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**THE RESTRUCTURING OF BANKS  
AND FINANCIAL SYSTEMS  
IN THE EURO AREA  
AND THE FINANCING OF SMEs**

edited by

Filippo Luca Calciano - Franco Fiordelisi

Giovanni Scarano

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# RIVISTA DI POLITICA ECONOMICA

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# Introduction<sup>◇</sup>

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[JEL Classification: G20; G30].

*Keywords:* banking; regulation; SMEs.

## 1. - The Regulatory Framework of Banks in the Euro Area

Banking has traditionally been one of the most heavily regulated industries in all countries: the existence of specific market imperfections (such as negative externalities in case of bank failures, asymmetric information) have always called for government interventions. Until the late 1980s, banking was strongly regulated in most countries to restrict competition (viewed as the major source of banking instability) through entrance barriers, opening of new branches, restricting bank activities, separating commercial and investing banking activities, etc. As a result, most banks were run both inefficiently and ineffectively. At the end of 1980, there was a general consensus to shift toward a new prudential-style of regulation, based on the establishment of objective rules (based on risk-weighted capital requirements) aiming to achieve both banking stability and efficiency. As such, structural regulation tools were removed by mid 1990s in most countries and the re-regulation started. However, in some countries (e.g. the US), the re-regulation was not timely implemented (or implemented at all). This is what the US Financial Crisis Inquiry Commission (2011, page *xviii*) reports:

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<sup>◇</sup> The introduction is the result of a close co-operation between the authors. However, Franco Fiordelisi has mainly contributed to section 1, Filippo Calciano to section 2 and Giovanni Scarano to section 3.

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«The sentries were not at their posts, in no small part due to the widely accepted faith in the self-correcting nature of the markets and the ability of financial institutions to effectively police themselves. More than 30 years of deregulation and reliance on self-regulation by financial institutions, championed by former Federal Reserve chairman Alan Greenspan and others, supported by successive administrations and Congresses, and actively pushed by the powerful financial industry at every turn, had stripped away key safeguards, which could have helped avoid catastrophe. This approach had opened up gaps in oversight of critical areas with trillions of dollars at risk, such as the shadow banking system and over-the-counter derivatives markets. In addition, the government permitted financial firms to pick their preferred regulators in what became a race to the weakest supervisor».

As an example of the slow re-regulation process, the Basel 2 capital adequacy framework became effective only after 10 years of discussions in January 2008 in the majority of developed countries (but not in the US). As such, it is not surprising that the financial system became riskier in the 2000s than in the past (see Rajan, 2006) and only the international banking system has been hit by such a deep financial crisis from 2007 onwards. This imposed on central banks to significantly increase the amount of liquidity in the financial system and on national governments to support banks using different tools (capital injections, subsidized loans, etc.). In the following years, this financial crisis gave rise to a corresponding public finance crisis, with many national governments of developed countries facing a significant increase in their budget deficit and national debt.

The Basel Committee (2009) describes the causes of the financial crisis as follows:

«One of the main reasons the economic and financial crisis became so severe was that the banking sectors of many countries had built up excessive on- and off-balance sheet leverage. This was accompanied by a gradual erosion of the level and quality of the capital base. At the same time, many banks were holding insufficient liquidity buffers. The banking system therefore was not able to absorb the resulting systemic trading and credit losses nor could it cope with the reintermediation of large off-balance sheet exposures that had built up in the shadow banking system. The crisis was further amplified by a procyclical deleveraging process and by the interconnectedness of systemic institutions through an array of complex transactions». To solve these problems, the Basel 3 framework proposed a heterogeneous set of new rules to enhance the stability of the banking system, which consist essentially in the introduction of:

- 1) two capital buffers to reduce procyclicality:
  - a) the “*capital conservation buffer*”, set at 2.5% of a bank’s risk-weighted assets to absorb losses emerging during periods of economic and financial stress; and
  - b) the “*countercyclical capital requirement*” (ranging between 0% and 2.5% of a bank’s risk-weighted assets, as decided by national regulatory authorities) to protect a banking system from risks related to an excessive loan growth;
- 2) a maximum leverage threshold, *i.e.* a minimum 3% *ratio* of high quality capital (Tier 1 capital) over the sum of total assets and off-balance sheet exposures;
- 3) two liquidity constrains:
  - a) the “*liquidity coverage ratio*” aims to ensure that banks maintain an adequate level of high quality liquid assets (which can be readily converted into cash) to withstand an acute short-term (30 days) stress scenario;
  - b) the “*net stable funding ratio*” designed to encourage banks to balance stable (medium to long term) funding sources with their corresponding medium to long term needs;
- 4) a new capital requirement for Globally Systemically Important Banks (G-SIB);
- 5) new counterparty risk capital requirements;
- 6) two new requirements (the Incremental Risk Charge and the Stressed VAR) for the market risk.

The Basel 3 framework has been implemented in most of developed banking markets as Europe, India, China and, partly, the US. Focusing on Europe, Government agreed to create a banking union (completing the economic and monetary union) and allowing for centralized application of EU-wide rules for banks in the euro area (and any non-euro Member States that would want to join). Specifically, a common set of rules for banks was set for all banks in all 28 Member States (*i.e.* a single rulebook), in particular Capital Requirements Directive IV and the Capital Requirements Regulation. The banking union ensures the common implementation of those rules in the Eurozone: as of November 2014, the European Central Bank (ECB) will directly supervise more than 6,000 banks (covering 85% of total assets) in the euro area in the framework of the Single Supervisory Mechanism. In addition, in case banks do end up in difficulty, the Directive on Bank Recovery and Resolution was also approved, *i.e.* a common framework to manage the process, including a means to wind them down in an



orderly way. The Directive on Deposit Guarantee Scheme also guarantee that the EU savers deposits (up to €100,000, per depositor/per bank) are protected at all times and everywhere in the EU.

## 2. - Incentives, Financing of Firms, and the New Regulatory Framework

Whether this new regulatory approach represents an overreaction to the financial turmoil, perhaps even a reaction driven emotionally, or else it is a too-long-awaited and essentially correct approach to bank regulation, is a difficult question to answer. And honestly, we do not pretend to have a definitive answer to this question. Instead we propose here some points of reflection, in the hope, if not to give an answer, at least to cast the problems in a correct framework.

### 2.1 *Incentives and Regulatory Dilemmas*

As economists, we believe in incentives. Mechanism design and the theory of incentives has taught us a lot in terms of how to induce an economic agent to act in a manner that can be considered socially desirable. From the point of view of a regulation authority, mechanism design tells us that it is almost pointless to say to a market player exactly what to do, because what it really does is, in most of the cases, unobservable. Even when the authority conditions on apparently observable actions, for example on financial or balance-sheet *ratios*, those actions can be framed, can be revealed to the authority in many different ways, and a market player could well pick the most misleading way to represent his action whenever it is profit-maximizing for it to do so. The history of EU competition policy is one of the most striking examples of this.

Instead, according to incentives theory, the regulation authority should give to market players the right *incentives* in order for them to behave spontaneously as the authority wants. Mechanism design has taught us this lesson for many years now.

Are we following this incentives approach in the set up of the new regulations for banks and the financial system described in the previous section? Probably not. Take for example the maximum leverage threshold requirement, where banks are required by the regulator to keep a minimum 3% *ratio* of Tier 1 capital (the so called high quality capital) over the sum of total assets and off-balance sheet exposures. Tier 1 capital is formed by common and preferred stock and retained earnings, plus a quota of Tier 1-equivalent financial instruments.

