinvestment in specific assets or measures to increase own funds. The BdE has the power to establish additional measures at its discretion.

As far as pre insolvency situations, we must add that all the authorities share the possibility of withdrawing the licence as an extreme sanction to avoid the insovency but not all of them share the ability to impose a moratorium on the bank, that may take the form of temporary suspension of payment to closure of the bank for business without declaring insolvency, whereas in some countries moratoria do not apply to credit institutions that are subjected to specific rules. Where it applies, triggers, competent authority and quantity of powers differ.
Further, according to art. 136 of the Capital Requirement Directive, whenever an institution does not comply with requirements imposed by the Directive, each Authority shall at least have the following preemptive powers: 1) obliging credit institution to hold own funds in excess of the minimum level setup by the law; 2) requiring the reinforcement of the arrangements, processes, mechanisms and strategies implemented to comply with the Directive; 3) requiring credit institution to apply a specific provisioning policy or treatment of assets in terms of own funds requirements; 4) restricting or limiting the business, operation or network of credit institutions, and 5) requiring the reduction of the risk inherent activities, products and systems of credit institutions.

3.4.4. Hints on deposit insurance and Lender of Last resort functions

Should a bank become insolvent two mechanisms take place beside, but mostly in coordination with, supervisory role: deposit insurance and the lender of last resort.
The former is a tool designed to protect bank's depositors. In fact it intervenes to reimburse depositors' losses whenever their bank is not able anymore to repay their money. It tops up a minimum amount fixed by the EU directive[145] in 50.000 euros[146]. However national legislations differ in relation to the amount actually covered, the types of depositors eligible, the funding structure for the insurance system, the possible role of government in backing the coverage, the availability of supplementary insurance (see Spain), the system administration and the timeframe for action.
All those issues contribute to increase both moral hazard and ability of the Authorities to cooperate. In fact, on the one hand timely resolution is essential; on the other it is important to avoid the potential for moral hazard. As in the case for government recapitalisation and in that of protection from losses, with deposit insurance in place banks may assume that the risk from losses would not be borne by the institute itself hence it can gamble with the deposit insurance fund. Furthermore empirical findings[147] showed that explicit deposit insurance tends to increase the likelihood of banking crisis especially when the fund has an extensive coverage and if the

145 Directive 2009/14/EC of the European Parliament and of the Council of 11 March 2009 amending Directive 94/19/EC on deposit guarantee schemes as regards the coverage level and the payout delay, at OJ L 68/3 of 13.3.2009.

146 Before the latest amndments to the directive, the minimum amont as fixed at 20.000 euros. By December 2010 the Commission plans to increase this level up to 100.000euros.

147 See Demirguc-Kunt A., Detragiache E., *Does deposit insurance increase banking system stability? An empirical investigation*, in «Journal of Monetary economics», 49, 2002, 1373-1406.

insurance system is run by the government rather than the private system. The results hold particularly when the institutional framework is weak and bank interest rates are deregulated.

These results are reinforced by other evidence that showed an increase in risk taking behavior once deposit insurance had been introduced[148]: banks' loans had higher interests rates and bad performance, but nonetheless banks neither pledged adequate collateral to those activities nor decreased loan maturity. Moreover, differences between 'too big to fail' and smaller institutions diminished in the post deposit insurance introduction period.

The opinion in favor of deposit insurance advocates that, by removing the incentive for depositors to "run" on the bank, the institute may experience greater stability. This in turn would lead to the stability of the financial system as a whole. Unfortunately this theory relies on wrong assumptions: the first is the consideration of the awareness of depositors on the existence and the role of the Fund and the second is that banks really go bust because of depositors' panics. In fact, depositors do run anyway notwithstanding the existence of such a safety net and they may contribute to the contagion of the crisis but not really to the crisis itself that we have seen having other causes.

However other findings may give robustness to the above opinion: Nagarajan and Sealey (1995) showed how forbearance policy by the regulator may have an incentive compatible role in banks risks assumptions. They demonstrated that in a model where the regulator provides deposit insurance and has the authority to set a minimum capital requirement, to set the deposit insurance premium and possibly follow a forbearance

148 See, Ioannidou V. P., Penas M. F., *Deposit insurance and bank risk taking: evidence from internal loan rating*, at «Journal of Financial Intermediation», 19, 2010, 95-115, that take the recent introduction of deposit protection in Bolivia in 2001 as an example.

policy[149], in presence of moral hazard banks may have incentive to improve the ex ante quality of assets[150].

Deposit insurance, as well as lender of last resort, can be framed into a too big to fail policy, since their existence may influence bank's behavior, especially as far as its cost of funds is concerned. Consider that the interests rate banks pay for their deposits, CD's and other borrowing can be seen as a function of the possibility to go bust (risk premium): without a maximum insurable the possibility for the bank to declare insolvency diminish leading to the deposit fund to basically subsidise the bank. In fact, the declaration of the Comptroller of the Currency that gave rise to the expression "too big to fail"[151] actually had as a consequence an increase in the wealth effect (i.e. increase in share price) accruing to the eleven TBTF institution with corresponding negative effects accruing to the "too small to save" ones[152].

We said that differences among jurisdictions in relation to deposit insurance may aggravate coordination problems: this is due to the fact that insurance is provided by each country where a subsidiary is incorporated. This means that home country would have fewer incentives to share information and the host country would be more worried about the stability of that bank as well as on the possibility to recoup the money from the home authority. Notwithstanding other considerations that may arise, such as protection of local banks, economic stress, policy and political perspectives. As Krimminger wonders: «in the calculus of differing interests (between home/host authorities, *nda*), the key questions may

149 Namely, the possibility of allowing the insolvent bank to continue its business under regulatory supervision.

150 See Nagarajan S., Sealey C. W., *Forbearance, deposit insurance pricing and incentive compatible bank regulation*, at «Journal of banking and finance», issue 19, 1995, 1109-1130

151 For more references, see Chapter 1.

152 See, O'Hara M., Shaw W., *Deposit insurance and wealth effects: the value of being to big too fail*, at «The journal of Finance», vol XLV, no. 5, 1990, 1587-1600

continue to be who has the power to act and who has the information to fully assess the potential consequences from action or inaction»[153] .

Conversely, more cooperation between interested authorities would fix an optimal level of deposits coverage and agreements to cap deposit guarantee could be beneficial since otherwise each country would tend to provide excessive amounts of coverage that may in turn have adverse effects on financial stability elsewhere. Agreements among authorities would also favour a more tight supervision[154].

Lender of last resort is the role pursued by the national central banks in supporting not yet insolvent banks.

Its theoretical foundations dates back at the XIX century when Thornton (*An Inquiry into the nature and effects of the paper credit of Great Britain*, 1802) and Bagheot (*Lombard Street*, 1873) developed the idea that central banks should lend short term money at temporarily illiquid but solvent banks although at a penalty rate[155].

The instruments actually used by central banks are open market operation, repo's and assets' swap. However, experience has shown how central banks act irrespectively from illiquidity or insolvency: whenever they think that an intervention is needed to preserve financial stability they engage in those operations, with the result of increasing moral hazard and, when it comes to cross border issues, to free riding. This is due to the fact that nearly ever is possible clearly

153 See, Krimminger M., (2008), *supra*.

154 See, Hardy D., Nieto M., *Cross border coordination of prudential supervision and deposit guarantees*, IMF working paper no. 283, 2008, available at www.imf.org

155 Other elements of the model involved the possibility to accommodate anyone with good money, valued at pre-panic prices; the clear ex ante declaration of intent of Central bank readiness to lend; discretionary and not mandatory role of the LOLR; intervention subjected upon the evaluation of the bank's solvency and the existence of a trigger for contagion. See Lastra R. M., *Lender of Last Resort, An international perspective*, at «The International and comparative law quarterly», vol. 48, no. 2, 1999, 340-361.

distinguish between insolvency and illiquidity, whereas a shortfall of the types of intervention is that a fully collateralized repo market allows central banks to provide the adequate aggregate amount of liquidity and leave to the banks the responsibility of lending uncollateralized[156].
Eventually LLR turns out to be a blunt instrument and, given the asymmetry of information, is not able to distinguish between fundamentally sound but illiquid institutions and those truly insolvent[157].
Lender of last resort functions are discretionary and stay at national level. We said that this implies a certain degree of moral hazard: banks are aware that CB, possibly in combination with deposit insurance mechanisms and public intervention, would rescue them and therefore they would gamble again with the tool.
Furthermore LOLR acts with regards of banks incorporated in each country, notwithstanding whether they form part of a group or not. Again, coordination problems may arise.

3.5. Coordination vs. ring fencing. Early intervention tools.

We are now mature to exactly frame the case of a cross border group that gets insolvent.
In an ideal framework the home country regulator would take the lead and coordinate actions among host countries' supervisors, making use of informal contacts as well as of provisions contained in the MOU. The group would possibly be treated as a whole entity and creditors, assets, and shareholders rights would be settled consequently, as well as there will be a contribution by each member state by providing

156 See, Freixas X., Parigi B., Rochet J-C., *The lender of last resort: a twenty-first century approach*, at «Journal of European Economic Association», 2, 2004, 1085-1115.

157 See, Llewellyn D., *The economic rationale for financial regulation,* FSA occasional paper, 1999.

deposit insurance or lender of last resort tools.
However we have showed how the above proved to be wrong.
Coordination is likely to be suboptimal because of 1) conflicting interests among authorities; 2) lack of compulsory application and enforceability of MoU's in place; 3) poor mediating role of EU Agencies; 4) severe difference between legal frameworks, supervisory powers and triggers for intervention. Hence group's companies will be resolved as separate legal entities under the local law in all jurisdictions. Eventually, member States would intervene possibly with recapitalization or guarantee measures to maintain financial stability.
Furthermore what may happen is that member States may ring fence subsidiary's assets.
By ring fencing we mean the ability of one Country (through its supervisor or central bank or minister of finance) to isolate local operations and to size local assets of the bank in order to protect its local creditors and other stakeholders, whenever the parent company threatens to become insolvent[158]. The final outcome is then the impossibility of the ailing parent to make use of subsidiaries' assets to get fresh money or to stay afloat at the expenses of foreign stakeholders.
Ring fencing may have positive implications on early corrective actions among countries. In fact, it may provide more predictable results, it maight contain contagion, and it may give incentive to home authority to share information and

158 More precisely, ring fencing can take mainly two forms: 1) country's supervisor imposition of assets pledge or asset maintenance to assure that sufficient assets will be available in their jurisdiction in the event of failure of the parent company. Supervisors may also encourage or require that operation by foreign banks be conducted through standalone subsidiaries. This requires the resiliency of the local operation; and 2) imposition of limitation on inter-affiliate transactions, including transfer of assets, to prevent contagion and to protect creditors of a legal entity. Local authorities may also impose limits on intragroup transaction to protect the domestic entity from contagion and prevent the outflows of funds that may be detrimental to the subsidiary. See, BIS, nt. 67.

to collaborate because of the treat of having to face local differentiated independent proceedings. It can also contribute to the resiliency of the separate operation within host country assigning greater role to the subsidiary. Notwithstanding this, for host Countries ring fencing is particularly appealing – unless of course their chartered entity is the weak one or it is strongly dependent upon the ailing parent. It indeed allows greater control of capital, liquidity and risk management of incorporated banks albeit this comes at a cost, namely the possibility of the parent company to reduce –while still in business –operations in that country and the likelihood of the home authority not to fully cooperate in the on going supervision.

In effect, shortfalls of ring fencing are not negligible either. It cannot avoid the collapse of the subsidiary, whose strength derives from parent's downstreams, and may hamper creditors' satisfaction, which in turn means that liquidity of the group as a whole may be compromised because of the segregation of internal funding and liquidity flows. It may hence hinder orderly resolution form the home authority by reducing the pool of assets available for intra group transfers.

Lastly it may increase the probability of further defaults on other countries and complicate crisis management[159].

To this regard, burden sharing can be seen a way to minimize the above drawbacks.

In this section we hence shall investigate the means that could be activate *ex ante*, namely before the crisis occurs.

We can divide them in public or private: the public admit the intervention of the State and could be the so called burden sharing agreements between involved countries whereas private solutions could be the asset transferability within the group, namely a downward or an upward streaming of resources, and the so called living wills, namely the predisposition of a plan by the bank wherein actions to be

159 See, BIS, *Report and recommendations of the Cross border bank resolution group*, March 2010, available at www.bis.org

taken in case of crisis are anticipated to the regulators.

3.5.1 Burden Sharing agreements

This expression has been recently in vogue in the financial sector. It admits the possibility that involved States share the fiscal responsibility of a cross border banking group collapse. In fact, as we will see in chapter 4, when a crisis occurs, public actors get involved by providing public financing in order to protect financial stability and public confidence.

Our opinion is that this aid should be confined to the minimum and that a private solution should be preferred to avoid taxpayers' burdens and moral hazard. Beside, public authorities should take a more extensive approach of art. 123-126 Eu Treaty (ex art. 101-104).
According to art. 123, central banks cannot provide overdraft facilities and any other type of credit facility to EU institutions and the purchase directly from them by the ECB or national central banks of debt instruments shall be prohibited, unless those measures are required by prudential considerations[160].
Article 124 gives indeed room for manoeuvre to support ailing institution only when prudential concerns come at stake. These concerns however shall not be interpreted extensively but shall be limited to ensure the stability of the financial system as a whole, as well as shall not necessarily imply that actions can be taken only by NCB's, but might be carried on from private banks as well.
Although art. 126 has immediate implications on other aspects

160 Nieto and Schinasi (2009) point out that one interpretation of art. 123 would be that if a bank were declared insolvent than all assets (included collateral) would be frozen and creditors would have the first priority in being made whole. See, Nieto M., Schinasi G., *EU framework for safeguarding financial stability: towards an analytical benchmark for assessing its effectiveness*, IMF working paper no. 260, 2007, available at www.imf.org. Namely, this would formally justify ring fencing behaviors.

of public expenditures, it states an easy but challenging principle: «Member States shall avoid excessive government deficits». If we consider how many billions governments have otherwise lent to ailing banks, we understand why this principle may be of a certain importance in our debate.
Burden sharing agreements can intervene *ex ante*, namely before a crisis occurs, to predefine each State participation, and *ex post*, namely after a crisis has actually occurred, to assess the degree of aid to be given.
Clarification is needed on the actual meaning of the expression.
What is the burden to share and how to share it?
The burden may refer to budgetary and fiscal costs borne by the State where the ailing bank is incorporated. This definitions considers the net direct costs and may include the costs of measures enacted (i.e. recapitalization, asset guarantee and swaps) as well as –where any –the revenues that may result from the management of the banking crisis (i.e. flows arising from the asset sales of from dividend distribution). In a much broader sense, burden sharing may refer to the total welfare losses incurred by the State. That may include the net budgetary costs as well as the overall economic impact of the crisis and would comprise the diminution of wealth and welfare with respect to the previous situation.
Obviously, the second meaning is too vague to be measured, although it takes into account the real consequences of a financial crisis on a State. Consider the current crisis: the meltdown propagated to the real economy leading to an increase in unemployment rate, contraction of credit, diminution of private expenditures and so on forcing governments to intervene with economic stimulus packages besides financial aid to the banks.
We will then consider only the net budgetary costs of bailing out the bank.
The sharing agreement may be fixed on different grounds.
One may be, as we said, an *ex ante* division.