A basic question arises here naturally: is Tier 1 capital really observable? Of course it is not. A regulator could make a list of financial assets as detailed and precise as it wants in order to define Tier 1 capital, but still banks and law firms will work it out and find their way to abide by the requirement while using formally Tier 1 instruments that, in terms of intrinsic complexity and risk, would at a certain point turn out to be pretty different from what the regulator meant by *high quality capital*. This happened with Basel II, where financial innovation driven by the regulation itself allowed banks to use new sophisticated financial instruments to generate Tier 1 assets that turned out to be very risky instead. Why it should not happen with Basel III as well?

Furthermore, even assuming that a regulator can really observe and measure Tier 1 capital, why a 3% *ratio* would be the optimal number to impose? In other words, does a regulator has as much information as a bank about the bank business in order for him to be able to calculate what is the optimal level of leverage that the bank should maintain over time?

If one finds this argument against the current design of bank regulation compelling, she should take the alternative route of incentives. Here, however, we face some problems, which seem to be even more difficult to solve. Continuing with our example, the basic question is: What is the *right incentive* that a regulator should give to a bank in order for the bank to calculate and maintain spontaneously over time an *optimal leverage ratio*? The most immediate answer would be, simply, the market-participation incentive. That is, if a bank does not keep by itself some optimal leverage *ratio* over time, sooner or later it will go into trouble, and even worse, sooner or later it will fail. However, the current regulation seems to adhere to the mainstream idea that we cannot leave alone a bank that is running into trouble, especially a so-called systemic bank; we need to help it, and even to save it from running out of business, if necessary. The Directive on Bank Recovery and Resolution in some sense testifies of this approach.

Hence we have a regulatory dilemma: imposing specific leverage threshold numbers on part of a regulation authority may not work because those numbers are not fully observable and, even if they are, a regulator may not be able to calculate the optimal number to impose. But relying on incentives to induce banks to calculate and keep optimal leverage ratios by themselves may not work either, because one of the main incentive for banks to do so, the participation to the financial market, may not work completely. This participation is guaranteed by the regulator itself.

## 2.2 *Pricing of Risks and the Financing of Firms*

A similar regulatory dilemma arises in competition policy, where the task consists in regulating industrial firms. In competition policy it is clear that the so called full-list-approach, that is, listing all conceivable types of anticompetitive behaviour in order to forbid them, does not work; but on the other hand, the design of correct incentives for firms is a nontrivial and often very difficult task. A solution to the regulatory dilemma in competition policy has consisted in defining a different metric to assess anticompetitive behaviour: by anticompetitive, and hence forbidden, we mean every business practice implemented by firms that harms consumer welfare. And economic theory is able to identify those actions on part of the firms that harm consumer welfare.

Can we apply a similar approach to banking and financial regulations? Not so directly, because it is not so clear – it has not been extensively studied so far – what type of conducts on the side of banks and financial intermediaries directly harm consumer welfare. At least, this is not so evident as it is in the case of industrial firms.

However, we could tackle the problem in an indirect way. If one agrees that the real task that banks and financial intermediaries should fulfil successfully in order to improve social welfare consists in the correct pricing of risk – of different types of risks of course depending on the type of financial institution that we are considering – then a metric comes out naturally: the new regulatory approach is a right approach if it gives incentives to banks and financial intermediaries to price risk properly. It goes without saying that the determination of an optimal level of lending to firms on part of the banks is an immediate consequence of a correct pricing of risk. Hence if one wants banks to lend to firms sufficiently, she should want banks to price risk properly as a first instance.

Of course risk pricing is a difficult task per-se. Sometimes it is almost impossible, and often not univocal, as it is demonstrated for example by the fact that many different ways of assessing risks (and returns) of new investments exist in corporate theory. But net of this, it seems still possible to ask at least generically whether the new regulation helps banks in pricing risk or not.

If we consider the new rating methodologies for assessing the basic risks of lending that have been introduced with the various Basel regulations, the answer may be a cautious yes. At least, the assignment of credit rating to borrowers has become a standardized and common procedure for banks, at least for the bigger ones; a procedure much more based on objective parameters than before.

However, when we consider many of the regulatory features that have been exposed in the previous section, the answer becomes less simple. As an example, a “capital conservation buffer” set up at 2.5% of a bank’s risk-weighted assets will make the bank more efficient in pricing risk? Of course not, or at least not necessarily. Indeed, almost all the regulatory provisions described in the previous section are devoted to the task of making banks more solid and resilient in the face of a financial turmoil; that is, exactly in the case where banks fail in pricing risk. Because it is exactly these, the mistakes in pricing risks on part of the banks, that caused the financial crisis at the beginning.

On this ground, the new regulations not only will not help banks in doing their job properly, but will also protect them in those cases where they do their job badly. Exactly the opposite of what one means by a good incentive scheme. In other words, the new regulation will generate banks that are more solid in case of a turmoil, but that will not be more efficient in avoiding the turmoil itself. And maintained distortions in risk pricing will not help good borrowers to access the credit market easily.

The reasons why banks and financial intermediaries have failed and may continue to fail in the pricing of risks and hence in optimal lending to firms, and the possible regulatory remedies for this, is an issue that certainly requires further investigation. The papers in this issue will try to give hints and insights into this, and to present some of the non-banking financial instruments that are being supplied by the market for the financing of SMEs in particular.

### **3. - Review of the Papers**

In Section I, dealing with the European process of restructuring Banks and the financial system, Gabbi and Sironi, starting from the factors underlying the financial crisis of 2007-2009 and the subsequent necessities of regulation of the banking system, offer a critical analysis of alternative proposals to separate banking activities, for the purpose of preventing banks from being too big to fail.

Ferri and Neuberger claim that a banking regulatory bubble has been swelling. They start by observing that banking intermediation theory hinges on borrower-lender asymmetry of information while the keystone of the finance theory is the

presence of complete information. Next, they document how finance theory prevailed over banking intermediation theory in shaping banking regulation, justifying lower credit standards, systemic risk in banking, and macroeconomic debt overhang. Finally, they discuss actions to restore the consistency of banking regulation with the theory of banking intermediation.

Chiorazzo and Morelli, taking the opportunity of the ECB's fifteenth anniversary, offer some remarks on the conduct and performance of its monetary policy, focusing on the effects on Italian banks during the crisis. They argue that the ECB has pursued price stability through an accommodating monetary policy stance and has played a crucial role once the sovereign crisis erupted. They draw also important lessons for Italian banks, such as the liquidity stress that has highlighted a funding gap problem. To avoid an unsustainable fall of the credit stock, they call for both a resumption of domestic savings and the restoration of adequate profitability levels.

Bruni summarizes the issues which have been better understood while walking towards banking union. He discusses the implications for central bank independence and governance as well as for non-euro area countries, showing how the banking union appears to be an indispensable complement to the single currency for the single market.

Marzioni, Monti, Pandimiglio and Spallone focus on the way structural funds from the EU could alleviate the credit crunch on Italian SMEs. They show not only that the resources available to SMEs are scarce, but that they are also allocated in an inefficient way, and conclude that it would be very useful to improve efficiency and transparency, by adopting simpler procedures and reducing compliance costs.

Hönig deals with the changes in Europe's financial regulatory framework since the 2007-2009 financial crisis which had major impact on the banking system. She shows that the commercial and private banks have proved the least prepared for this new kind of regulation, as compared with the cooperative and savings banks, which managed well during the crisis and were best prepared for this new regulation.

Scarano analyses the corporate saving glut, which played an important role in the last financial crisis, showing that it is really worth looking into its structural,

cyclical or transitory nature for a single deposit guarantee mechanism, like that of the European banking union.

In Section II, dealing with the new tools for the financing of firms, Belke and Verheyen highlight the fact that SMEs, while playing a crucial role for innovation and economic growth, face special problems, such as information asymmetries, when trying to access funding. Their situation is further complicated by the European economic crisis, which led to a fragmentation of financial markets in the euro area. Thus the authors provide an overview of the current situation for SMEs and evaluate whether it should be up to the central bank to help the SMEs through their funding difficulties.

Baglioni, Monticini and Vaciago analyse the Italian credit crunch between 2008 and 2011, highlighting differences between the starting point and the ending point of this period. Subsequently, they browse alternative funding sources for the Italian corporate sector, as possible solutions for the credit crunch.

Also Rapacciuolo highlights that the difficulties of bank lending to Italian firms create urgent needs for new financial channels. New resources should come from private equity and mezzanine finance. A promising novelty are Mini-Bonds and network finance, which can open the corporate bond market to SME.

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SECTION I - RESTRUCTURING BANKS AND FINANCIAL  
SYSTEMS IN THE EURO AREA





# Breaking up the Bank: Alternative Proposals to Separate Banking Activities. A Critical Analysis

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*Since the onset of the recent financial crisis, discussions have been taking place around a set of proposals with a view to reducing the probability that ‘it could happen again’. Along with new rules related to bank capital and liquidity buffers, the hyper-speculative exposure of some financial players has stimulated a debate on the recommendations that commercial banks and depositors should be ring-fenced. Theoretical assumptions and pros and cons of these proposals are compared, to conclude that a mixed regulatory model based on prudential and structural rules could fail the purpose to make the financial system both safe and efficient.*

[JEL Classification: G18; G21; G24; G28].

**Keywords:** financial regulation; investment banking; financial crisis.

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## 1. - Introduction. The Regulatory Reaction to the Financial Crisis

The factors underlying the financial crisis originated in the US in 2007 are many, and several observers have tried to rationalize them. According to Taylor (2011), we should seek to answer three separate questions: what started it? What prolonged it?

Among the answers to the first question, we might list the following: 1) monetary excesses, particularly in the US, where the interest rates, during the early 2000s, were lower than the level that would have been consistent with the Taylor rule; 2) financial engineering, which gave rise to sophisticated and complex contracts; 3) mispriced concentrated portfolios, which facilitated the risk assumption of financial intermediaries who were confident they could manage (or transfer) it; 4) rating procedures and model risk, particularly for securitizations *tranches*, driving the underestimation of the probabilities of default.

In response to the second question (why did the crisis last so long?), the answers most frequently quoted are: 1) central bank policy-making, which treated the crisis as an illiquidity situation; 2) the behaviour of bankers, which must be considered a long-term strategy not easily changed overnight; 3) the interconnection of banking institutions, which determined a systemic crisis.

The intensity of the crisis was probably strengthened by the uncertainty among bailout schemes, where in some cases both equity and bond holders were protected (Bear Sterns and, to some extent, AIG), in other cases only bond holders were protected (Fannie Mae and Freddie Mac, Northern Rock), and where sometimes no-one was protected (Washington Mutual and Lehman Brothers).

The remedies to the crisis are held to be of three different categories: natural response or self-regulation; market pressure; public regulation. The regulatory issue and the debate on what might be an optimal regulatory framework is based on the idea that self and market regulations are scarcely effective, at least in reducing the likelihood of a new systemic risk within the financial system and that behind all the causes explaining the crisis, a lack of effective regulation must be recognized.

In December 2009, the Basel Committee published a consultative document (“Strengthening the resilience of the banking sector”) aimed at defining the guidelines of the new framework for a macro-prudential regulation, after the lessons learnt from the crisis.

The post-crisis regulatory regime was designed to include a significant “macro-prudential” component. The diagnosis of regulatory weaknesses was accompanied by a set of proposals for a new framework capable of reducing the likelihood of a new crisis and, above all, the use of taxpayers money to bail out financial inter-

mediaries. According to the Federal Reserve “*No one wants another TARP programme*” (Tarullo, 2011, page 2).

The new international proposals are articulated along the following lines: increasing quality, consistency and transparency of a bank’s capital base; enhancing risk coverage; introducing global liquidity requirements; supplementing risk-based capital requirements with a leverage *ratio*; reducing pro-cyclicality by promoting countercyclical capital buffers; introducing new rules aimed at minimizing the systemic risk. Along with these proposals, a debate arose on the role played by investment banks in the financial crisis and on the ways to avoid the banking system to be involved in a systemic collapse.

During the financial crisis, many governments found themselves facing a dramatic trade-off: let big, systemically important banks fail, or bail them out. The failure of a bank could prove particularly severe and damaging for the entire economy in the case of “systematically important financial institutions” (SIFIs). Indeed, the failure of a bank can generate a contagion effect to other financial institutions in two ways: through direct exposure to the failed institution and through a loss of confidence in the financial system in general. Both this phenomena are particularly severe in the case of a SIFI, which then becomes “too big to fail” (TBTF) and, also, “too interconnected to fail”.

Avgouleas (2010) identifies a TBTF financial institution as a bank whose failure would cause a breakdown in the functioning of the financial system. That is, introducing distortions into the financial system’s ability to facilitate orderly payments and to settle transactions between institutions and consumers in domestic or international markets. This could generate a failure of confidence in the financial system, leading to a chain of defaults.

TBTFs are large, interconnected financial institutions whose failures could have an impact on the financial system as a whole. The Group of Thirty (2009) defines SIFIs making reference not only to size but also considering three other dimensions: leverage, interconnectedness, and systemic significance of its infrastructure services, such as custody, clearing, settlement, and payment services. These services have a systemic importance as they require strong credit linkages between service providers and service users.

To avoid moral hazard and lack of market discipline, SIFIs should not be prevented from defaulting. This is why regulators and academics started to investigate and propose reforms that could make it possible to allow SIFIs to fail without excessive costs for the entire economy.

One possible solution to the “too big to fail” problem is to prevent financial institutions from becoming TBTF. This in turn can be achieved by breaking-up large, interconnected financial institutions and limiting by law their risk-taking activities. Following this line of reasoning, during the last few years a number of legislative proposals have been presented, and in some cases approved, in the United States, in Europe and in the United Kingdom. President Obama’s legislation for the separation of “utility” banking from “casino banking” is one example. The ring-fencing mechanism proposed by the UK Independent Commission on Banking and the universal banking model based on a holding structure suggested by the European Commission are other proposals we discuss below.

## 2. - Theoretical Frameworks behind the Debate

The theoretical foundations of the debate on optimal structure of banking by business line can be found both in economics and in finance.

Within economic theory, Lucas reformulate the classical view of economics in a new version that could claim to be at the same time uncompromisingly anti-Keynesian in method, theory and policy implications. The anti-Keynesian revolution had started in the late 1960s and was led by two schools of thought: the monetarism of Friedman based on partial-equilibrium Marshallian foundations and the school of Phelps advocating rigorous microeconomic foundations. Lucas reformulated Friedman’s monetarism providing new foundations in the general equilibrium model of Arrow and Debreu.