Goodhart and Shoenmaker (2006; 2009)[161] have developed a model whereby they admit two types of sharing agreements: what they call generic burden sharing and a specific burden sharing. The first is a general scheme financed collectively by the participating countries that would participate in the funding on a GDP base. In such a way the cost for recapitalization would be proportionally shared among all Countries. More specifically, Authors' idea is to create a European fund managed by the European Investment Bank (EIB, to overcome the mentioned prohibitions of the Treaty on the ECB). The funding mechanism would occur during the crisis when bonds could be issued by the EIB to finance the recapitalization and used to bailing out ailing banks, whereas the annual servicing costs of the bonds would be paid by the government. According to the Authors, the borrowed money would cover the full nominal value needed for the rescue and interest on the outstanding bonds would be paid out of the fund as any loss on the bonds.

However, this model may give only a partial and intermediate solution to the problem and would be somehow in contrast with the prohibition of monetary financing from EU bodies.

What they call "specific burden sharing" consists instead on the participation of only those countries where subsidiaries of the failing company are incorporated. Each involved part would pay its relevant part of the burden. That would imply the exact definition of "relevant part" and, we would say, of the cross border externality and penetration, but we have seen how difficult it proves: to this end reference may be done to assets (foreign assets/total assets), income (foreign income/total income) and employee (foreign employment/total employment)[162]. In this way, cross border transfers may be

161 See Goodhart C., Schoenmaker D., *Burden sharing in a banking crisis in Europe*, LSE Financial Markets Group Special Paper Series, 2006; Ii., *Fiscal burden sharing in cross border banking crisis*, at «International Journal of central banking», 5, 2009

162 See Sullivan D., *Measuring the degree of internationalisation of a firm*, in «Journal of international business studies», 25, 1994, 325-342

avoided.
To us, both models have severe free riding and moral hazard problems and still do not overcome the enforceability problem. Ex post division (once the crisis has occurred) is better able to frame the burdens borne by each country, and can limit the temptation to cheat by member States since their involvement is more transparent.
Empirical findings showed how it nonetheless proved to be inefficient. Freixas (2003) realized that ex post burden sharing arrangements lead to an underprovision of recapitalizations: it called this consequence «improvised co-operation». In fact, countries would have incentive to understate their share of the problem to play a smaller part in the costs. This would leave the largest country, usually the home country, with the decision whether to shoulder the costs on its own or let the bank close and possibly liquidated[163].

3.5.2. Overcoming the *empasse*?

Whenever a private solution is not feasible, at least in the short run we must acknowledge the possibility of state intervention. In our opinion however there is no need to clear cut *ex ante* from *ex post* agreements, we rather want to focus on a "soft" combination of the two's.
Our idea is that a form of burden sharing must be realized because collective costs and stability treats are effectively existent, because we cannot deny that if a crisis explodes it is partly because who had to supervise failed to do it and because the legal personality principle cannot pose such high barriers to impede a global consideration of the group and global responsibilities among all the interested parties.

163 Freixas X., *Crisis management in Europe,* in «Financial Supervision in Europe», eds. By Kremes, Shoenmaker and Wierts, Edward Elgar, 102-119.

Especially since those institutions operate in an "internal market".
The word "internal", also in re to the competent DG of the Commission, implies that there cannot be a segmentation of the European market into "national boundaries", but nonetheless public intervention shall be designed in such a way to avoid opportunistic behaviors from banks. This means that one part of the proposed burden sharing agreement shall include provisions on its final outcome: let the banks, its management and shareholders bear the costs.
So we want to consider the possibility of imposing *ex ante* a duty of coordination and of "crisis management sharing" among involved authorities. To this end, MOU's are of a great help because they define preconditions under which those agreements shall rely upon as well as already contain provisions on burden sharing and have already been accepted by interested parties.
Since it is always likely that member States would tend to hide their real involvement, it is necessary to fix preconditions under which those agreements may work.
The first is related to mutual trust.
Authorities will be willing to cooperate only if they rely on the other cooperation as well as on the other credibility.
In fact, a country may have incentive to sign such an agreement if it considers its peer able to efficiently monitoring the institutions and willing to share any relevant information. This eventually implies the need to pierce the veil of the legal personality and taking a broader view of the group. Further, the awareness that there may be a form of sanction on the supervisor may give incentive to the Authority (especially the home) to share its information and to solicit host authority to do its own job, because in such a way it may not have to pay all the costs associated with the parent failure.
The second precondition is legal recognition.
How can you make such an agreement on the duty to act in a certain way should a crisis occur binding?
One possibility would be seeking parliamentary approval so

that it becomes a law of the State. However the related procedure would be long, subjected to strong lobbying pressures and may violate the secrecy necessary to avoid banks' opportunistic behaviors. Furthermore since the text has to be the same for all member States involved, any amendment shall be approved again by each chamber of each State. It may turn out to be a never ending story or to lead to a sub-sub-optimal agreement.

One other would be seeking judiciary approval to make the agreement binding *erga omnes*. The competent judge may possibly be the Court of Auditors.

This solution has a certain appeal because the judge would confine its role to the formal recognition of the obligation of the interested party to respect their own wills. It would not play a role into the negotiations nor would substitute itself to the source of commitment that remains in the public parties' ability to act on behalf of the State. Nonetheless, if requested it may play a consultative role on the actual existence of public funds. It is for this reason that the ministry of budget and finance shall instead participate to the negotiations: they can have a clearer idea then the supervisory authorities on the actual use and limitations on public funds and possibilities.

The very problem is that for a burden sharing plan to be credible participating States must be confident on the actual use of public funds from each participant in case of need. This is why a certain role must be played by ministry of finance or budget or whoever is in charge of decisions on public expenditures. Those are the only people that can commit the State to spend the money needed and that can figure out the means to have access or to raise those funds.

The actual feasibility of this solution may be instead at stake because of the division of labour among public powers and the fact that it may raise many constitutional and legal concerns.

So maybe one solution may be leave the question of legally binding formalities aside and for grant but focus on the other side of the spectrum that is its actual enforcement.

The third precondition is indeed enforceability.

We have seen how mou's currently in place have not proved to be followed in case of crisis for the reasons that we are aware of. So the idea is leaving to a European agency the duty to supervise the actual implementation of the contents of the agreement and the information sharing. To this end, since we have considered provisions included into mou's as precondition for mutual trust, MOU's shall be made legally binding. The Authority shall receive in copy any document, any information, any resume of meetings, reports of inspections and so on and so forth to double check the actual respect of the overall provisions.
Should authorities do not comply with the requirements, the EU authority must take appropriate actions.
This power may be entrusted to the newly created European Banking Authority (ex CEBS). Nonetheless we must acknowledge that EBA involvement may not ensure that Authorities may have access or may want to respect budgetary promises.
This is even truer in the light of the recent supervisory reform of the financial regulatory architecture, wherein the micro supervisor can issue binding decisions directed to states as well as to single institution. However, whenever those decisions imply a fiscal responsibility of the member state it can appeal to the council. The example is to show how when it comes to fiscal and budgetary decisions these are yet national prerogatives.
The last precondition for a burden sharing plan to be effective is the commonly agreed assessment of the best policy option.
This is something that States won't decide with exact details in advance since nobody can predict the actual manifestation of the crisis. However, it seems necessary that the plan would fix state participation in proportion of certain indicators plus it should be related to concept definable beforehand such as: self enforcement; proportionality; involvement; restitution; home authority responsibility; and so on. Those criteria may influence supervisors' behavior in normal times, so great attention should be paid in their definition.

Only if those condition are satisfied and considering that a certain degree of uncertainty is anyway present, we may expect a burden sharing agreement to be enforced and respected by participating countries.

The next steps are related to the object of the agreement and the participating parties.
In our opinion it has not great sense make all the EU member states participating in a common fund nor that GDP is a fair point of reference. Shall these mechanisms be in place, banks would feel even freer to assume risky behaviors, since State intervention is formalized in an ad hoc fund and depositors are protected through deposit insurance mechanisms. Further, these facilities make sense when an event is the direct consequence of one institution's choices. This is the rationale behind the funding mechanisms of deposit guarantees whose financial contribution is imposed on the banks itself. So banks are held responsible and (contribute to) "pay" for their mistakes.
Here the thing is that in on going business situations governments have no decision, information or whatever power in relation to banks' businesses choices. So the underlying question is: why should they pay for someone else misconducts over which they had no intervention powers?
This is to avoid that a vicious culture takes place in Europe: the idea that governments must rescue banks.
Better, if we agree with the idea of correlation between financial contribution and responsibility, it would be more appropriate make Supervisory authorities participating, with own resources, to the bailing fund. The incentive to better supervise would be greater.
Lastly, although GDP reflects with no doubts the wealth of a nation, it still does not capture all the variables related to the presence and contribution of a certain banking group to that wealth. Maybe more sector- specific variables would be better suited.

So the idea is that Member states should ex ante formally commit themselves to participate in a certain burden sharing agreement whenever an identified banking group would face financial difficulties. The way by which they commit themselves shall fulfill the above preconditions. Also, participating members shall be banking groups specific.
Now the problem moves to the contents of the agreement.
Two main features: the decision shall be first of all on the triggers for intervention. Whatever they will be, State intervention shall be activated only after that banks' internal mechanisms of crisis prevention have been exhausted[164] and only if a private solution has not proved feasible. It should be a sort of intervention of last resort.
The other would be on the choice of the policy option to pursue.
The optimal resolution policy cannot however being decided before the event has occurred. It can also include the ring fencing option, which we have seen not to be detrimental per se, but only in re to the hindering of a group wide resolution. Here we can only remind that it has to be a credible commitment, has to be enacted in a timely manner, has to be cost efficient and has to take into account all the steps already done by the bank involved.

3.5.3. Asset transfer within the group

One way to manage/prevent the crisis of the whole group avoiding public intervention may be admitting the possibility of a cross border transfer of funds from the parent to the subsidiary or vice versa. This is not revolutionary at all since it is what happens under normal circumstances, especially from the parent to the subsidiary in national based groups.
Further, it is expressly recognized in the CRD Directive in its recitals[165] as a sound banking management tool –although

164 We will se in the next section what those mechanisms would be.
165 According to recital 52, Directive 2006/48/EC, "When a credit

particular prudence is required –and it can be framed into the free movement of capital guaranteed by the EU Treaty.
Beside, member states body of laws does not distinguish between a transfer made during a crisis situation and a transfer made in an on going base.
However we have seen that in crisis situation, competent authorities may ring fence bank's assets. In fact, CRD directive requires credit undertakings to maintain a constant level of own funds hence supervisors may prohibit any transfer that may hamper subsidiary's solvency. Furthermore there may be legal obstacles to the transfer deriving from company law, insolvency law and banking law. The final aim is stakeholders' protection (shareholders, depositors, creditors). The lack of a common set of rules in relation to groups' transfers, group's identification and recognition of a "group interest" and of a European regulatory framework complicates the matter.

In what follows we will briefly describe legal obstacles and advantages/disadvantages of intra-group transfer in case of crisis. A proposal will follow further.
We shall start with the definition of transfer: we want to refer basically to inter-bank lending, financial instruments and

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institution incurs an exposure to its own parent undentaking or to other subsidiaries of its parent undertaking, particular prudence is necessary. The management of exposures incurred by credit instututiuons should be carried out in a fully autonomous manner, in accordance with the principles of sound banking, without regard to other considerations. Where the influence exercised by persons directly or indirectly holding a qualifying participation in a credit institution is likely to operate to the detriment of the sound and prudent management of that institution, the competent authorities should take appropriate measures to put an end to that situation. In the field of large exposure, specific standards, including more stringent restrictions, should be laid down for esposures incurred by a credit institution to its own group. Such standards need not however be applied where the parent undertaking is a financial holding or a credit institution or where the other subsidiaries are either credit or financial institutions or undertakings offering ancillary services, provided that all such undertakings are covered by the supervision of the credit institution on a consolidated basis".

capital transfers [166].

One main problem with the asset transfer is that when it take the form of a downstream (from PtoS) of capital, it does not create great concerns, since the dependency of a subsidiary from its parent is a matter of fact as well as the power of direction and control from the first to the second implies a form of financial contribution. Likewise, the financial health of its subsidiaries is a primary interest for the parent and such a transfer avoids the loss of confidence within the group. In this respect, parent company acts as a source of strength to its controlled companies whenever they are in need of financial aid[167]. Lastly the parent in a sense recoups the aid through its participation in the subsidiary.

Unlike, an upstream transfer (from StoP) would create greater concerns since it may be the result of an unduly influence of

166 In relation to the transfer of capital, a special case is the capital increase of the receiver: this would require shareholder approval, hence it would delay the procedure to support the institution.

167 The so called source of strenght docrtine, fairly unknown in Europe, is instead formalised in the US. For instance, in *Board of Governors v. First Lincolnwood Corp* the Board had to assess the financial and managerial soundness of a company which had applied to purchase a controlling interest in a bank corporation. The Court upheld the board denial for application on the basis that the purchaser was financially unsound and "would not be a sufficient suorce of financial and managerial strenght to its subsidiary bank". Further, when US regulators deem a bank failed or about to fail, they have the authority to compel existing controlling shareholders to downstream additional capital into the ailing bank. Regulation Y of the Board of Governors adopted in 1984 states at § 225.4 "Corporate Practices Bank holding Company Policy and Operations": (1) A bank holding company shall serve as a source of financial and managerial strenght to its subsidiaries and shall not conduct its operation in an unsafe or unsound manner. For further reference see, Schinski M., Mullineaux D.J., *The Impact of the Federal Reserve's Source of Strength Policy on Bank Holding Companies*, at «Quarterly Review of Economics and Finance», 35, 2004; Bierman, Fraser, *The 'Source of Strength' Doctrine: Formulating the Future of America's Financial Markets,* «Annual Review of Banking Law», 12, 1993, 269-316; Alexander K., *Bank special resolution regimes: Balancing prudential regulation and shareholders rights*, 2009, mimeo

the parent over subsidiary's businesses decisions.
Although there is no specific prohibition of transfers within a group, some types of asset transfers may be expressly prohibited. According to a study of the European Commission[168], if the transfer is considered as a repayment of shares it may be prohibited in some member states: to this end, it shall be conducted at arm's length, or it may be severely taxed or maybe expressly prohibited if it has as a consequence a refund of the registered equity. Other member State's law contains restriction on loans (Estonia) directed to shareholders above a certain threshold or in a conflicting position, whereas some types of transfers need prior shareholders approval[169] or supervisory approval[170].
Another question is whether the arm's length principle can be waived.
In fact, in principle, transfers shall be conducted under "fair"

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168 DBB LAW, *Study on the feasibility of reducing obstacles to thetransfer of assets within a cross border banking group during a financial crisis. Final Report*, available at www.ec.europa.eu

169 Shareholders approval is needed when the transaction is of a certain importance, because it is carried on by two company strictly interlinked, because in not conducted under normal terms (e.g. at arm's length), because it exceed a certain percentage of company's capital, because it is considered beyond the scope of everyday economic activities, because transaction belongs to a specific category generally void, if it is a share transfer, and so on.