This approach implies that any optimal business mix will be driven, in the short as well in the long run, by market forces. Therefore, trying to calibrate the best banking portfolio mix within a regulatory framework would be useless and damaging. According to Fama (1980), banks are not regulated because they are special but rather they are special because they are regulated. Therefore banks suffer from a competitive disadvantage (cost of regulation) when compared with other less regulated market participants. If the market suffers from institutional differences, without any kind of structural regulation the market would be able to find the best allocation and mix of businesses. Moreover, the disadvantage due to regulation originates banking regulation costs which are expected to be transferred to customers (Fama, 1985).

The mainstream literature affecting more than others the regulation applied since the Eighties in the banking system was strongly affected by the intermedi-

ation theory (transaction costs, uncertainty and asymmetric information). This in turn is based on the idea that markets suffer from imperfections which open the opportunity for banks and other intermediaries to operate more efficiently (Klein, 1973; Pyle, 1971; Akerlof, 1970; Leland-Pyle, 1977). Therefore, regulation should be designed to manage inefficiencies and reach an optimal market allocation. Dombret (2014) believes, within this approach, that the issue on financial stability should be faced as follows: «Why not let the market determine which business models work and which don't? [...] the state certainly has to set boundaries to guide this selection process».

At the same time, these imperfections could affect banks' activity and need to be regulated in order to reach the equilibrium from which it slightly deviates. Particularly, the asymmetric information theory provides many clues not only for explaining the existence and the crucial role of banks in financial markets and in the economy as a whole, but also for explaining financial fluctuations and their recurring degeneration into serious, sometimes devastating, financial crises. The causal mechanisms, triggered by an increase in the interest rate producing a positive feedback with asymmetric information, are liable to trigger cumulative processes bringing about recurring fluctuations and, under particular circumstances, financial collapse.

In the more recent case of the financial crisis, the asymmetric information approach splits between two different basic explanations having radically different policy implications. The crucial divergences between them are rooted in a different understanding of the evolution of banking since the early 1980s and in particular of the crucial role that the process of securitization came to play. To simplify the analysis we focus on two polar approaches as represented respectively by Mishkin (the originate-to-distribute hypothesis, 2011) and Gorton (shadow banking system hypothesis, 2009).

The two main branches of the asymmetric information theory have radically different policy implications. The "hold-to-distribute" hypothesis points to the correction of the most significant shortcomings of the new model of banking mending the distortions of investment banking activities, securitization and shadow banking. The opinions differ, however, on which are the most effective and urgent measures to be adopted. Generally speaking they should go in the direction of an effective repression of shadow-banking and securitization and the request that all the transactions, including those that are currently off balance sheet, be rigorously registered in the balance sheets of banks.

While “shadow banking” is seen by the first point of view as a degeneration of the traditional banking system that in principle should be repressed, the second point of view sees it as the banking system of firms that should be controlled and regulated. In this view the banking panic of 2007 has originated not in the traditional banking system but in the shadow banking system. In order to understand this crucial point, the recent evolution of banking is put in a long-run perspective in the conviction that, unless we learn from history, we are condemned to repeat past mistakes. Gorton (2009) draws pregnant policy indications from the comparison between the recent bank panic originated in the US and those occurred in the same country before 1934. He distinguishes two periods: the National Banking Era (1864-1934) following the approval of the national Banking Act, and the Quiet Period (1934-2007). In the National Banking Era in the absence of a central bank, «bank themselves developed increasingly sophisticated ways to respond to panics [...] centred on private banks clearinghouses. [...] In response to a panic, banks would jointly suspend convertibility of deposits into currency [...] the clearinghouse would also cease the publication of individual bank accounting information [...] and would instead only publish the aggregate information of all the members. Finally, banks issued loan certificates [...] a kind of deposit insurance» (Gorton, 2009, page 19).

This response strategy aims at making the liabilities of individual banks more informationally insensitive while giving also a tangible protection to clients in the form of loan certificates. Though this strategy was well designed, it did not prevent panics but reduced their frequency and the impact of their consequences, in particular by preserving single banks from insolvency caused by specific runs. The Great Depression clarified that the self-regulation of the market system may succeed to avoid bank runs in tranquil times but not when the entire system is believed to be insolvent. Therefore in 1934 the crucial decision was taken of providing bank deposits with public insurance and of re-regulating the banking system according to strict rules. This new policy regime inaugurated a “quiet period” in US banking as a response to the Great Depression. The number of U.S. Bank failures, that had increased to the remarkable number of 4,000 per year just before this decision, suddenly dropped to a number very close to zero that was maintained until the recent crisis (apart from a moderate and short-lived spike from the late 1970s to 1994 (Gorton, 2009 figure *at* page 3). This depends not only on the introduction of public deposits insurance but also on the introduction of severe regulation of the banking system (*i*) by segregating commercial banking from investment banking (Glass-Steagall Act, 1933); (*ii*) by limiting the entry in

the market by rationing in each area banking charters; *(iii)* by introducing a strict supervision, compulsory balance-sheet disclosure, and interest rate ceilings on deposits (Regulation Q).

A last, and more heterodox approach, is based on neo-keynesian theories of banking. According to Minsky (1982) banks can decide to hedge their exposures, to take speculative positions, or, finally, to hold an hyper speculative position (Ponzi finance). The case of investment banks often move towards the last case. When the net worth breaches the perceived safety threshold, units try to recover the safety margin by deleveraging and fire selling greatly accelerating the vicious circle of contagion (Minsky, 1982; Vercelli, 2011). Therefore, the contagion process crucially depends on the structure and strength of the interrelations between the balance sheets of economic units. A considerable amount of literature has been published on contagion in financial networks. The theoretical underpinning is provided, among others, by Allen, Gale, 2000; Iori *et al.*, 2008; Nier *et al.*, 2007; Babus, 2009; Gai, Kapadia, 2010; Martinez-Jaramillo *et al.*, 2010; Acharya *et al.*, 2010.

In this case the policy implication should be to either ban the activities and the institutions speculative oriented or to compartmentalize them from banks more hedged oriented.

The second framework developed within the modern finance theory. The issue can be analysed as a portfolio management optimization problem, where the portfolio is made of business lines generating returns and covariances among each other. Baud *et al.* (1999) apply a market factor model to estimate the correlation matrix of the different business lines for US and European banks. The allocation problem is treated as an asset allocation among business lines problem with specific constraints. The implications of their study are: *(i)* the optimal portfolio is different by country; *(ii)* the cost of capital depends both on business line risk/return *ratio* and on the optimal portfolio chosen by risk appetite.

Data from table 1 (Baud *et al.*, 1999) show that, before the crisis, returns and covariances were compatible with the purpose to diversify banking portfolios.

Requiring a global increase of capital quality could generate a wealth inequality by business line. This is a case which can be experienced when a highly volatile business (such as structured finance and corporate market) requires capital from less risky business (e.g. retail banking) to allow the group to survive. It generates an asymmetric wealth transfer process. Moreover, during the last 20 years banks have increasingly issued hybrid capital instruments, providing the advantage of avoiding a different capital allocation by business line.



TABLE 1

## EXPECTED INPUT FOR CAPITAL ALLOCATION BY BUSINESS LINE

<i>Panel A: Returns and volatility</i>								
Business line	Europe			US				
	Returns		Volatility	Returns			Volatility	
Retail banking	11.0%		6.1%	18.0%			14.0%	
Middle-market	1.8%		5.5%	5.5%			5.4%	
Asset management	7.7%		5.3%	7.9%			15.0%	
Corporate banking	0.3%		4.3%	8.6%			26.4%	
Corporate market	4.7%		8.0%	18.0%			18.0%	
Structured finance	2.0%		36.0%	1.0%			9.2%	
Non-life insurance	0.9%		11.0%	8.5%			10.0%	
Life insurance	4.0%		4.2%	22.8%			11.6%	

<i>Panel B: Correlation coefficients</i>								
	Retail banking	Middle-market	Asset management	Corporate banking	Corporate market	Structured finance	Non-life insurance	Life insurance
Retail banking	1.00	0.63	0.57	0.83	0.87	0.91	0.87	0.80
Middle-market		1.00	0.31	0.69	0.44	0.64	0.60	0.46
Asset management			1.00	0.41	0.73	0.45	0.68	0.62
Corporate banking				1.00	0.53	0.94	0.75	0.71
Corporate market					1.00	0.69	0.75	0.68
Structured finance						1.00	0.76	0.73
Non-life insurance							1.00	0.91
Life insurance								1.00

Source: BAUD N. *et al.* (1999).

### 3. - The Proposals to Separate Banking Activities

Preventing banks from becoming TBTF or too systemically important to fail does not simply mean limiting their size, but also imposing barriers or separations among different banking activities. This could indeed reduce the cost of a failure, allowing different rescue programmes for different banking activities. The separation would, under certain circumstances, eliminate implicit government guarantees, at least for those banking activities that are not “vital” to the economy, and would protect retail depositors from the excessive risks taken by the bank in some specific activities. This would in turn reduce systemic risk and the cost and the impact of banks’ failures.

The rationale behind these proposals is relatively simple. In a model where banking activities are separated it should be clear *ex-ante* which are the activities “vital” to the economic system that have to be rescued and protected, and what instead can be left to market discipline. The part of a bank that offers a prime service to clients that do not have any alternative to banks and that take care of services that are fundamental for the proper functioning of the economic system (deposit taking, lending, etc.) should be rescued. Other services that banks offer to clients with greater choices and a higher capacity to evaluate the risks they are taking (*i.e.* proprietary trading, investment banking, etc.) should be subject to a different treatment. When a bank is fully integrated, it is very difficult for the regulatory authorities to quickly identify different business lines and treat them in different ways in the event of trouble. The bank is indeed a unique entity whose failure has a very high impact on other banks and on the economy in general. The policy makers are asked to decide whether to save the bank or to allow it to default. Business models where the business lines are separated *ex-ante* should allow governments to quickly identify which part of the bank has generated problems, what has to be saved, what can be sold to private purchase, what has to be liquidated. This should reduce the social cost of rescuing the “vital” parts of a bank. In general, smaller, less interconnected banks should be easier to rescue.

The separation of different activities and the introduction of a mechanism whereby the losses originated in some businesses would not affect the viability and stability of other businesses should also lead to a reduction in risk-taking and force banks to keep the risks associated with all their business lines under control. Finally, separated entities would hold more capital than a unique universal bank, which benefits of correlations lower than 1. This in turn would generate a positive impact on the stability of the financial system as it would increase the ability of absorbing losses when needed.

It is also argued that separation may increase competition and consumer welfare in the financial services industry. Following this reasoning, breaking up financial conglomerates would favour competition and reduce barriers to entry. It would allow the growth and development of small specialized financial institutions with a higher capacity to serve their clients and with lower conflict of interests. Smaller financial institutions would be better managed, given the more direct link between each individual effort and the final profit of the institution.

Advocates of the compartmentalization claim that regulation should not try to prevent failures but rather to limit their impact. The recognition that banking activities can also fail is crucial to avoiding excessive risk and to making market

discipline effective. What is important is to recognize that banking activities are different and in the event of losses they should be subject to different treatments. In order to reach this goal it is first necessary to give authorities a way to promptly identify different business lines. The argument in favour of separation is that by separating proprietary trading from the systemic functions carried out by banks, a possible failure of trading firms would not affect the stability of the financial system as a whole, reducing the issue to manage a bail out, particularly for large banks. Moreover, the existence of deposit insurance and of a lender of last resort would be optimal within a separated system because it would not create a moral hazard issue. Finally, according to Gambacorta, Van Rixtel (2013), reducing the average size of banks the captive regulation risk would be minimized.

To summarize, the separation of different banking activities should:

- eliminate or reduce the implicit government guarantee and the associated moral hazard effect leading to excessive risk-taking behaviour;
- make it easier to find less expensive solutions for financial institutions that experience significant and default threatening losses;
- make the financial system better able to absorb shocks through increased capital requirements for the different and separated activities.

Separation also has costs. These costs are mainly related to the expenses that financial institutions would sustain, directly or indirectly, to implement the separation model and to the inefficiencies that limits to banking activities could create for banks' clients.

Different models for implementing the "separation" between banking activities have been proposed.

- I. Legal and operational separation between commercial and investment banking, particularly in order to avoid the former can take financial exposures in proprietary trading assets. The "Volcker Rule" proposed by the US administration can be associated to this approach.
- II. Regulatory capital separation between business lines with different financial exposures and trading portfolios. Within this approach we can quote the ring-fencing model presented by the UK Independent Commission on Banking (ICB), also called the Vickers report, where different activities of a banking group are artificially separated and subject to different capital requirements. A similar model is also put forward by the European Commission report, the Liikanen Report.

### 3.1 *Legal and Operational Separation*

Proponents of the legal and operational separation model would maximize the protection of retail depositors at the cost of losing the advantages of universal banks.

Under this model, investment banks and commercial banks are two different entities completely isolated from one another, and in the event of a crisis they would be subject to different resolution mechanisms. A crisis in investment banking would not translate into commercial banking since there would be no possibility to move capital from one entity to the other. This should maximize depositor confidence and reduce the risk of bank runs. A radical implementation of this model (as already experienced within the Glass-Steagall period) would prohibit commercial banks to access capital markets, but this approach is generally accepted to be extreme and not implementable given the size of today's commercial banks. Complete separation would also mean the loss of the economies of scale and scope typical of universal banks, the termination of the one-stop-shop model (with an increase in costs for both retail and business clients) with the connected advantages for bank clients. Finally, the complete separation would prevent the possibility that some strong and solid business lines in some periods can subsidize other loss making business lines.

Section 618 of the Dodd-Frank Act of 2010 has reintroduced compartmentalisation in the US (also called Volcker Rule). The Volcker Rule bans insured depository institutions and their affiliates taking positions in proprietary trading; holding any equity, partnership or other ownership interest, and even sponsoring, in financial firms operating as hedge fund, private equity fund, venture capital funds, and real estate funds.

Basically, all the transactions that involve or result in a conflict of interests between the bank and its clients, customers or counterparties; result directly or indirectly in an exposure to high risk assets of high risk trading strategies are prohibited to banking entities.

The idea behind the Volcker Rule is that retail banks that benefit from government guarantees should not be allowed to invest only for the purpose of making profits of their own. Allowing proprietary trading to retail banks generates private benefits (profits for shareholders) but public costs (the losses are divided between taxpayers). As a consequence, an excessive risk is taken. The Volcker Rule is aimed at curtailing government guarantees and the consequences that this can create in terms of excessive risk-taking.

### 3.2 *Regulatory Capital Separation*

A second possible form of separation and regulatory strategy is to apply to financial services the typical model of other industries, mainly utilities. As in the case of the utility industry, the aim of regulation should not be to prevent failures but to ensure that vital services will continue to run in the event that problems arise. Regulators should protect the whole economy from the consequences of the failure or the instability of some institutions.