170 For instance, in Spain the permission of the State financial Institution commission is required for the transfer of account portfolios and contracts for repayment of monetary instruments from PtoS. In Portugal, prior authorization of the Central bank is needed for transaction (i.e. transfer of assets within the banking group) conducted in crisis situation and when recovery measures are to be implemented. In Italy (as in other countries), art. 58 banking law requires the authorisation of the Bank of Italy to transfer en masse of assets if the bank of the banking group's equity margin is less than or equal to zero. Authorisation is required for any transfer exceeding 10% of the transferee's regulatory capital. In Sweden, if the transferee is a Swedish bank and the consideration to be paid by exceeds 25% of its own funds, it needs the prior approval of the Swedish Financial Supervisory Authority.

conditions, to protect subsidiary's solvency, shareholders' and creditors' rights, especially since the provision of collateral or a form of guarantee is generally not considered compulsory.

With the exception of Spain, where the transfer does not need to be concluded in fair conditions but is otherwise subjected to stringent publicity requirements, the arm's length principle is directly or indirectly required by national regulations. This means that either it must be made under market conditions or shall be justified on the grounds of a more general interest[171] of the group: should not this be the case, civil responsibility and/or criminal liability of the transferor' managers, non opposability to the transferor's creditors and cancellation are the due consequences.

However one may think that in crisis situation, market price may be lower than usual hence leading to a sub optimal transaction for the transferor and if it is not the case, it may contribute to aggravate receiver's financial distress. Caveats are hence necessary.

As far as sanction is concerned, when those transactions took place against law or have provoked damage to the transferor, insolvency law, company law and banking law provide a set of remedies.

In fact usually insolvency law[172] may *ex post* render void and null the transfer, because the transaction is considered done in fraud, to the detriment or in prejudice of creditors and shareholders[173]. The primary effect is that the transaction is

171 What in Italy is called "vantaggi compensativi".

172 Provisions we are referring to are not specific to intra group transaction since they apply to transaction with any party. However since they do include also transfers within affiliates and related parties they are included in the scope of our analysis.

173 For instance, in France if transactions occurred during a suspected period those can be canceled, in Denmark the tax authorities would decide upon the allocation, in Italy criminal liability is admitted, in Luxembourg, the transaction can be annulled and there may be the extension of the bankruptcy to the directors. In Portugal, all acts performed in the four previous years to an insolvency procedure can be annulled in order to allow that the assets subject to those acts can be

treated as if it has never occurred and actions must be taken to restore the *status quo ante*.

Also, it may hold directors liable for the corporations' debts. For instance, in France directors may be compelled to bear its debts in the whole or in part, when company's liabilities exceed its assets or in Luxemburg they may see their personal asset merged with those of the ailing company whenever they caused the company to enter into transaction wherein they had an interest or when they used company properties for private purposes.

However for such sanctions to take place insolvency proceedings must be initiated in regard of the subsidiary and the only transactions that will be taken into account will be those conducted over a certain period, namely when the company's insolvency where likely to exist.

Irrespectively of insolvency proceedings, civil and company law provides other means that may discourage and obstacle the smooth transfer of assets in case of crisis.

These are related to Directors' liability towards the company, its shareholders, creditors and third parties for transactions deemed to be fraudulent. If directors make (negligently) intragroup transfers resulting in company's insolvency because of excessive expenditures, granting or taking excessive credit or carelessly using such credit, or by concluding high risk transactions outside the usual scope of subsidiaries business transactions or when are in sharp contrast of the company's financial means available, they can be held liable for damages incurred to the company and may be obliged to compensate the damages. Likewise, some countries may consider shareholders itself liable for losses caused to one company's creditors[174].

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affected to the assets belonging to the bankruptcy assets (*massa insolvente*), in UK there is a claw back provision for suspect transactions whilst in Spain no sanctions can be taken.

174 This is the case in Austria, where shareholders may be held liable for losses caused to a company's creditor. This is the "piercing the veil" principle and may occur when the assets of a shareholder are

Also, in some Countries transactions can be rendered null and void by the same company and civil law[175].
Banking law instead gives competent Authorities the possibility to intervene in irregular or unfair transactions, as well as to restrict credit institutions ability to enter into transaction especially when the institution fails to achieve minimum liquidity or solvency ratios. Authorities can also fine institutions for any violations of regulatory provisions in relation to the matter.
Lastly, transfer of assets within the group may have criminal consequences for the management of the company, ranging from fines to criminal imprisoning according to the nature of the asset transfer and other circumstances.
Other constraints may stem from private international law provisions contained into the EU Regulation 593/2008.
When an intra-group transfer occurs, one may think that the main players are the receiver and the transferor. However other interested parties are directly or indirectly involved, whose rights shall be taken into account: supervisors, depositors, shareholders, creditors and employees.
Since supervisors must monitor the respect of solvency ratios, large exposures, minimum capital requirements and so on,

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commingled with the assets of the company, in cases of gross undercapitalisation or when a dominant shareholder has exercise undue influence in the management of the company or had *de facto* taking over the running of the company. In Germany, a parent company that misuses its influence over a subsidiary company is liable for any resulting loss. In Italy, art. 2497 civil code admits the liability of the parent company for the damages occurred to the subsidiary when a certain operation was not in the group's interest.

175 For instance, in Germany a creditor of the transferor can contest the transfer of assets in accordance the Act of Protection of Creditors, if the transfer of assets discriminates against creditors provided that other conditions are fulfilled. In Belgium and France, creditors may benefit, under civil law, of the so called action "paulienne", that however requires the transaction or transfer be known by the third party to be fraudulent. In France, under company law, a transaction may be null or void if it required prior approval of the board of directors and this approval had not been sought.

banks' manager have a duty to inform the competent authorities of any transfer of assets that would impair company's liquidity/solvency/ratios. In most cases regulatory approval is necessary.
As far as shareholders rights is concerned, albeit there are no specific provisions in relation to a duty to inform them or to get their approval, some member states may recognize a general right for minority shareholders to request information whilst we have seen how some types of asset transfer require prior General Assembly approval. An external evaluator assessment on the price fairness may also be required. Further, after transfer has been implemented minority shareholders may sue directors, whenever they think that their decisions have been conducted in violation of the statute, in bad faith, or in case of breach of fiduciary duties.
Once the transfer had taken place, creditors of the transferor may act judiciary to obtain the annulment of the transaction when it would negatively impact the ability of the transferor to fulfill its obligations.
Certain duties of information are to be paid to the employees. In fact, if the transfer involves all or substantially all of the assets, the transferor informs its employees of the contemplated transfer within a reasonable time prior to the transfer.
Lastly, although no specific regulations are in place with regard to prior/subsequent depositors' information/approval, nonetheless if the transfer has been fraudulent, depositors may have a right to restitution of their funds making use of civil law provisions.

To sum up, member States do not regulate the case of cross border transfers since those are considered into the day to day activity of companies belonging to a group; further, no specific distinction is done in relation to crisis or normal times nor from banking and non banking companies. However the specialty of banks is such that supervisors play a role in evaluating those transactions.

To the fast, efficient, predictable and smooth functioning of this tool, legal obstacles and risks run against.
As for the obstacles, we saw that if ex post the transfer is deemed to be fraudulent, it may be revoked by a judge as well as if it is not conducted at arm's length, directors may be held liable. The latter may incur in civil and criminal liability in case of damage to the company.
National laws tend, rightly enough, to protect both subsidiaries and stakeholders. The first from the unduly influence of the parent that may affect subsidiary's independence of assets and independent decision making, and the stakeholders are protected from unfair decisions taken by the board of directors; minority shareholders from majority shareholders decisions; creditors from the development of an imbalance between the creditors of the transferor and those of the receiver.
Obstacles may derive also from the lack of certainty in relation to the criteria used to assess the transfer, to the absence of clear regulations in place and so on.

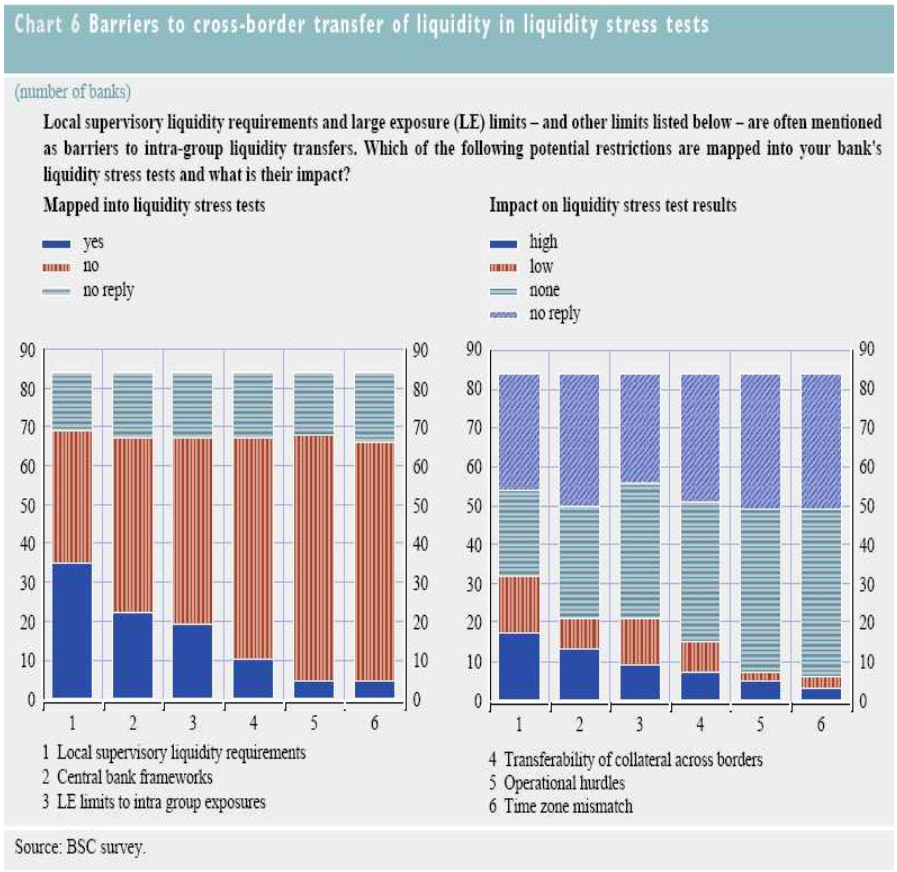
So we see that asset transfer's outcome is twofold: on the one hand it may help the entity in difficulty to facilitate its responsiveness to the crisis and not to go bankrupt. If transfers are upstream, the avoidance of the parent's collapse may help to keep afloat the group as a whole. It is a truism in fact that in the market the group is seen as a whole entity, hence solvent subsidiaries can hardly survive when the parent or a major subsidiary is in financial distress because of reputation risk.
Further assets transfers in case of distress may also facilitate private sector rescue to be arranged in the meanwhile.
As EU Commission put it «the transfer of assets as a means of intragroup financial support could assist groups in managing liquidity positions and in some cases could help stabilise entities in a developing crisis»[176]

176 See Commission staff working document accompanying the *Communication from the commission to the European parliament, the council,*

The importance of allowing asset transfer in case of crisis sand the detrimental effects the impossibility has, is showed by the following tables (6, 7)

the European economic and social committee, the European court of justice and the European central bank. An EU framework for cross-border crisis management in the banking sector, available at www.ec.europa.eu

Table 7: Barriers to cross border transfer of liquidity in liquidity test stress

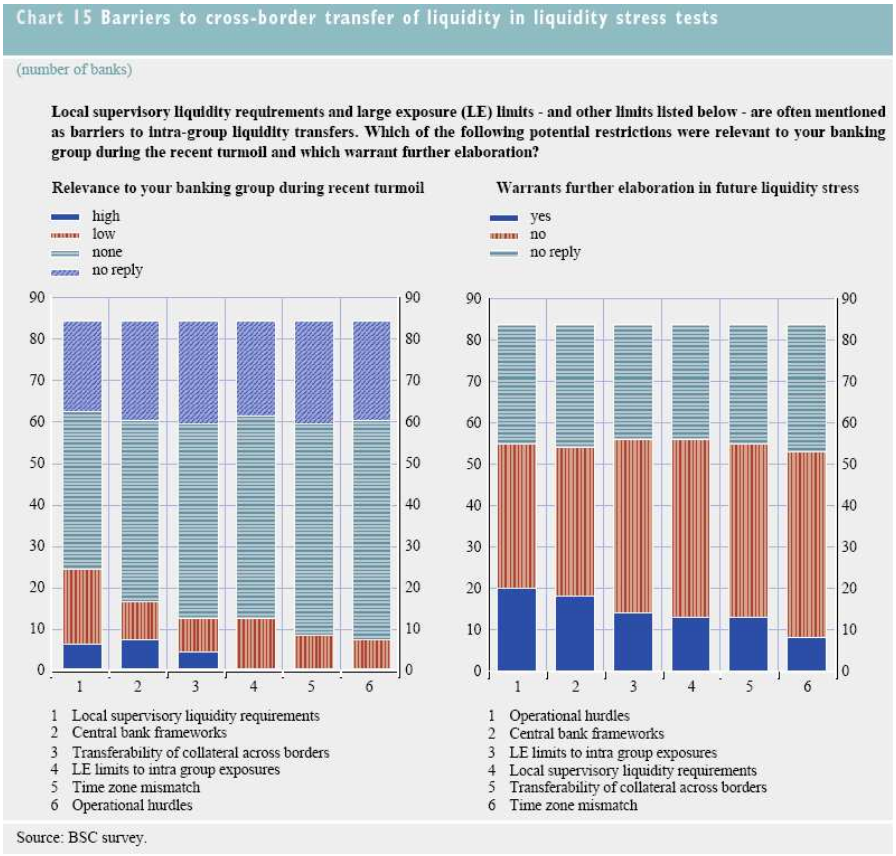


Source: ECB

In table 6 stress tests carried by banks showed that constrained[177] imposed on banks in relation to asset transfer have a high impact on involved entities' liquidity, or better, have a negative impact on efficient liquidity risk management for cross border banking groups.