This implies defining, as narrowly as possible, the areas in which the interruption of activities is impossible and the business lines in which a failure would simply mean a change in the ownership and governance of the failed institution. The first set of activities should be subject to strong forms of regulation and constrained in their risk taking. The other activities should be left to competition, to the ability of the management and to market discipline.

Applied to the financial system, this means that financial institutions should be structured so that in the event of failure the “utility” or vital part can be readily separated from the other components of the bank.

A radical release of this approach is ‘full reserve banking’, where banks are required to hold enough cash funds to cover all their depositor liabilities. Deposits would only be invested in cash. For the proponents of this model, full reserve would lead to a reduction in lending opportunities, and this should help to avoid lending bubbles experienced during the last 10 years. However, a reduced lending capacity would strongly impact economic activity and growth opportunities.

Recently, a number of financial regulatory reforms have been put forward or agreed upon this rationale. The recommendations of the UK Independent Commission on Banking (ICB) chaired by Sir John Vickers, were reflected in a Treasury White Paper (HM Treasury, 2012) followed by the UK Banking Reform Bill, sent to the Parliament in February 2013 and expected to come into force in 2019. The core idea of this reform is the ring-fencing as a way to reduce the impact of failure of financial institutions on the economic system; the risk of systemic failure of financial institutions; and the risk-taking attitude of financial institutions. Similarly, on May 2013, the German Parliament approved a law which is in line with the Liikanen Committee proposals. According to the Liikanen Report, trading activities (proprietary and non-proprietary trading) exceeding €100bn in assets or more than 15-25% of the banks’ total assets should be transferred to a new entity that would need to hold its own capital.

According to the Vickers and Liikanen reform proposals, albeit not identical, banks should “ring-fence” their commercial banking divisions’ capital from their

investment banking operating entities to preserve against riskier financial activities. Retail and investment banking should be considered as two subsidiaries, legally and operationally separated, with their own capital. Legal separation is necessary to give authorities different resolution options for different parts of the banking group. Operational separation is needed to ensure that the retail banking arm will be able to provide services also in the event of failure of other lines. If the ring-fenced bank is part of a financial group, the economic links within the group should be clearly defined and all transactions between the ring-fenced bank and other parts of the conglomerate should be executed as towards “third parties”.

While the inclusion of deposit taking from individuals and SMEs and payment services within the ring-fenced area is widely accepted, other services are not so easy to classify. More specifically, some doubts have been raised on the following activities for ring-fenced banks: *(i)* deposits from high net worth individuals; *(ii)* deposits from large companies; *(iii)* lending to deficit units such as individuals and SMEs; *(iv)* lending to medium and large firms; *(v)* managing investment banking activities.

Since private clients often have more than one banking relationship, and they generally have experience and knowledge of banking, they should be allowed to put their deposit outside the ring-fenced banks as long as they certify that they understand the consequences of this choice and the associated risks. This type of client might also require a one-bank relation model. So they might wish to deposit their money into the ring-fenced area to benefit from the minimum safeguard ring-fenced banks offer. Ring-fenced banks might find this desirable since diversification of depositors could improve their stability and increase loss-absorbing capacity. However, in case ring-fenced-banks were allowed to take large corporate deposits, a significant proportion of corporate clients would probably choose to deposit to ring-fenced-banks. In this case, the options for rescuing retail banks without taxpayers support would decrease, and the benefits of ring fencing would be reduced. At the same time, investment banking activities would lose a significant proportion of the deposits needed to fund their activities.

In case of lending activities, if ring-fenced banks were prevented from lending to individuals and SMEs, a large amount of deposits (estimated by the UK Commission as around 1tn GBP) would no longer be available to provide credit to the economy. As a consequence, to reduce the economic cost of ring-fencing, credit provision to retail customers should not be prohibited to ring-fenced banks.

Lending to large corporate clients could also be positive for ring-fenced banks because they are allowed to take different deposit typologies, they should also be allowed to lend to different client typologies. Restricting the lending activities to

retail could indeed create a ‘retail lending bubble’ since a large amount of deposits are available for lending only to retails. What should be in any case prohibited to ring-fenced banks is lending to other non-ring fenced banks and financial institutions. Lending to financial institutions could create the case were a banking group might create a non-ring-fenced bank involved in “prohibited services” but funded by a ring-fenced bank. Since lending is not restricted to ring-fenced banks, a drawback of the model could be the credit supply ending up being offered outside the regulated sector and authorities losing control of lending activities.

The ICB report focuses on ancillary activities defined as “those activities necessary for the efficient provision” of mandated services. Examples of these activities are risk management, liquidity management and wholesale funding (Cerutti, Schmieder, 2014).

#### **4. The Debate about the Proposals and its Implications**

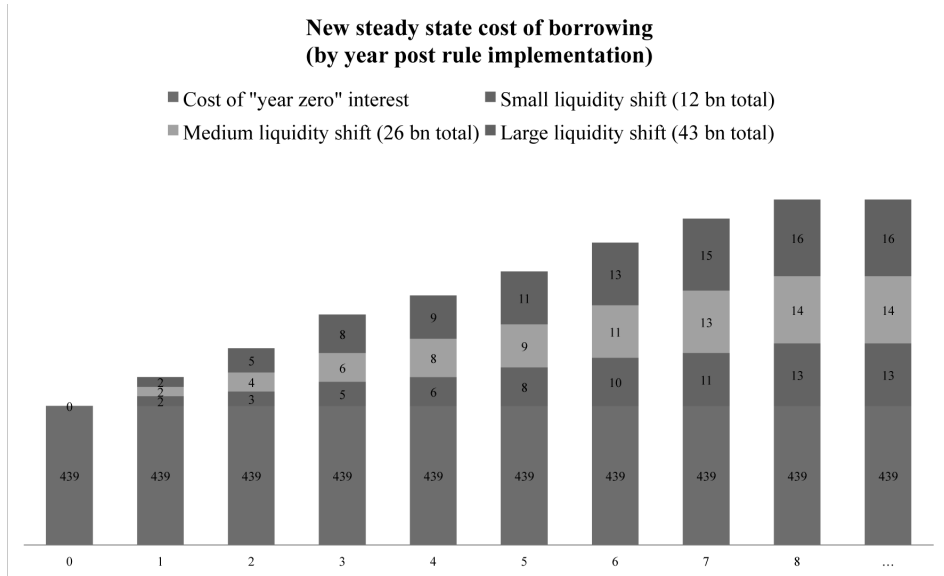
The debate on these proposals and on the way to minimize the systemic risk is strictly connected with the theoretical background described in section 2. Those against structural reforms believe that market forces are able (thanks to self-regulation or to prudential regulation) to calibrate a safe and sound banking system, coherently with Lucas and the mainstream economic and financial assumptions.

More specifically, the critics of structural reforms underline the following drawbacks.

- 1) commercial banking is not necessarily safer than investment banking, as proved by the crisis of Washington Mutual, Hypo Real Estate and the Spanish savings banks. According to Dombret (2014) «the question of stability ultimately depends on the sustainability of the business model. And a commercial bank that is highly leveraged and has an unsustainable business model can be as risky as any investment bank. In addition, breaking up the banks would reduce their potential to diversify»;
- 2) breaking up universal banks would not necessarily block the channels of contagion, since many pure investment banks, like Lehman Brothers, are interconnected with other players of the financial market, particularly because of counterparty exposure;
- 3) after the compartmentalization, investment banks would find it more difficult to ensure their liquidity, borrowing money from less stable sources of funding and becoming less safe. Moreover, the cost for issuers could increase, as simulated in the Graph 1;

GRAPH 1

## THE IMPACT ON ISSUERS AFTER THE INTRODUCTION OF THE VOLCKER RULE



Source: Oliver Wyman at the Joint Hearing to Examine the impact of the Volcker Rule on Markets, Businesses, Investors, and Job Creation, January 18, 2012.

- 4) even though breaking up the banks could reduce the investment bank risk attitude, not only large deposit banks would be protected but also medium-sized institutions could possibly be bailed out by risk-averse regulators (Calomiris, 2013);
- 5) it could be argued that some of the activities that would be banned to ring fenced banks – such as hedging services, underwriting, and other traditional investment banking activities – play a significant role in supporting the real economy. Moreover, it is difficult to distinguish proprietary trading and trading related to clients' needs (Goodhart, 2010);
- 6) a bank without diversification in different business units would concentrate its risk, increasing the risk/return *ratio*. Some of the proposals, particularly the Volcker rule, requires banks to tie each hedge to the risk of specific positions they have. In the absence of such specific type of hedge, the trading of derivatives instruments would be prohibited. However, banks often adopt “portfolio hedges”, designed to protect against broad risks such as interest rates increases or economic downturns. These type of hedges would not be allowed under the new regime (EBF, 2013);



7) the international regulatory arbitrage could become a problem difficult to face by individual national regulatory authorities (Houston, Lin, Ma, 2012; Muller, Uhde, 2013; Fidrmuc, Hainz, 2013).

The Gorton approach to shadow banking, described in section 2 and the neo-keynesian economists appear to be convinced that structural regulation could be an effective way to increase the banking system resilience. They respond to the previous criticisms as follows.

- 1) commercial banks could take speculative exposures but when they do so it is within the financialization process (Gabbi, Ticci, Vercelli, 2014), that could be directly observed with the increase of securitizations and more generally with the transformation from monitoring banks to distributing banks (Gabbi, Kalbaska, Vercelli, 2014);
- 2) separating investment from commercial banks could help to block the channel of contagion, shield the real economy and protect savers and taxpayers alike;
- 3) one of the purposes of the proposals is to reduce the proprietary trading books' size. Universal banks can draw on a subsidized source of funds to finance their investment banking activities. Separating commercial and investment banking would abolish this subsidy, align incentives for investment banks and force them to reduce the size of their business;
- 4) the business operations, often done within investment divisions, without direct connection to the real economy would be treated differently. They would be excluded from implicit government guarantees. Consequently, if things went wrong, they would not be rescued by the government at the taxpayers' expense – moral hazard would be reduced. Moreover, banks would become less complex and thereby easier to resolve;
- 5) the issue is not how to support the real economy with ancillary services, but to reduce speculation. Commercial banks are asked to avoid speculative exposures, that is when they help non-financial firms to hedge their risks, the derivative position cannot remain as a market risk, but it is expected to be hedged;
- 6) banks business units offer a diversification opportunity only when correlations between their portfolios is empirically low: the increasing interconnection between balance sheets reduces this chance. Moreover, according to Johnson (2013), capital regulation will not limit excessive risk-taking because trading firms want to become even bigger, more opaque, and more powerful. Complexity is not aimed at diversifying their portfolios, but at increasing opaqueness. When banks become so huge, the moral hazard is inevitable;
- 7) structural regulations should be harmonized within a common framework and, hopefully, supervised by unified regulatory bodies.

Moreover, other factors have been cited to support structural reforms. Admati, Hellwig (2014) underline that an advantage of having smaller and more specialized banks is that regulation and supervision can be calibrated to their portfolio of activities. For example, banks operating in different countries are expected to be subject to stricter capital requirements to manage the difficulties of cross-border resolution processes. Finally, to maintain a “level playing field” it is necessary to drive the largest banks to become smaller and easier to manage in case of failure.

The issue which has not been adequately found out is the coherence of a blended regulatory system with prudential and structural solutions. Since the two regulatory models are based on two completely different theoretical assumptions, it is likely that such a solution could fail for a lack of consistency.

## 5. - Concluding Remarks

During the last few years a number of regulatory reforms aimed at breaking up the activities performed by universal banks have been put forward and/or approved both at national and international level. These reforms are based on two main assumptions: *(i)* only a fraction of the different activities performed by banks, typically deposit raising and retail and corporate lending, play a crucial role for the proper functioning of an economic system and need protection from public authorities; *(ii)* some activities performed by global banks, typically proprietary trading, are riskier than others and are potentially threatening for the solvency of the entire institution.

Following this line of reasoning, the reform proposals are based on two alternative logics: *(i)* to limit the possibility for banks active in deposit raising and lending to engage in risky activities such as proprietary trading; *(ii)* to separate, either through ring fencing or through separate legal entities, the most risky activities from the ones that need to be protected for the proper functioning of the economy.

While both these mechanisms appear effective in isolating the key monetary and credit functions played by banks from the risks associated to other activities, they are not short of consequences. Indeed, the above mentioned reforms inevitably limit the diversification opportunities of banks' revenues, constraint banks' activity in securities markets thereby reducing liquidity, and introduce an unbalanced regulatory model, with a prudential architecture mixed with structural decisions. All these effects are likely to negatively affect the stability-inefficiency trade-off and, as a consequence, increase the cost of bank services – including bank lending – for customers.

Finally, going back to the above mentioned underlying assumptions, one should wonder what are the true riskiest activities performed by banks. The recent financial crisis has been induced by a significant financialization process, but the optimal regulatory model cannot be based on the danger that risky assets could be transferred to unregulated (or less regulated) financial firms. The financial crisis was somewhat induced by key regulatory issues, such as the inadequate priority assigned to liquidity and systemic risks. Nevertheless, the trust on the prudential model did not change. A blended regulatory model, with a portfolio of prudential and structural rules could become ineffective to minimize the probability “it can happen again”.

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# The Banking Regulatory Bubble and How to Get out of It

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*We claim that we currently live in a banking regulatory bubble. We review how: i) banking intermediation theory hinges on dealing with borrower-lender asymmetry of information; ii) instead, the presence of complete information is the keystone of finance theory. Next, we document how finance theory prevailed over banking intermediation theory in shaping banking regulation: This appalling contradiction is the true culprit behind lower credit standards, mounting systemic risk in banking, and macroeconomic debt overhang. Consequently, we discuss actions that, by restoring the consistency of banking regulation with the theory of banking intermediation, would make banking sounder.*

[JEL Classification: G01; G14; G21; G28].

**Keywords:** asymmetric information; relationship lending vs. transactional lending; efficient markets hypothesis; banking regulation inconsistencies; Basel II.

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## 1. - Introduction

Banking was the character in the global financial crisis. We know by now that the subprime mortgages – from which the crisis originated in the US – were only a minor component of a much bigger obnoxious drift in banking. The bigger drift took the shape of excessive global credit supply and low lending standards, particularly in the industrialized world.

Much of that was the result of the transformation of the bank business model. The common feature of that transformation was that too many financial institutions, and certainly the large ones, moved from a model anchored to traditional intermediation – raising (retail) deposit liabilities to make loans that would stay with the bank till maturity – to a business model geared to financial market activities – e.g., through the securitization of loans and reliance on (wholesale) market funding. That transformation of the business model reshaped banking on a global scale and it is immaterial whether the transformation took on the form of separate shadow banks, as it did in the US, or, as it happened elsewhere, the change occurred inside the regulated bank entities. So, from a retail and relationship oriented way of doing business many banks moved to a different way emphasizing wholesale operations, as well as transactional and financial markets oriented banking.