177 Namely, local liquidity requirments, large exposures, barrieres to cross border transfer of collateral, differences in certral bank frameworks for the provision of liquidity, operational hurdles and time zone mismatches. See, ECB, *EU banks liquidity stress testing and contingency funding plans*, November 2008, at www.ecb.int

Table 8: Barriers to cross border transfer of liquidity in liquidity test stress: relevance for the group and further elaboration



Source: ECB

However, table 7 shows that during the current turmoil those hurdles had not been as significant as showed in stress tests: only six (over 27) banks stated that local liquidity requirements were relevant, whereas only four declared that large exposures regulations were relevant whilst the remaining barriers did not have any relevance for the banks in the sample.

On the other hand, intra-group asset transfers do carry risks. Those stem from the fact that since these may have as a result the total transfer of a subsidiary's control, the transfer of a branch or activity and the transfer of a portfolio of deposit accounts: in such a way creditors and shareholder would be extremely damaged since their company would have become an empty box.
So the basic idea would be trying to develop a harmonized framework for the matter.
This could be done by modifying CDR Directive to take into account the idea of "group's interest" and then allow supervisor to include in their Mou's and/or burden sharing agreements the possibility of such transfer. Furthermore banking living wills, where any, shall contain provisions on subsidiary's/parent's contribution to the ailing peers.
However precautions must be taken to protect stakeholders.
Thresholds must be designed to top up the maximum amount that can be transferred correlated to the transferor's financial capacity, covenants should be included to define transferor's return against penalties to the receiver and priority shall be given to transferor's creditors.

3.5.4. Living wills

As we said, banks may, and in some member States must[178] draw plans to decide in advance how the whole group would be treated in case of financial distress. Specifically, these could be recovery, resolution and contingency funding plans.
The living wills idea is fairly new and derives from the necessity to make the banks being liable for their failure and

[178] See the recent British financial regulatory reform, whereby the FSA has a duty to make rules requiring financial institutions to create and maintain recovery and resolution plans in the event that they become financially vulnerable. Those provisions are included into the Financial Services Act 2010, available at http://www.opsi.gov.uk/acts/acts2010/pdf/ukpga_20100028_en.pdf

not to spread the cost to taxpayers.
Further they may help reducing the complexity of the group and consider subsidiaries as independent entities to be wound up singularly.
However the big issue with those plans is their actual shape and their contents.
In absence of any neither practical examples nor specific regulations yet in place, we may only try to figure out their features.

First of all we must think at their intermediate goals.
Those may be *i*) the capability of authorities to get a clearer information framework on the group structure; *ii*) the capability of banks and authorities to get a clear cut idea on the functioning of internal and structural mechanisms (IT systems, data, intra-group facilities and so on) in responding to a group alert; *iii*) the understanding of feasibility or non feasibility or certain recovery options.
Second of all we shall look at their final aim: this should be the complete self sufficiency of the plan either to restore bank's viability or to winding up the institution.
So keeping this in mind, we may consider differently recovery from resolution plans.
The former are plans that shall allow for the orderly and timely business continuity in case of financial distress that does not compel the institution's solvency, whilst under a resolution plan the bank shall be able to plan in advance for the kind of information required and useful for the Authorities to carry on an orderly liquidation/resolution of the bank.
How can a bank recover from a crisis without getting into insolvency proceedings?
Usually, by having access to fresh capital.
In a living will this possibility should be entangled in capital and liquidity planning.
However since this kind of planning are already in place in a day to day business of the firm, when included into a recovery plan they shall take a different form: they must contain the

outside option and specifically refer to how and from whom they intend to get financed if their usual sources of funding are not available.
In fact, the usual sources may well not be willing to put the unusual (large) amount of capital required, nor they may be able to do it in a timely manner, or maybe, legal obstacles deriving from company law may arise. Further, it may get too costly for the bank raising new capital at time of distress (the risk premium for the investors would be higher than usual).
This would add uncertainty to the efficiency of a living will.
The practicability of the plan may be challenged in case of contingency plans. Here in fact, banks shall be able to demonstrate that, under stress and besides the on going liquidity arrangements, they may still have back up sources, collateral as well as routine sources. Namely banks must be ble to demonstrate that they can have access to a wider source of funding. To be credible, a contingency plan should contain also a reduction of risky activities such as the closure of certain positions.
Should a bank being able to demonstrate those requirements, a living will may be of a certain efficacy.
An alternative would be a living will that contains provisions for the sale of some business lines and/or their closure. To this end, managers shall be able to demonstrate that the line is saleable and that no shareholders approval is requested (otherwise it would be too lengthy and unpredictable). This would imply that the activity shall be run by a separate subsidiary, shall be operationally sizeable and the subsidiary shall be self sufficient as regards funding, assets and liquidity positions.
Here a solution may be providing in the Statute of the company that in case of crisis shareholders rights in relation to certain matters are suspended.
Otherwise, recovery plans may provide for the sale of the entire business through private acquisitions.
However great concerns arise as far as competition is concerned and for the possibility of efficiently concluding the

deal.
In fact, the only player that can be able to buy a bank is a big financial institution that will however more consolidate its position in the market and become even bigger to fail.
As for the smooth success of the sale, that may be hampered by some type of liquidity backstop and/or guarantees required by the buyer, i.e. on the safe approval of the transaction from shareholders. Again a modification of statutory law may be considered.
Those plans –that are institution specific –should contain exactly the triggers for intervention.
As far as resolution plans is concerned, they are directed immediately to the Authorities to give them a clear picture of the group structure and hence must be confined to the following contents: 1) group structure (characteristic, assets, liability, subsidiaries fully self sufficient and so on); 2) groups infrastructure functioning; 3) resolution options taking into account different laws of incorporation.
Lastly, whatever the plan is, coherently with its objectives, it should be designed in such a way to *i*) ensure a timely frame of the group for the supervisors and bank's managers itself; *ii*) be able of being enacted in a timely fashion; *iii*) allow for the split up of entities; *iv*) contain a reasonable set of options; and *v*) be credible and enforceable.

3.6 Conclusions

In this chapter we have gone deeply through the maze of obstacles that can hamper the smooth functioning of the crisis management.
The cross border character and the size of the financial institution make it fairly impossible to predict the outcome of their insolvency.
This is indeed affected by:
i) agency conflicts among interested authorities, that do not –or poorly –cooperate since they pursue local interests;

ii) differences in regulatory culture;
iii) the inefficient regulatory framework in place that assigns the matter to non binding and not enforceable private agreements; and
iv) differences in national legal frameworks that –although harmonised to a certain degree –maintain divergent approaches on supervisory powers', triggers for intervention, resolutions tools and procedures.

A formal European framework to regulate the issue with a *lex specialis* is thus urgently needed.
This shall have a mixed nature, since it must contain provisions directly addressing the crisis as well as great reference must be paid to private tools.
In our opinion, the choice between an ad hoc directive/regulation or the modification of the already existing directives (CRD, Conglomerate, Winding Up) is left to political discretions. However the fastest and more efficient mean must be preferred.
The framework shall pursue a maximum harmonisation approach whereby at the same time contain obligation for the States to obey to the provisions included in MoU's and burden sharing agreement. In fact, the peculiarity of each group, the financial sectors of reference and the need to give incentive to these institutions to invest in Europe, makes it necessary to develop consistency in the approaches plus however institution based solutions.
To this end great role can be played by ex ante intervention tools.
In fact, the idea would be rendering binding the current MOU's: this would be in a sense time efficient and frictionless because States already engaged into them and they contain provisions sufficient enough to define the room for manoeuvre for coordination in case of crisis. Further, for what is not expressively mentioned reference can be made to the EU Mou of 2008.
As for crisis management, States must intervene only as a last

resort chance after that recovery plans and intra-group asset transfers have proved to be ineffective and insufficient.
This would be coherent with the natural consequence of those failures: the resolution of the bank.
Obviously the effective implementation of those tools may compress some shareholders rights. Nonetheless this possibility shall be provided under the common EU lex specialis to obtain a certain degree of harmonisation of laws.
Further work needs to be done on the triggers for intervention.
This requires two steps: the modification of art. 136 of the CRD Directive to entrust Authorities to require a wider range of pre-emptive situations and measures they can impose and to ask fore a more uniform application of such powers as well as the identification of triggers specifically tailored upon the single entity. These shall be identified into the living wills plan.
Further changes shall be done to art. 129 and 130 of the CRD to improve coordination efforts and a much leading role shall be formalised to the college of supervisors.
However those efforts may be of poor help if a high degree of discretion is left to policymakers and governments.
Although the question on (if and) how to eliminate these discretionary powers would open a wide and lively debate, it must be acknowledged that a great States' commitment to respect the agreements is nonetheless needed.
In fact, shall they always be able not to respect and implement agreements, to act differently under the justification of financial stability rather then depositors' protection or public confidence, their crisis management choices will always be perceived as time inconsistent.

Chapter 4

European banking bail out plans implemented during the current turmoil

4.1. Introduction

After the collapse of the investment bank Lehman Brothers and of AIG[179], the "giant" of the insurance industry, the financial crisis began to be felt throughout all European markets, which

179 The 14th of September 2008, LB filed for Chapter 11 bankruptcy procedure. The triggering event was in that case the *ring fencing* procedure imposed by the Japanese Financial Supervisory Authority on LB's subsidiaries, motivated by the amount of debts which they held with regard to some Japanese banks, particularly Aozora, Shinsei e Mizuho. Such amount of debts appeared not to be proportionate with respect to LB subsidiaries' assets. Total debts amounted to 463mln dollars on Aozora, 363mln dollars with regards to Shinsei and 239bn for Mizuho. On this subject see www.businessweek.com/globalbiz/content/sep2008/gb20080916_047232.htm.
It has been calculated that the total liability of those European banks mostly involved with LB in the second quarter of 2008 amounted to: 473,329bn euros for Société Générale, 383,995mln euros for Credit Agricole, 460,423mln euros for Barclays, 1,138,090bn euros for Deutsche Bank, 277,362bn euros for Credit Suisse and 652,972mln euros for UBS. Source: JP Morgan. AIG was the insurance company which collapsed because of its exposure in the derivatives market and Credit Default Swaps in particular. http://www.aig.com/aigweb/internet/en/files/CounterpartyAttachments031509_tcm385-153015.pdf .

up until then, had been only marginally affected. Therefore, EU Member States have been forced to intervene to bolster banks' capital and prevent a crisis of confidence and a subsequent run on the banks. In fact, the decision to intervene to support banks was taken by the Member States in an ECOFIN meeting held in October 2008.

In that meeting Member States took on the responsibility of adopting all the necessary measures in order to guarantee financial stability and the interests of depositors. These measures were to be adopted at each State's discretion, but should also respect the following agreed common principles, namely:
a) interventions should be promptly adopted, but support should be temporary,
b) interventions should take into account taxpayers' interests;
c) shareholders should bear the necessary consequences of the interventions;
d) Governments should be able to change the management of the company;
e) managers should not be able to maintain any undue benefit and, *inter alia*, the Government should be able to intervene on their remuneration; and, in addition to that,
f) Governments should protect competition, especially with regards to state aid rules;
g) negative spillover effects should be avoided[180].
Member States also committed to avoid any distortion of treatment between US and European banks, due to the application of different accounting methods. Finally, Member States agreed to face in the next future the problem of the correct evaluation of assets in banks' balance sheets.
Although each plan is different, measures adopted by the States basically follow three main policy directions: *i*) direct injection of capital through subscription of financial

180 http://www.ue2008.fr/PFUE/cache/offonce/lang/en/accueil/PFUE-10_2008/PFUE07.10.2008/ECOFIN_results;jsessionid=469F155B629C7825CA68410951BA4750.

instruments; *ii*) State guarantee of liabilities of the banks and finally *iii*) swap of "toxic" securities with high-quality ones.
In this article, the bank bail-out plans of some European countries will be described, and the main policy choices of each Member State will be spelt out. In particular, the possible compatibility of such plans with EU state aid legislation will be analysed, and, more generally, the future role of EU state aid legislation in the banking sector will be highlighted. Indeed, even if all recapitalisation plans are declared to be compatible with art. 87 of the EU Treaty, it appears that a proper analysis of the relevant EU decisions on this matter could only be conducted over a longer period. More specifically, if we look at the overall financial market structure resulting from those "compatibility decisions" we could argue that the role of the State may be more than "temporary" and less than "profitable" for the taxpayers. Moreover serious moral hazard problems may arise.
This would led to the conclusion that the final outcome of the EU approvals would be a distortion of competition in the banking sector in future "peaceful" times due to the fact that in some States (i.e. the UK), the Government is deeply involved in banks' capital through overlapping levels of intervention (that will be in place at least for next 3-4 years), while in others (i.e. France) there are no binding covenants on share repurchase agreements or on distribution of dividends (i.e. Italy), which might turn out to have damaging consequences for the profitability and hence the willingness of the State to leave the bank. Moreover, given that huge amount of money has been lent to the banks, some of them may not be able to repay the loan/guarantee or to redeem its own shares in due time. This possibility adds uncertainty to the likelihood of the State to exit the bank. Should it be impossible for the State to exit, other form of intervention on the institute governance –in the form of i.e. veto/voting powers or in the form of shares conversion – are likely to arise
In addition, few States (i.e. UK) discipline the transfer of share regime. There might be the possibility that when-if the State

wants to exit, given the peculiarity of the shares subscribed, it could attach *ad hoc* provisions on the characteristics of the future purchaser of the shares, conditions that in turn might be affected by domestic economic policy arguments. Should this be the case, possible "national championship" temptations might materialise. Lastly, the current EU Commission approach might lead to a weakening of state aid rules perception and enforcement, with the risk of seriously hindering EU Commission strength and credibility in the matter.

In the following sections the bank recapitalisation plans in the United Kingdom, France, Spain, Italy and Germany will be described, and some critical reflections will be drawn in the last section.

4.2. The French case: on how the State becomes a market player

The plan set up by the French Government (*Le plan de financement de l'economie)* consists of several layers of measures approved after the beginning of the crisis. Indeed, the first intervention dates back to October 2008, with the approval of a Bill, the "Loi 2008-1061" on the financing of the economy[181], which was followed in December 2008[182] and February[183] 2009

181 See,www.premier-ministre.gouv.fr/chantiers/croissance_847/nicolas_sarkozy_presente_plan_61358.html;http://www.premier-ministre.gouv.fr/chantiers/plan_relance_economie_1393/garantir_systeme_bancaire_1401/; http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000019653147&dateTexte=&oldAction=rechJO.

182 http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020014790&dateTexte=.

183 http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000020215123&dateTexte=.

by a modification of the funding scheme of the banks and by the increase in the allotted budget. Moreover, the French Government completed the intervention by fine-tuning the creation of *ad hoc* state corporations and by giving birth to a Committee in charge of monitoring the plan implementation, with the approval of the Decree 2008-1287 of December 10th 2008 [184].

The Government hence intervened to strengthen banks' capital adequacy and to inject liquidity into the banking sector, through the creation of the *Société de Financement de l'économie française* (SFEF)[185] and the *Société de prise de participation pour l'État* (SPPE). Furthermore, the Government approved a State guarantee of banks' debt, amounting to an initial investment equal to 360 billions euros. The course of action followed by the Government in order to reinforce funds of relatively sound banks was a horizontal intervention. In fact, it set up a State-owned company that would have subscribed preference shares or subordinated debt. The SPPE, financed by public debt, was funded by an initial amount of 40bn euros. The first *tranche* of this capital (10,5bn euros) has been used to subscribe TSS (*titres super-subordonnès*)[186], issued by the six major French banks for a total amount almost equal to 0.5% of their regulatory capital. The second *tranche* has been increased in January 2009 from 10.5bn to 11bn and the expiring date of issuance of eligible securities has been postponed to the 31th of August 2009. In this second phase as well the French Government has given

184 http://textes.droit.org/JORF/2008/12/11/0288/0020/.

185 The SFEF is owned both by the State (34%) and private investors (66%), namely seven large French banks: Banques Populaires, BNP Paribas, Caisses d'Epargne, Crédit Agricole, Crédit Mutuel, HSBC France and Société Générale.

186 The main characteristics of the TSS being: they are perpetual and early redemption is at issuer's discretion; the security ranks senior only to share capital; under certain conditions, the payment of dividend is left at the issuer's discretion; should the payment endanger the viability of the bank, the non payment must be compulsory; the issuer retains the ability to reduce the nominal value of the securities to absorb potential losses.

banks the option of issuing subordinated debt in addition to preferred stocks without voting rights.
The remuneration fixed for the subscription of issued securities is equal to 8,2%, which would eventually result in 850bn profit for the French Government [187].
Horizontal intervention is also contemplated to sustain banks' liquidity. Indeed, the Government guarantees securities issued by an *ad hoc* company called SFEF, whose statutory function is to grant loans to relatively sound banks. The SFEF is funded by selling its securities on the market; hence SFEF is supervised by the *Commission Bancaire*. The State guarantee is applicable to all instruments issued by SFEF within the 31st of December 2009 and it has a maximum duration of 5 years.
Institutions eligible to participate in the plan are banks incorporated in France, including subsidiaries of foreign banks.
In common with the previous measure, in this case financial aid comes at a cost, since all the participating banks must pledge collateral[188] whose quality is determined on a case by case basis by the French Central Bank and the Finance Minister.
Banks must pay the Government interest calculated on the basis of the cost of financing for SFEF and the specific State interest rate for the issuance of the guarantee.

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187 However, direct intervention by the State in relation to banks' capital is permitted in case of special necessity and urgency: the Government could thus subscribe a capital increase of any financial institution whose default poses a systemic threat to the marketThis is what happened in the DEXIA case. See, http://premier-ministre.gouv.fr/fr/;http://www.premierministre.gouv.fr/chantiers/croissance_847/point_presse_christine_lagarde_61177.html .http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1745&format=HTML&aged=0&language=EN&guiLanguage=en. http://europa.eu/rapid/pressReleasesAction.do?reference=IP/09/399&format=HTML&aged=0&language=EN&guiLanguage=en .

188 It can be either residential mortgage -backed loans, or a warranty issued by a finance institution, or loans to public administrations, or to firms with high credit rating level, or consumer credit.

In so far SFEF, which is managed by the Treasury, has borrowed 23bn euros from the market, and has lent an equal amount to 13 banks, at an interest rate equal to 4%, which will allow the Government to make 380bn euros profits on the initial investment189. The total amount of money the Government committed to guarantee amounts at 265bn euros. One billion was specifically addressed to banks making loans to car manufacturers, in order to sustain this specific industrial sector.

In addition, at the end of January 2009 the Government created the "Committee of Supervisors on the implementation of the plan", consisting of the President and the *Rapporteurs* of Parliamentary Committee on Financial Affairs, the Chairman of the French Central Bank, the Deputy Director of the Treasury and the Deputy Director of the Budget190.

The participating banks are required to make both an economic and an ethical contribution. Their commitments are specified in a memorandum of understanding signed by the banks and SFEF where the obligation to increase their lending activity by 3-4% by the end of December 2009 and to sustain the export industry[191] are established.

Banks are also required to participate in "credit mediation" programs. These programs are designed to increase access to credit for the highest possible number of enterprises, through the subscription and re-negotiation of loans[192].

Moreover, banks should adopt the MEDEF/AFEP code of conduct on directors' remuneration[193] and, before the 31st of March 2009, their managers should have renounced any variable component of their remuneration package.

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189 SFES are rated AAA by Moody's v. http://www.highbeam.com/doc/1P2-19491164.html .

190 http://www.minefe.gouv.fr/discours-presse/discours-communiques_finances.php?type=communique&id=2455&rub=1.

191 http://www.minefe.gouv.fr/discours-presse/discours-communiques_finances.php?type=communique&id=2795&rub=1.

192 http://www.mediateurducredit.fr/..

193 http://www.medef.fr/medias/files/132856_FICHIER_0.pdf .

As can be seen from the explanation given above, the French intervention measures to sustain banking capital are mixed (public-private) measures. On the one hand State companies are created in order to inject liquidity into the banking system, but on the other hand they seem to mimic market-based mechanisms, as they are raising funds from the financial market, and accordingly, they impose high interest rates as remuneration for the higher risk incurred.

Nevertheless, the nature of the hybrid instruments subscribed by the Government should not be underestimated. Indeed it appears that the TSSs subscribed seem to be the less-intrusive instruments in order to satisfy the credit interests of the owner. It may be also for this reason that the Government has decided to set high interest rates in order to compensate for the significant financial sacrifice involved. Nonetheless, the final say on the opportunity to repay securities purchased by State-owned companies is left to the bank which benefits from the public intervention[194].

It is also unclear how the French Government is going to shed its participation, and how it would behave with regard to participating banks: indeed, on the one hand it is clear that the Government's guarantee is going to be limited in time. However, there is not a time limit for banks' repurchase of financial instruments subscribed by the Government.

In addition to that, Government prescribed that its representative should have the right to attend the SFEF board of directors' meetings, with veto rights over funding resolutions. However, it has not been explained whether the Government representative has powers over participating institutions' resolutions, and what, if any, those powers are. Indeed it seems likely that SFEF's directors or the Government

194 However it might be argued that the provision contained in §6, art. 6, of the Law 2008-1061 –which states that, in the event of bankruptcy, the State -owned company should have priority over other creditors on the reimbursement of pledged collateral –represents sufficient protection for the State.

representatives will be in touch with the directors of beneficiary institutions and that could dissuade them from taking certain decisions: nonetheless, they can only exercise "soft suasion" powers, given that the directors still retain full discretion to adopt any business decision, within the confines of the agreement in place between State and participating entities.

4.3. The 360° United Kindom plan: on how monetary policy could save the system

The United Kingdom could be seen as the first European country to be seriously damaged by the freezing of the wholesale markets as a result of the subprime crisis[195].
As soon as financial market conditions worsened, the Tripartite Authorities responsible for the banking system, namely the FSA, the Treasury and the Bank of England put in place both general and specific provisions to ease banks' difficulties.
The UK Government announced its first measures in October 2008 and provided additional facilities in January 2009. Since January 2009, those facilities have been constantly updated following the continuing deterioration of market conditions.
However, the very first measure adopted by the Government to support the financial system dates back in April 2008 several months before the EcoFin decision, followed by further intervention at the beginning of October 2008. New measures followed in April 2009, specifically tailored to increase banks tier 1 capital, namely the Asset Protection Scheme and the Asset purchase facility[196].

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195 Indeed the first signal dates back to September 2007, when Northern Rock, a small mortgage bank was forced to ask for a LOLR intervention that eventually ended up with the nationalization of the bank. The Northern Rock experience gave rise though to a vast process of reforms that involved all the areas which proved inadequate in dealing with the crisis , such as bank insolvency legislation, deposit protection, risk management and supervision.

196 Previous measures adopted by the Bank of England were updated

4.3.1. The *Special Liquidity Scheme*

The Special liquidity scheme was first introduced in April 2008[197] and it allows banks to swap for up to three years their illiquid assets for Treasury bills.

The measure operates as follows: firstly, HM Treasury issues Treasury Bills borrowed by the Bank of England; secondly the BoE, in return for a fee[198], swaps those Bills for assets that banks held on balance sheet as at 31st December 2007. The main category of eligible instruments is made up of securities backed by residential mortgages[199]. These assets will be high quality rated as AAA.

Lastly, the underlying value of the illiquid assets must be higher than the Treasury bills value: for instance, if the illiquid asset is worth 100 pounds, the bank would receive Treasury bills worth70-90 pounds, depending on collateral quality. This is needed to avoid the Government bearing the credit risk, or limiting its exposure to losses to the hypothesis of bank's default, or to the amount exceeding the asset value of the Bills.

From April 2008 to January 2009, participating banks borrowed Treasury bills amounting to a total value of 185bn, whereas the face value of illiquid securities amounted to 287bn. However, because of the deterioration in market conditions in January

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as well, such as the Operational lending and deposit facility and the Discount window facility: those open market operations are in addition to the normal repurchase agreements already in place: however, more types of instruments have been accepted as collateral.

197 See Bank of England, *Special Liquidity Scheme: Market Notice*, 21th *of April* 2008, in www.bankofengland.co.uk/markets/marketnotice080421.pdf

198 See. www.bankofengland.co.uk/markets/money/information080421.pdf, p. 2.

199 The BoE retains the discretion to accept securities backed by credit cards but it will not accept securities backed by US mortgages, although it can routinely accept assets denominated in currencies other than sterling.

2009, their value has been reduced to 242bn.
Despite Government efforts, the attempt to ease the liquidity problems of banks did not succeed, so the Treasury had to adopt new measures to increase banks' access to funding and to improve credit conditions in the economy. To this end, the BoE and the Treasury issued in October 2008 a fresh set of measures including the Discount Window Facility and the Credit Guarantee Scheme. A further analysis of those measures follows.

4.3.2. The *Credit Guarantee Scheme*

By means of the CGS HM Treasury guarantees new debt instruments of eligible institutions: specifically, in the event that the institution is not able to meet its obligations when the payment falls due, the Treasury will pay the guaranteed liability to the beneficiary[200].
Eligible institutions are banks incorporated in the United Kingdom, as well as UK subsidiaries of foreign institutions that have a relevant activity in UK. Subject to Treasury discretion, it would be possible to consider other institutions as eligible. Within a banking group, the only entities able to participate are deposit-taking institutions.
The main objects of the scheme are to:
i) provide sufficient liquidity in the short term, ii) make available new capital to UK banks and building societies to strengthen their resources, permitting them to restructure their finances while maintaining the support for the real economy, iii) ensure that banking system has the funds necessary to maintain lending in the medium term.
To qualify for the scheme, the relevant institution must either already have or have committed to raising tier 1 capital, in the form and amount agreed with the Government. Subsequently

200 http://www.dmo.gov.uk/documentview.aspx?docname=cgs/press/cgsrules.pdf&page=.

the Government will guarantee the emission of new medium and short term debt, in return for market oriented remuneration.
Eligible senior unsecured debt instruments include the following: certificates of deposit, commercial paper, bonds or notes, issued between the 13th of October and the 31st of December 2009. Moreover, they must not contain any cross default or cross acceleration clause or any right of payment by the issuer.
Instruments have to be expressed in sterling, US dollars or Euro. Later the Government permitted the issue of instruments in Yen, Austrian dollars, Canadian dollars, and Swiss francs, to allow the banks to have access to a wider range of markets, taking advantage of the State guarantee.
The guarantee will be valid up to 36 months, unless extended for a further 2 years, at Treasury discretion, but only up to 1/3 of the total amount of guaranteed liabilities. In any event, the guarantee must end in April 2014[201].
In its first notice of the measure, HM Treasury named some banks as eligible to participate immediately in the scheme[202]. However not all of them have taken up the offer. During the following months other banks have asked for a Government guarantee. In so far the Treasury has guaranteed liabilities for a total amount of 17.175billion of sterling, 13.850 billion of euros and 4.850 billion of US dollars[203].

4.3.3. The *Bank Recapitalisation Fund*

201 See http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/2057.

202 Namely: Abbey National plc, Bank of Scotland plc, Barclays Bank plc, HCBS Bank plc, Lloyds TSB Bank plc, Nationwide building society, The Royal Bank of Scotland plc, Standard Chartered Bank. Si v. http://www.dmo.gov.uk/documentview.aspx?docname=cgs/press/cgs090208.pdf&page=.

203 See, http://www.dmo.gov.uk/index.aspx?page=CGS/CGSLiabilities#publiclyissued. See, www.hm-treasury.gov.uk/press_100_08.htm .

The second measure announced in October 2008, directly intervenes in relation to bank capital: by means of this facility the Government will make available new tier 1 capital to eligible institutions in the form of preference shares or PIBS[204] in case of building societies, under certain conditions

Eligibility criteria are the same as the CGS scheme (UK incorporated banks, including UK subsidiaries of foreign institutions), whereas the total amount and types of eligible instruments should be determined on a case by case basis, taking into account the amount of tier 1 capital that the bank wants to raise.

Irrespective of the amount raised, the Government, if it decides to provide capital, will lay down terms and conditions relating to managers' remuneration[205], dividend policies, and a full commitment to support lending to small businesses and home buyers[206].

The Royal Bank of Scotland, Lloyds and HBOS immediately asked to participate in the fund. It was agreed that the Government would subscribe 5bn of RBS's preference shares[207], 3bn of HBOS' preference shares[208] and 1bn of Lloyds'

204 See, http://www.bsa.org.uk/faq/whatarepibs.htm.

205 See, www. http://www.fsa.gov.uk/pubs/cp/cp09_10.pdf.

206 As soon as it announced the measure, the Government made available 25bn for the facility, and made available another 25bn to the same institutions identified under the CGS. These banks had committed to the Government to increase their total tier 1 capital by 25bn, at aggregate level. The main objective of the Chancellor of the Exchequer was to protect the banks from future shocks and to strengthen their resources for the current crisis. According to the Chancellor, the decision to underwrite preference shares was justified by the fact that these rank above the shares of ordinary shareholders. Moreover, given the provision of a commission, taxpayers would be fully rewarded for the investment. See, http://www.hm-treasury.gov.uk/statement_chx_081008.htm.

207 See, *Preference share subscription agreement between the Commissioner of Her Majesty's Treasury and The Royal Bank of Scotland group plc*, 366.

208 See, *Preference share subscription agreement between the Commissioner of Her Majesty's Treasury and HBOS plc*.

preference shares[209]. Eventually the total stake in Lloyds was increased because of the merger between Lloyd's and HBOS, which took place a few months later.

According to the conditions attached to the subscription agreement between HM Treasury and RBS[210], the bank could not pay dividends, nor redeem, purchase or otherwise acquire in any way any of its own ordinary shares, until the Government's preference shares had been redeemed or repurchased in full. Another covenant of that agreement stated that in any case the Government's preference shares would not be treated as ranking after any new ordinary share and that a HM Treasury representative should be entitled to attend the general meeting of the company and to speak or to vote upon any resolution proposed thereat in circumstances where the dividend stated to be payable had not been declared and paid in full.

Another interesting clause in the contract establishes the duty to notify the Government immediately if the RBS directors resolve not to pay any dividend on preference shares by reason of lack of distributable profits, or because of the application of FSA capital adequacy requirements, or the exercise of their own discretion[211].

If we read such covenants *a contrario,* this means that directors, under certain circumstances, are not obliged to pay dividends on the preference shares. However, such conditions may not only be objective (lack of distributable profits) but also subjective (at the directors' discretion), which makes these

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209 See, *Preference share subscription agreement between the Commissioner of Her Majesty's Treasury and LLOYDS TSB plc,* 414.

210 http://www.hm-treasury.gov.uk/d/combined_rbs_hbos_lloydstsb.pdf.

211 "The Directors may, in their sole and absolute discretion, resolve (...) that the dividend in the (...) Preference shares, or part thereof, shall not be paid on that Dividend Payment Date. If the Directors resolve as aforesaid, then none or (…) part only of the dividend shall be declared and/or paid". See, *Preference share subscription agreement between the Commissioner of Her Majesty's Treasury and The Royal Bank of Scotland group plc,* 368.

shares comparable to the shares acquired by the French Government.

As with RBS, HBOS shares subscribed by the Government were preferred in the dividend distribution, the payment of dividends was subjected upon certain conditions, and the bank could not conduct operation on its own shares until the Government shares are repaid in full[212].

Lastly, as far as Lloyds's shares are concerned, the subscribed shares have the same features as RBS and HBOS preference shares (dividends and payment, ranking, voting rights), with only one difference, in the Lloyds agreement there is a covenant relating to the holder's rights in case of liquidation of the institution, stating that holders of preference shares will rank equally with holders of the most senior class of preference shares and in priority to the holders of any other share capital of the company.

Given that the beneficiaries of the measure were fundamentally sound institutions, they were not asked to present a restructuring plan; it sufficed instead, to produce a report demonstrating that they remain fundamentally sound and indicating how they plan to repay the state capital[213].

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212 However the agreement with HBOS differed from the RBS agreement because the former had a capital disqualification clause and granted the Treasury representative voting rights in respect of general meeting resolutions when the dividend had not been paid in full (as for RBS) and where a resolution is proposed varying or abrogating any of the rights, preferences, privileges, limitations or restrictions attached to any class of shares of which preference shares form part.

213 However, it is well known that the public intervention has not proved sufficient to restore banks' capital viability and this, coupled with the continuing closure of inter banking lending market, forced the British Government to dramatically change strategy. First, on the 19th of January 2009, HM Treasury converted its RBS preference shares into ordinary shares. See, www.hm-treasury.gov.uk/press_06_09.htm. The aim of the conversion is to provide "additional core tier 1 capital to the bank to strengthen its resources, enable it to absorb expected losses and permit it to restructure its finances and give the bank the opportunity to build its

4.3.4. The *Discount Window Facility*

By participating in the Discount Window Facility[214], banks, in return for a commission and a guarantee issuance, can borrow gilts[215] from the Bank of England to strengthen their resources. Eligible institutions are UK banks that usually pay cash ratio deposits and that satisfy eligibility criteria to participate in the BoE's program for the Sterling monetary framework. Banks can hold securities no longer than 30 days, although the period can be extended by the Central Bank. Indeed, in January 2009 the term has been increased to one year. Instruments admitted as collateral might be of 4 kinds, but basically they are the same as the instruments normally admitted by the BoE in its open market operations: e.g. G10 State bonds, covered bonds guaranteed by triple A commercial mortgages. No synthetic

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capital further so that it is able to maintain and increase its support for the real economy by facilitating £6bn more lending to industry and homeowners, over and above the existing commitments". See also, http://www.investors.rbs.com/investor_relations/capitalisation_issue_2009.cfm. Eventually, after other interventions mentioned below, the Government held 70% of the bank's capital. Secondly, during March 2009, the Government changed its term agreement with Lloyds. As a result of the bank's request to participate in the new public measures, it was decided to increase the bank's capital increase and to convert the preference shares into ordinary shares. In this way, the Government became the owner of 43.5% of the bank. In addition, it was established that, if the increase in capital could not be underwritten, the Treasury would take up its pro rata share of the offer and would also subscribe for any additional shares not taken up by existing shareholders. Should this be the case, the total stake in Lloyds would amount to 65% of the capital. The Government shares conversion was also subject to the adoption by the bank of the FSA's principles on remuneration practices. See www.hm-treasury.gov.uk/press_23_09.htm. and http://www.ukfi.gov.uk/.

214 See *Bank of England Market Notice: Operational Standing Lending and Deposit Facilities; Discount Window Facility*, in www.bankofengland.co.uk/markets/ marketnotice081020.pdf .

215 See, http://www.dmo.gov.uk/index.aspx?page=Gilts/About_Gilts.

products are eligible. In order to bolster banks' liquidity, borrowed gilts can be used as collateral in open market operations.

On the 19th of January 2009, because of the deterioration of market conditions, the UK Government decided to intervene again this time with monetary policy measures. However, in this case the measures adopted -the Guarantee Scheme for ABS, the Asset Protection Scheme and the Asset Purchase Facility[216] -seem to be more "aggressive" than those adopted previously.

4.3.5. The *Guarantee Scheme for Asset Backed Securities*

As in the case of the CGS, the aim of the Government in issuing such measure was to improve market players' confidence in the stability of the wholesale market, to "help support lending and promote robust and sustainable markets over the longer –term. To this end, the Government provided full or partial guarantees to triple A rated ABS, including mortgage and corporate and consumer debt. Institutions eligible to participate in the CGS will be held eligible to participate the Guarantee scheme as well. However, those institutions have to fulfill international standards and best practices in underwriting, disclosure, reporting and valuation. The Bank of England reserved the right to add other terms and conditions at a later date, especially as far as eligible assets and collateral are concerned[217].

216 See, www.hm-treasury.gov.uk/press_05_09.htm.

217 All the details will be available on the *Debt Management Office* website: www.dmo.gov.uk .

4.3.6. The *Asset protection scheme*

The program[218] is designed as follows: the Treasury, in return for a fee[219], will provide protection against future credit losses on one or more portfolios or defined assets. The institutions should bear a first loss amount, but the 90% of the excess will be hedged by the State. The fact that the first 10% of the loss will not be covered by the State should give institutions sufficient incentive to minimize losses[220].

Eligible institutions are UK- incorporated deposit -takers, including UK subsidiaries of foreign institutions, with more than 25bn of eligible assets. To be included in the scheme, assets must be owned by the bank, and basically must consist of corporate and leveraged loans, residential and commercial

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218 See, www.hm-treasury.gov.uk/press_19_09_htm and the *Appendix*.

219 The *fee* will be determined according to "international practices so as to provide appropriate incentives to participating institutions to meet their commitments agreed with the Treasury to support lending to creditworthy borrowers and to ensure appropriate protection to taxpayers. The pricing will also ensure that the Treasury benefits from a share of any upside returns". And "the fee will include an amount calculated to be the applicable participants pro rata share of the costs incurred or to be incurred by HMT in establishing the Scheme", *ivi* in *Appendix*, 15.

220 The procedure for assessing the respective losses to be borne by the bank and by the Government is as follows: first, a "trigger event" must have occurred resulting in a loss covered by the scheme. The trigger might be: a) a failure to pay amounts due subject to grace period and provision for remedy, b) bankruptcy, c) such other event or circumstances as HMT might agree shall be a trigger in respect of a specific covered asset or covered pool. The event might have occurred even before the scheme commencement date. Triggers do not include (i) unrealised mark-to-market losses, (ii) accounting provisions or accounting write downs, or (iii) disposal of Covered Assets. Secondly, a loss will be considered equal to the lesser of the outstanding principal balance of that covered asset, as at the date on which the trigger occurred, and the covered amount. Hence part of such lower value will be covered by the institution, whereas the remaining part, if any, is divided between the State (90% net of costs and expenses) and the bank (10%). See www.hm-treasury.gov.uk/press_19_09_htm and the *Appendix*.

loans, residential mortgage-backed securities, collateralized loan obligation, commercial mortgage backed securities, collateralized debt obligation, held by the participating institution as at 31st December 2008. The Treasury has discretion to extend the scheme to other assets.

In order to participate in the programme, banks must, *inter alia*, commit to increase their total lending to worthwhile debtors, with monthly reporting to the Government, to adopt remuneration practices in line with the FSA code, and satisfy the highest international standards of public disclosure in relation to their asset books. Lastly, they must give access to the Treasury and its advisors to all the documents necessary to evaluate assets' risk.

The participating institution will continue to manage the covered assets. However in this regard there is a clause that may give the Government some control of the management of the bank: in fact, banks must adopt oversight, control and management procedures in respect of the covered asset pool that help to identify both risks and asset performance. The institution must report on those procedures to the Treasury on a regular basis, in a transparent and complete manner, and must manage the assets according to common agreed guiding principles The institution must monitor and manage conflicts of interest, both actual and potential, that might arise and must grant access to all relevant documents, books, records and other information to a Government representative.

Specific reporting requirements cover transactions with related parties, or that are not at arm's length, or that exceed a certain amount.

In the latter cases taxpayers' interest in the correct use of public funds is protected by giving the Treasury the power to approve such operations; the Government can also appoint an independent manager that, in prescribed circumstances, has the right to manage or supervise the management of some or all of the covered assets, including the case where aggregate losses exceed the applicable threshold specified in the agreement. The fee may be paid in cash or through the issue of

capital instruments by the institution. These may include a range of alternative capital instruments but are not expected to include ordinary voting shares at the outset.

The expression "at the outset" seems to envisage the hypothesis that the institution is in such a bad shape that it is not even able to repay the commission: should this be the case, the State might exercise its voting rights to participate actively in the governance of the institution.

The first bank that participated in the measure was RBS[221]: in return for the relief provided by the government, the bank committed to increase its lending activities by £25bn in 2009. Should the lending demand be particularly high, £9bn will be specifically devoted to mortgages and the remaining £16bn to business lendings[222].

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221 On that occasion the Government and the bank's managers agreed both on a fresh injection of capital and on the participation of the bank in the scheme.In the first case, the Government subscribed a capital increase of 13bn and committed to subscribe a 6bn capital increase at the bank's request. The shares subscribed will be preference shares in the distribution of dividends and will carry the option to subscribe for new shares.In addition, those shares will give voting powers over general meeting resolutions relating to the modification of any rights attached to the shares or the liquidation of the institution.

However, the Government's rights would be restricted if it were to it decide to convert its preference shares into ordinary shares: in this case it could only exercise its voting rights if the total percentage of votes held exceeded 75% of the total amount of those needed to adopt the resolution, In the second case, the Government would "protect" the assets of the institution up to a total of total £325bn, in return for a commission in cash of £6.5bn. In case of losses, RBS would cover a first loss equal to £19.5bn: should the total loss be more than the amount covered by the bank, the State would cover 90% of the remaining part, whereas 10% would stay with the bank. See Appendix 1. Summary of the expected terms of the B Shares, in RBS Announcement, Royal Bank of Scotland Group plc – HM Treasury Asset Protection Scheme, in http://www.investors.rbs.com/investor_relations/announcements/ReleaseDetail.cfm?ReleaseID=367753.

222 See, RBS *Announcement*, *Royal Bank of Scotland Group plc – HM treasury Asset Protection Scheme*, http://www.investors.rbs.com/investor_relations/announcements/Releas

4.3.7. The *Asset Purchase Facility*

In order to increase the total amount of money that banks could spend to support the wider economy, the Bank of England – by means of a special fund and under authorisation of the Treasury - would purchase banks' illiquid assets which might constrain their normal activity.

Eligible assets would be bought by the Bank of England Asset Purchase Facility Fund Limited, a BoE's 100% subsidiary that in turn would operate as an agent of the Fund. The measure would be funded by Treasury gilts and funds from the Debt Management Office and, although limited to the minimum, from BoE reserves.

The facility has been implemented by 2 *sub*-measures: the *Corporate Bond Secondary Market Scheme* and the *CGS bond secondary market scheme*

By means of the corporate bond secondary market scheme, the BoE may purchase small quantities of corporate bonds through reverse auctions. Eligible bonds are those issued by companies incorporated in UK, that actively contribute to the British economy and that carry their main activities there. In principle, bonds issued by non- bank financial institutions may be considered as eligible, whenever the BoE considers that the company significantly contributes to corporate financing in the UK.

Corporate bonds issued by building societies cannot be included in the scheme. Hence, eligible bonds must be conventional senior unsubordinated debt, with a minimum long-term credit rating of BBB-/Baa3, for a minimum amount of £100million. Eligible issuers must be market -makers in that market to facilitate their support activities.

Alternatively, by means of the CGS bond secondary market scheme – the Fund will stand ready to purchase bonds issued

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eDetail.cfm?ReleaseID=367753.

by institutions participating in the Credit Guarantee Scheme and might also consider the possibility of purchasing securities issued by those institutions. As in the case of the former measure, in order to facilitate the activities of market makers in supporting secondary market liquidity, eligible BoE counterparties would be those intermediaries that are market makers in such securities.

To sum up, we can see how the British intervention has involved both a direct injection of capital and macro-economics tools have been used. Indeed the Government subscribed for preference shares and used two out of the three tools of monetary policy that central banks have at their disposal: swap and purchase of securities and discount lending.
In this way the BoE aimed to mitigate credit institutions' liquidity demand, to allow them to meet their obligations and to use as collateral financial instruments that would not have been otherwise accepted, given the uncertainty about their value.

4.4. Spain: a plan for a country only marginally affected by the crisis

The Spanish financial system has not been severely hit by the crisis thus far, although banks are restructuring their balance sheets through participation in government programs. The relative strength and resilience of the system could be due to some of the Spanish prudential requirements, namely "dynamic provisions" and the rigorous consolidation rules on balance sheet vehicles[223].

223 Under the dynamic loan-loss provisions, banks are forced to set aside a certain amount of capital for any loans granted, weighted both on their specific risk and on more general potential losses that might arise. The main effect of this buffer should be the mitigation of credit pro-cyclicality, because it creates a cushion for bank's losses that exceeds what would be "strictly" necessary. As far as the consolidation rules are concerned, banks

More generally, the Spanish banks were less dependent for funding on securitised products and on the North American and British markets than banks located in other member States. Nonetheless, a few Spanish banks, i.e. Santander and BBVA, are dangerously exposed to such markets, having become sophisticated international players through recent expansion[224]. The Spanish government has chosen to intervene with measures to sustain banks' capital soundness by increasing their access to funding rather than by subscribing for preference shares, although this option has not been ruled out.

4.4.1. The *Plan Espanol para el Estimulo de la Economia Y el Empleo*

The Plan for stimulating the Spanish economy and employment[225] is divided into different areas relating to families, firm, employment, credit institutions, budgetary measures, and economic modernization. The financial part of the plan consists of four measures: the *Fondo de Adquisicion de Activos financieròs*, the *Avales del Estado a las nuevas emisiones de deuda de las entidades de crédito*, the increase of the coverage for the *Fondo de Garantia de depositos y dè inversiones* and finally the possibility for the government to order the acquisition of bonds issued by some credit institutions .

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have to apply the same accounting standards on an individual basis and on a consolidated basis and the rules are particularly strict in relation to risk transfer and control of SPVs.

224 The government has recently rescued an ailing savings bank, Caja La Mancha. This was due to the fact that, Spain had previously experienced a boom in the housing market, a sector where savings banks are particularly exposed. Today, there is a decline in that market and increasing mortgage defaults, which are threatening the soundness of these institutions. As a result, consolidation and concentration are expected within the sector.

225 Available at http://www.plane.gob.es/.

4.4.2. *Fondo de Adquisicion de Activos financierò*s (FAAF)

By means of the Fund[226], the government can purchase high quality bank assets in order to support credit institutions in access to funding. The ultimate objective is the re-establishment of normal credit flows to families and companies. The fund is administered, managed and led by the Ministry of the Economy and finance but is governed internally by an Advisory Board, an Executive Board[227], and a technical committee[228].

By virtue of the *Real Decreto Ley* 6/2008, that created the Fund, it has an initial allocation of 30bn euros and operates through auctions. Four auctions have been conducted thus far and 54 institutions (banks and cajas) had access to funding totalling more than 19bn euros[229].

The fund purchases only triple A assets for outright purchases and double A for repos: these assets are not considered toxic because they must have been issued after August the 1st 2007 in the first case and after October 15th 2008 in the second case.

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226 http://www.fondoaaf.es/SP/index.html.

227 The Advisory Board, chaired by the Minister, is in charge of the establishment of FAAF investment guidelines, the monitoring and evaluation of its activities, "deciding the assignment of FAAF asset yields, as well the product of its asset maturity or sales, and to approve the capital and operational budgets". Transactions involving the acquisitions, disposal, use and management of the financial assets of FAAF are the responsibility of the Executive Board as well as the preparation of the capital and budget proposal.

228 The committee is composed by the secretary of state for the economy, the director general of the Treasury and financial policy, the director general for insurance and pension funds, a representative of the State general legal services, a representative of the official credit institute, a representative of the state financial controller, with speaking privileges but no voting rights, Member of the Treasury and Financial Policy General Directorate, acting as Secretary, with speaking privileges but no voting rights.

229 http://www.fondoaaf.es/EN/EntidadesCredito.htm.

According to the government, taxpayers' protection is guaranteed because "the FAAF is designed in such a way that it is expected to be profitable and therefore it does not represent any foreseeable expense whatsoever for taxpayers, quite the opposite". Nonetheless, the provision increasing public debt by financing the fund does not seem to provide the necessary protection for taxpayers due to the uncertainty surrounding the actual value of the assets.
Eligible institutions are banks, credit cooperatives, and financial credit institutions domiciled in Spain, together with Spanish branches of foreign institutions.
Eligible assets include covered bonds (*cédulas hipotecarias*) and other types of securitised products rated and traded in organised markets.
The fund purchases the assets through auction mechanisms which should promote efficiency and competition in asset allocation. The fund should not conduct auctions after the 31st of December 2009.

4.4.3. The *Avales del Estado a las nuevas emisiones de deuda de las entidades de crédito*

The Spanish government was ready to guarantee new medium term debt issues of credit institutions whose request was submitted before the 3rd of December 2008; the issue deadline was 14 December 2009.
Eligible debt instruments are those simple non-subordinated bonds not subject to any other type of guarantee, excluding options and derivatives. In any case the minimum amount of debt issued must be 10 million euros per issuer. The issuer should pay a fee in return for the guarantee.

4.4.4. The *Autorización para reforzar el capital de las entidades de crédito*

By means of this measure the Minister of economic and financial affairs is authorised to order the acquisition of instruments issued by those credit institutions domiciled in Spain which need to strengthen their resources. Eligible securities would be bonds, preference shares and *cuotas participativas*, in case of saving banks. Thus far, no credit institution seems to have applied for this measure.

4.5. Italy: on the creation of *ad hoc* financial instruments

In line with the EcoFin decision, the Italian government has intervened with a set of measures aimed at providing a public guarantee for banks' liabilities, an asset-swapping facility and government subscription for future capital increases.

By virtue of Emergency decrees 155/2008 and 157/2008, transposed into law 190/2008, the Minister of Economy and finance is authorized to: *a*) Underwrite or guarantee future capital increases of banks in difficulty; *b*) Guarantee their medium term liabilities; *c*) Swap banks' securities or counterparties' banks liabilities for treasury bonds; *d*) Guarantee banks' funding operations on the Euromarket; *e*) Guarantee the Bank of Italy's lending in case of emergency liquidity assistance provided to ailing institutions; *f*) Guarantee deposits, beyond the minimum already established by law.

However the most controversial measure is without doubt the provision included in art. 12 of law 2/2009, which gives the Minister of finance the power to subscribe for a particular type of financial instrument, known as "Tremonti bonds", at the bank's request.

4.5.1. The *sottoscrizione e garanzia di aumenti di capitale*

According to art. 1 of law 190/2008, the Minister of finance is authorized until 31 December 2009 to subscribe for or guarantee a capital increase in case of undercapitalized banks. The conditions attached to the subscription are basically twofold: 1) the capital increase should not have been completed at the date of the decree and 2) the bank has drawn up a viable restructuring program lasting at least three years.

The State intervention must be at arm's length and is subject to the approval of the Bank of Italy, conditional on the suitability of the plan and the dividend policy decided by the general meeting. In case of subscription, the government will be given preference shares, with no voting rights. The bank retains the option of redeeming those shares subject to the agreement of the Bank of Italy. The approval by the Central Bank is conditional on the operation not compromising the solvency of the bank or, where the bank is part of a group, of the group as a whole. However, nothing has been stated yet, in relation to the rights the Minister could exercise as a shareholder. Should the participating bank decide to change the stabilisation program, the amendments must be authorized by the government and the Bank of Italy.
The law lays down no provisions regarding the State's exit options.

4.5.2. The *garanzia sulle passività* and the asset swap facility

By means of this provision, the Ministry of Finance can provide a guarantee for banks' liabilities, at arm's length until the 31st of December 2009. Eligible liabilities must have a maturity date of 5 years and must have been issued after the 13th of October 2008. In addition, the government can

guarantee the reimbursement of instruments traded by banks in order to have access to funds in the Euromarket. In both cases, State intervention requires the Bank of Italy to certify that the applicant bank has sufficient capital.
The asset swap facility should work as follows: the Treasury issues special purpose bonds called *Certificati di scambio del Tesoro* (CST-Treasury Exchange Certificates) that would be swapped for an equal nominal amount of certificates of deposit (*certificati di deposito*, namely a kind of time deposit) issued by interested banks. CSTs will have a final maturity date of 30th of June 2010, the issue price and the reimbursement price are equal to par.
In the asset swap case the public intervention would expire in six months, but can be renewed, without the issue of new CSTs.
As for the capital increase, there seem to be no banks that have received those types of government support.

4.5.3. The so called "Tremonti" Bonds

By virtue of law 2/2009, the government can, at the request of a bank, underwrite a particular kind of financial instrument, issued by credit institutions. The main characteristic of the instrument is that it is a hybrid subordinated debt instrument that carries no voting rights in the general meeting, but one which can be converted into ordinary shares and can be remunerated by the payment of dividends.
Credit institutions who are permitted to issue those bonds are Italian banks and bank holding companies whose shares are listed on the Stock Exchange. Those instruments are considered as tier 1 capital and can be redeemed by the bank, subject to the approval of the Bank of Italy who must be satisfied that the redemption would not threaten the stability

of the institution.
The remuneration for the State would be the notional interest on the bonds that is supposed to be very high (7-8%)[230], in order to remove any incentive for banks to abuse the measure and to protect taxpayers: however the actual payment is subject to the payment of dividends by the bank.
The government can only subscribe for those bonds if the overall operation is cost effective and is conditional on a waiver from the Central Bank allowing the inclusion of those instruments in tier 1 capital under the prudential rules.
Furthermore, the issuing bank must sign a MoU with the government where it commits: a) not to reduce the level of credit to SME's and households; b) to support homeowners in the repayment of their mortgages; c) to guarantee adequate levels of liquidity to the Government's creditors; d) to adopt dividend policies in line with their liquidity status; e) to adopt a code of practice, containing, *inter alia*, provisions on remuneration policies.
The final date of subscription by the state is the 31st of December 2009 and the State intervention should last no longer than 10 years.
The primary concern relating to *Tremonti* bonds is the fact that the State is seriously exposed to banks' risk without having voting rights, and it is "locked" into the bank because only the bank can exercise the redemption rights.
As in the case of the French TSS and UK preference shares, it will be difficult for the State to recoup its investment in the absence of dividends. However, contrary to what we have seen with the UK provisions, nothing is stated about banks purchasing their own shares: this can easily be a scapegoat to avoid paying dividends to shareholders (or bondholders in the cases under consideration).
Lastly, no sanctions are provided in case of breach of contract

230 In any case the interest should be 2 bp above that of 3 years treasury bills, and the 30% of the total amount of bonds issued by any bank should be underwritten by private investors. between those investors no more than 1/5 should already be a bank's shareholder.

by the banks.

4.6. Germany: a State deeply involved in saving its ailing financial system

As is well known, the German financial system was in severe trouble long before the crisis materialized in other EU member states due to severe financial difficulties of some credit institutions.

This article focuses only on the general measures adopted by Member States; it does not analyze individual rescue measures such as Hypo Real estate, Sachsen, West lb, IKB, some of which are still under investigation by the EC commission.
The first rescue package came into force in October 2008, when the German government created the Financial Market Stabilisation Fund (*Sonderfonds Finanzmarkt Stabilisierung, SoFFin*)[231] under the Financial Market Stabilization Act (*Finanzmarktstabilisierungsgesetz, FMStG*)[232]. This also contained provisions modifying the German Banking Act, the German Insurance Supervision Act and the German Insolvency Code. The Act has been supplemented by a subsequent Regulation[233].
In march 2009 the government emended the Act to introduce the possibility for the State to "nationalize" troubled institution. Commentators see this as a way to establish a "bad bank" in Germany.

231 http://www.soffin.de/index.en.php.

232 http://www.bundesfinanzministerium.de/nn_69116/DE/BMF__Startseite/Aktuelles/Aktuelle__Gesetze/Gesetze__Verordnungen/Finanzmarktstabi__anl,templateId=raw,property=publicationFile.pdf.

233 http://www.bundesfinanzministerium.de/nn_1928/DE/BMF__Startseite/Aktuelles/Aktuelle__Gesetze/Gesetze__Verordnungen/Finanzmarktstabilisierungsfonds__Verordnung__anla,templateId=raw,property=publicationFile.pdf.

4.6.1. The Financial Market Stabilisation Fund

The fund had an initial endowment of 400bln euros, of which 100 was funded by public budget.
It provides facilities for guarantees, recapitalisation and assumptions of risk positions. Where a guarantee is provided, the Ministry of finance can take out from the public budget credits up to 20bln euros, whereas 70 bln can be used for recapitalisation and assumption of risk positions. If the budget committee consents, an additional amount of 10 bln euros can be taken out..
SoFFin is a public agency which is not legally independent, established within the Central Bank, albeit supervised by the Federal Ministry of Finance and managed by a management committee composed of 3 members appointed by the Ministry of Finance in consultation with the Deutsche Bundesbank.
The managing committee submits proposals to the Steering committee, composed of representatives of the main Authorities in the area[234].

234 The managing committee submits proposals to the Steering committee, composed of representatives of the main Authorities in the area namely the Federal Chancellery, the Federal Ministry of Finance, the Federal Ministry of Justice, the Federal Ministry of economics and technology, and one representative of the federal states. One member of the central bank can attend the assemblies, with consultative functions only. The Steering Committee decides on stabilisation measures, questions of principle, matters of special importance, as well as on conditions to be imposed on the business activities of participating enterprises. Obviously, the Minister of Finance is politically responsible for the decisions of the Committee and is responsible for preparing the accounts .It is required to inform the board of the fund of all relevant facts. The board of the Fund can consult on fundamental and strategic questions as well as about long term developments in financial market policy. It is composed of members of the parliamentary budgetary committee. Decisions taken by the steering committee are based on the importance of the entity to the stability of the financial market, the urgency and the principle of effective and economic use of the fund.

4.6.2. The guarantee for new debt

The Fund can guarantee newly issued debt securities and other liabilities of financial sector and other enterprises which the government deems relevant. Eligible instruments (s.c. Notes) might have a maturity date of 5 years, but the guarantee expires on December 31, 2012. The maximum amount of the guarantee is determined by bank's capitalisation.
Eligible institutions are credit institutions, investment firms, investment companies, insurance companies, pension funds, operators of stock or derivatives exchanges and certain financial holding companies incorporated in Germany, provided they have sufficient capital.. German subsidiaries of foreign financial institutions are included. The decision to grant the guarantee is subject to the approval of the BaFIN (the Financial Supervisory Authority).
The guarantee is intended as unconditional, irrevocable and unsubordinated. Moreover according to the wording of the guarantee: "the guarantor may not set off any claims against its obligations under the guarantee and shall have no right of retention in respect of its obligation"[235].
From January 2009 to May 2009, 8 tranches of guaranteed debt have been issued, all of them with high quality ratings, since the major rating agencies have assessed positively the willingness of the German government to honour its obligations under the guarantee.
The provision of the guarantee will be remunerated at market rate and is also subject to the assumption by the bank of a viable business plan.

4.6.3. The recapitalisation measure

The fund can also intervene to bolster bank capital, subject to the same conditions. The sum of 70 billion (at aggregate level

235 See http://www.soffin.de/downloads/garantievertrag_muster.pdf.

for recapitalisation and assumption of risks) has been made available for the purpose of investing in any type of share, "silent participations" or other instruments, preferably included in tier 1 capital.
The maximum sum that can be granted amounts at 10 bln per institution, subject to the approval of the steering committee. The fund may hold and sell participations beyond 2012[236]. Acquired shares, silent participation rights and other rights must be sold in a manner which avoids distorting the market.
The guarantee is conditional on the meeting of certain criteria by the bank: *a*) the bank should be sufficiently capitalized; *b*) it must have a sound business plan; *c*) it must undertake to grant loans to small and medium-sized enterprises; *d*) it must adopt provisions on remuneration, including a prohibition on severance payments; *e*) no dividend payments must be made.
As far as remuneration is concerned, its validity should be assessed in terms of incentives and adequacy and has to be restricted to a level which is deemed "adequate": a salary of 500.000euros p.a. to any managing director or board member is deemed excessive. During the term of the stabilization measures, no incentives or other voluntary remuneration payments are permitted, unless these payments are compensated by a lower fixed remuneration and the overall remuneration is adequate.
Performance targets and remuneration based on economic performance may not be subsequently amended to the detriment of the enterprise. The financial institution seeking guarantees or the transfer of risk positions must have sufficient own funds which ensures that individual institutions are restricted in their use of the funds.
The institution that has mostly benefited from the funds is without doubt HypoReal Estate[237].

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236 http://www.soffin.de/leistungen_rekapitalisierung.en.php?sub=3.

237 On May 2009 the fund held the 47.31% of HRE and aimed to take it over completely by the end of June: on the 2nd of June, after an extraordinary shareholders meeting, an increase in capital of 2.96bln euros was approved. The increase has been subscribed by the Fund that today

Even if the HRE case is not seen as unique it is clear that the Fund can underwrite ordinary shares in a credit institution. Furthermore, although it was stated that the Fund would be active until the 31st of December 2009, we must recall that it can actually hold and sell its participations beyond 2012. Those circumstances make possible the involvement of the State in banks' capital for long time.

4.6.4. The assumptions of risks

The last option the fund can consider is the possibility of assuming risk positions (i.e. receivables, securities) from financial sector enterprises acquired before the 13th of October 2008. The fund would then transfer Government bonds to the institution.
The purchase price would be at book value and in any case the interest charged for the assumption of risk should cover the cost of funding by the Fund. Moreover the enterprise may still assume part of the risk where the creation of put and call options are involved..
The conditions for the fund to take over the risk are the same as for the provision of the guarantee except for two differences: 1) no commitment on the financing of SMEs is required and 2) the maximum amount of assumption of risk in any single entity is 5bln euros

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holds 90% of Hypo real estate holding. The government now stands ready to squeezing out the shareholders in order to proceed with its restructuring. Although the fund said it would offer 1.39 euros per share, the new shares must be issued at a nominal value of 3 euros. As can be seen in this case, the state is a "real" shareholder of the company; there are no provisions limiting its powers, nor obliging it to operate as a private market player.

4.7. Some critical reflections

As we have seen from the analysis of the bail out plans, they all tend to focus on rescuing the ailing institutions rather than allowing them to fail. In this respect, there is a major dispute between commentators as to whether it would have been preferable to set up a "bad bank" rather than to inject taxpayers' money into institutions whose true value is difficult to assess. Likewise there is no consensus on whether the final outcome of those plans will be the *de facto* nationalisation of the banks, whether it was in taxpayers' interests establishing temporary nationalisation plans or breaking up bigger financial institutions into smaller entities. But this debate is outside the scope of the article.

We would rather focus on the consequences for enforcement of the EU competition and State aid rules, and the incentive for the State and for the beneficiary banks to return to "normality".

It is well known that in "normal times" States would not have been able to help distressed institutions with such massive injections of aid without incurring the wrath of the European Commission. In fact, it is no surprise that the Commission in the so-called Banking Communication[238] allowed for a temporary exceptional regime relating to the application of State aid rules to measures taken in the context of global crisis. The Communication (hereinafter BC) raises no objection to the implementation of all the national bail out plans submitted for the Commission's attention.

Nonetheless, the approval by the EC is hardly unexpected given the circumstances: without State intervention, the crisis in the financial markets would have had a more serious and systemic impact on the real economy.

A brief description of the new temporary framework is

238 Communication from the Commission, *The application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis,* 2008/C 270/02 in OJ C 270/8 of 25/10/2008.

therefore needed[239].

The scope of the BC is pretty broad, given that it focuses on guarantees covering liabilities of financial institutions, recapitalisation measures, controlled winding up and other forms of liquidity assistance. The main principles expressed,

239 Other three EC documents are worth mentioning in order to have a clear idea of the new framework on State Aid: Communication from the Commission, *The recapitalisation of financial institutions in the current financial crisis: limitations of aid to the minimum necessary and safeguards against undue distortion s of competitions*, C(2008) 8259, in OJ C 10, 15/01/2009 so called "Recapitalisation Communication", the Communication from the Commission, *Communication from the Commission on the Treatment of impaired assets in the Community banking sector*, 2009/C 72/01 in OJ C 72/1 of 26/03/2009 also known as "Impaired Asset Communication", and lastly the Commission Communication, *The return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules*, in http//ec.europa.eu/competition, called the Restructuring Guidelines. The first is a document where the EC provide guidance for new recapitalisation scheme and opens the possibility for adjustment of existing recapitalisation schemes, following Member States', Ecofin Council and beneficiary institutions' requests on more detailed explanations on the compatibility of certain type of recapitalisation under art.87. Two main principles are spelt out: remuneration should be fixed close to market prices ("remuneration for State recapitalisations cannot be as high as current market levels (about 15%) since these may not necessarily reflect what could be considered as normal market conditions"), see Recapitalisation Communication, point (24), as a way to limit distortion on competition and the plans should contain incentives for State capital redemption such as to require an adequately high remuneration for the state and a pricing structure including increase over time and step-up clauses. See Recapitalisation Communication, point (31). The second one is a set of principles applicable to the asset relief measures. Basically they emphasize the need of full transparency and disclosure of impairments, of a coordinated approach to the identification of a basket of assets eligible and to their *ex ante* valuation, an adequate burden sharing of the costs related to the impaired assets between the shareholders, the creditors and the State and of coverage of losses incurred from the valuation of the assets at real economic value by the beneficiary bank. The Restructuring Guidelines are based on three principles: 1) return to viability of the bank in the long term without further aid from the State, 2) there has to be a fair burden sharing of the restructuring costs between bank and shareholders, 3) measures must be taken to limit distortion on competition in the member States.

that *mutatis mutandis* are applicable to all the above areas, are the following:

4) the aid must be non discriminatory, and
5) limited in time
6) the State support must be clearly defined and limited to what is strictly necessary
7) it must be appropriately remunerated by the private sector, in the form of fees, interest rates and commissions,
8) institutions must adopt rules of behaviour, relating to managers' remuneration, avoidance of undue distortion of competition, limitation on the size of balance sheets etc.
9) concrete support must be provided to the real economy.

If we go through the justification for these principles, we can observe how the main concern is the necessity to avoid moral hazard. This is perfectly comprehensible and justifiable: when the State intervenes to help institutions, the moral hazard problem is greatest.

However in our opinion there are two "small" details missing in the EC Commission communications: the rigorous expression of the "one time, last time" principle and the establishment of severe sanctions coming into force on the expiry of the plans, where there has been no exit from the share participations or from the guarantee.

According to the "one time, last time" principle, stated in the Community Guidelines on State Aid for Rescuing and Restructuring firms in difficulty[240], both rescue and restructuring aid should be granted only once, "in order to prevent firms from being unfairly assisted when they can only survive thanks to repeated State support" and because rescue

240 Communication from the Commission, *Community guidelines on State aid for rescuing and restructuring firms in difficulty*, in OJ 244, 01/10/2004, p. 002-0017.

aid is a "one-off operation primarily designed to keep a company in business for a limited period, during which its future can be assessed". Moreover "it should not be possible to allow repeated granting of rescue aids that would merely maintain the *status quo*, postpone the inevitable and in the meantime shift economic and social problems on to other, more efficient producers of other member states"[241]. This condition would not change in case of transfer of property of the recipient firm, or in the event of any judicial or administrative procedure shifting the ownership or part of the balance sheet.

Although it is likely that this principle applies in our case, because it is part of the general rules on rescue aid, nonetheless the Commission has left a door open to the risk of future moral hazard and protectionism problems, especially if we consider that such a rule, even when there where few doubts on its applicability, has been ignored by the Commission itself (i.e. in the Alitalia case).

The other condition lacking is that the Commission should have clearly stated that in order for a measure to be declared compatible with State Aid rules, there should be enforcement mechanisms both for breach of contract by the beneficiary institution and where an institution was unable to return to normal activity without the maintenance of public funds. In fact, the establishment of time limits for the availability of state aid is of little value when there is no specification of any kind of consequence following the expiring date.

This, coupled with the omission of the "one time, last time" principle, might, on the one hand nullify the Commission's efforts of avoiding moral hazard, and on the other hand cast a shadow over the future of competition in the banking sector across the EU. Two types of bank could emerge: banks that were able to survive on their own at the expiry date of the plan and were able to repay the aid, and others that continue to rely on public support without threat of sanction.

241 See R&R Guidelines, (nt.59), § 3.3.

Should this be the case, we would observe that, paradoxically, the most efficient banks risk being penalised, in terms of public confidence (would you prefer to go to a bank that is "guaranteed" by the State or instead to a "private" bank?), access to funding (would you prefer to lend money to a "public" bank or to a private one etc). In addition, the requested commitment to support the real economy does not seem to be particularly arduous, which, again, poses moral hazard problems[242].

Those conclusions might be more understandable if we recall the main features of the described plans and if we make some basic economic policy reflections.

In fact, the main conclusion is that in principle there is the will and the awareness by the State that support for any institution should be limited to what is strictly necessary and for a limited period in time. Nonetheless the plans are not designed for temporary use because in some cases the minimum period of guarantee is 5 years and any time limit always applies to the validity of the public measure: this does not mean that by that date the bank must repay the measure.

In addition, the asset swapped or protected stays in the bank's ownership (though this was inevitable). The problem is that, given that there is no concrete possibility of the true valuation of those asset in the medium-short term, the financial involvement of the State could last even longer than the time agreed upon. This in turn might provide the State with an incentive to act as if it were a private market actor, to bargain an additional form of remuneration for the guarantee, or, in case of subscription of bonds, to renegotiate the debt in case the bank is not able to repay the loan.

This remuneration/renegotiation might not necessarily be

242 If we look at the conditions attached to most plans, we see that hardly ever there is a benchmark over which the increase in lending activities should be calculated. In fact, we must consider that in the previous 2 years banks had already restricted access to funding. This basically means that banks should restore the amount of lending existing before the credit crunch.

represented by extra commissions or fees[243], but might be in the form of voting rights, which eventually could affect bank's governance and business decisions (i.e. on lending conditions). Should this happen, the State would have no incentive to leave the bank since it could exercise a form of control over the credit institution.

Conversely, where it proved impossible for the bank to repay the interest on the preference shares or to redeem them, the renegotiation would result, as has already happened with RBS, in the conversion of such preference shares into ordinary shares. As a shareholder, the State would have even less incentive to exit the bank and sell its participation.

Moreover, we must consider that where a high interest rate (e.g. 8%) has been fixed by the State it might be even more difficult for a bank to fulfil all its duties as paying the interest, paying dividends to its own shareholders and finally comply with regulatory capital requirements.

In addition, the uncertainty surrounding the restoration of normal credit conditions in the markets makes it even more difficult to assume that the State will not need to intervene again or continue to support the sector. That is why it would have been essential for the regular establishment of the *status quo ante* conditions, for the Commission to stress the "one time, last time" principle: if the State cannot exit "spontaneously", because of EC imposition it might be forced to leave the bank, though at bank's own risk: this in turn would mean introducing a market oriented criteria on which bank should survive on the market and which should not.

In such a case, two main concerns might arise: depositor protection and protection of taxpayers. As far as depositor protection is concerned, guarantee schemes are in place across

243 This comes from the assumption that renegotiation is a consequence of the banks' inability to repay the loan at Government's request or –should this condition be added in future reviews of the schemes –when it falls due. Hence it would be inefficient for the State impose extra fees, which would simply result in a further deterioration in the liquidity of the institution.

all the Member States. Taxpayers' protection is obviously a most sensitive issue, but if we assume that the State can participate in liquidation proceedings, ranking as a preferred creditor, we might consider this as a form of taxpayers' remuneration.

The actual enforceability of the plans seems to be unclear, because the powers given to the State to evaluate the true quality of banks balance sheet are not spelt out. In the US the Government is carrying out stress tests on the balance sheet of institutions participating in the State aid programme. By means of a stress test we can envisage the possibility for the Government to assess its real involvement in terms of money and time and to judge which bank should be saved and which should not, besides it might limit to the minimum the possibility a bank has, of cheating on its actual needs. In Europe, no such measure exists either at EU, or at national level.

Furthermore, the right of access to the necessary information relating to "protected" assets provided by a few Member States may not prove sufficient to evaluate the health of the company as a whole. This would carry the risk that, in the long run, those institutions will keep on operating in the market but there would be no real confidence in the reliability of their accounts. The enforceability of the conditions attached seems to be at stake as well. To give one example, consider the commitment to increase lending to the real economy, where two options seem likely:

i) the bank cannot in fact give loans to new borrowers because of legal constraints relating to the "creditworthiness of the borrower": in fact it is likely that new borrowers might not have high quality credit profiles while existing borrowers have seen a deterioration in their credit history; in this case the State cannot realistically enforce the commitment.
ii) Despite the above, the bank is forced by the State to grant additional loans: this would be likely to result in

loans given to low quality borrowers, which might in turn increase the possibility of future defaults.

Consider also the incentive for the bank to repay the loan: first, no sanctions are in place (e.g. liquidation of the bank, compulsory sell of some assets, spin off of some activities, managers' substitution, transfer of property to a private buyer, etc.). Second, the hybrid instruments subscribed (as TSSs and *Tremonti* bonds) give the State no voting rights or intervention rights in the general assembly, they may perpetual and early redemption is left to issuers' solo discretion. Those two features give the participating banks none or poor incentive to "behave" and repay the State.

Conversely, the conversion of preference shares may not be a big threat as well since it might not be so easy to realise: States should derogate to some basic company law rights, such as pre-emption rights and granting of exit rights to the old shareholders. Furthermore, the State might be forced to go to the market and launch a takeover in case the amount of shares resulting from the conversion would imply the control of the bank and the State had not a provision in place related to the nationalisation of financial institutions.

Lastly, as for the economic policy concerns, history teaches us that States have always been tempted to exercise control over financial institutions. The reasons are obvious, but are even more apparent today when State sovereignty is being undermined by the centralisation of financial regulatory powers in the European Commission's hands[244]. So it would not be surprising if we were to see interventionist covenants attached to guarantee provisions or share subscription contracts.

This is why the Commission should have been stricter in relation to banks behavioural rules, State involvement, enforcement and sanctions.

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244 The supervisory architecture suggested in the De Larosiere report and the prospected changes to the Capital Requirement Directive are recent examples of this trend.

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