The implication of the change in the bank business model is that now credit is not only excessive but it is also less informed. That is because, differently from the traditional one, the new bank business model severely weakened the incentives for the banks to engage in screening and monitoring (ECB, 2008). Accordingly, the current problem in the rich countries is not only the general need for deleveraging but, even more so, the tragedy that regulators fail to recognize the difference between informed and uninformed credit. In other words, while a loan generated under the new bank business model should be a “commodity”, a loan produced along the traditional bank business model is certainly not a commodity since attached to it are personalized screening and monitoring. Thus, imposing rules that do not contemplate the difference between informed and uninformed credit is a mistake. The immanent consequence is that the logic behind regulation seems unfit to sound banking.

With the benefit of hindsight, we can now identify that a “regulatory bubble” was created in recent decades whereby banking was subjugated to logics belonging to the theory of finance and disregarding the appropriate theory of banking intermediation. Understanding this is essential to bring banking back to safety,

something that requires getting out of that regulatory bubble. Taking this step is absolutely necessary to bestow banks the right incentives to perform appropriately their true mission.

In the rest of the paper, Section 2 offers a selected review of the literature to pinpoint how dealing with borrower-lender asymmetry of information is the true basis of the theory of banking intermediation. On the contrary, we stress that the presence of complete information is the keystone of the theory of finance (Section 3). Next, in Section 4, we document how the theory of finance prevailed over the theory of banking intermediation in shaping banking regulation and contend that the appalling contradiction is the true culprit behind lower credit standards, mounting systemic risk in banking, and macroeconomic debt overhang. Consequently, in Section 5 we discuss actions that, by restoring the consistency of banking regulation with the theory of banking intermediation, would make banking sounder. Finally, Section 6 recaps the main thrust of the paper and outlines the possible difficulties obstructing such course of action that, however, is needed to restore financial stability and, possibly, avoid further perturbation to the socio-economy throughout the world.

## **2. - Asymmetric Information and the Theory of Banking Intermediation**

In the seminal paper “What’s different about banks?” Fama (1985) explains the comparative advantage of banks *vis-à-vis* capital markets by the superior capability of banks to provide debt with private information. According to the theory of financial intermediation, banks specialize in information production and loan contract design to prevent credit rationing of borrowers, where asymmetric information prevails (Stiglitz, Weiss, 1981; Diamond, 1984; Ramakrishnan, Thakor, 1984; Holmström, Tirole, 1993). The existence of banks is explained by their role of delegated contracting and monitoring on behalf of individual investors (Diamond, 1984): If there is no intermediary and no monitoring, the best available contract between a borrower and lenders would be a debt contract which involves expected liquidation costs that are necessary to provide incentives for repayment. However, liquidation is potentially inefficient. A costly liquidation may be prevented if the lender can monitor the borrower’s business, but monitoring is costly, especially if duplicated. By delegating monitoring to an intermediary, duplicated monitoring can be prevented, but the intermediary’s information obtained from monitoring is private, i.e. not publicly observable. This private information causes

delegation costs, as the intermediary must be provided with incentives for delegated monitoring. If the delegated monitor issues unmonitored debt, which bears liquidation costs, the delegated monitor is a bank, which borrows from small investors, using unmonitored debt (deposits) to lend to borrowers (whose loans it monitors). While diversification is the technology that makes monitoring of deposit contracts unnecessary, monitoring of loan contracts is necessary (Diamond, 1984; 1996). To carry out its task properly, a bank must hold the loans it originates until maturity (“buy-and-hold”). If it instead anticipates selling these loans, its incentives to screen loan applicants, to design the loan contract properly and to monitor borrowers during the life of the loan will diminish (Pennacchi, 1988; Gorton, Pennacchi, 1995). If it sells the loans and transfers the monitoring and enforcement to a third party, the monitoring costs would be duplicated, costs of transferring ownership would arise and the bank’s private information would create adverse selection of which loan the bank chooses to sell (Diamond, 1984, page 410). Also, banks must diversify risks from monitored lending and avoid risks from unmonitored lending. «Unless a risk is intimately related to their monitoring task, banks should avoid risks that are not diversifiable unless the bank can remove the risk from its balance sheet through another (swap or futures) transaction» (Diamond, 1996, page 64). This theory predicts well-diversified banks holding illiquid loans and with a low probability of default, despite their high leverage via deposit financing. Yet, indivisibilities in the information production technology build benefits of specialization, limiting the scope for diversification.

A bank’s ability to reduce credit risk by monitoring is magnified if the bank uses a relationship-based lending technology, gathering soft information through direct and repeated contact with the same borrower. The benefits of relationship banking arise from lowering agency problems by long-term contracts and information reusability over time (Boot, 2000). Contrary to typically sales-related spot contracts, relationship lending creates relational long-term contracts, where the institutional arrangements for unforeseen events and conflicts during the life time of the contract are more important than the definitions and rules provided in the beginning when the contract is concluded (Bolton, Dewatripont, 2005, pages 3, 489; Nogler, Reifner, 2014, page 3). A loan made in traditional relationship-based bank business models is not a commodity, since attached to it are personalized screening and monitoring and the private information accumulated in this way represents specific knowledge. Thus, such informed credits are not standardized transactions in the spirit of Williamson (1985). During the bank–borrower relationship, many events may occur altering the bank’s cost of providing the

credit as well as the borrower's ability to pay back. Once the contract is signed, the borrower and the bank are trapped in a situation of bilateral monopoly. The value generated by the continuation of the relationship represents a quasi-rent which needs to be divided between both parties *ex post*. Relationship lending thus constitutes an implicit contract, from which the borrower and lender benefit. On one hand, the borrower may benefit from a reduction of the loan rate over time, if loan rates are conditioned on prior performance (Boot, Thakor, 1994). On the other hand, because of the private information gained by the relationship lender, the borrower is locked in the relationship, which may be used by the lender to hold-up the borrower and increase the loan rate over time (Rajan, 1992).<sup>1</sup> However, the relationship bank may subsidize the borrower at the beginning of the relationship and use the lock-in situation later only to recoup the losses from this subsidy (Sharpe, 1990; Von Thadden, 2004). Such long-term social contracts have a long tradition in law. Roman law was reluctant to apply the existing sales law model to long-term lending relationships, «where the factual provision of goods and services and the “relation” during the life time of the contract are the core elements of the relation instead of the initial will of the parties» (Nogler, Reifner, 2014, page 3).<sup>2</sup>

As shown by many empirical studies, relationship lending helps to reduce financing constraints especially for opaque small and medium-sized enterprises by increasing credit availability, reducing loan rates or lowering collateral requirements.<sup>3</sup> Bharath *et al.* (2011) find that the observed reduction in the cost of borrowing due to relationship lending increases with the information opacity of the borrower, but that there are significant benefits of relationship lending even for publicly traded firms.

<sup>1</sup> Here, the difference between profit seeking banks *vs.* cooperative or savings banks could matter. For example, ANGELINI P. *et AL.* (1998) find no evidence of hold-up – *i.e.* loan rates increasing for borrowers engaged in longer-term relationships with their main bank – for member customers of the cooperative banks they study.

<sup>2</sup> The true element of Roman law was the *locatio conductio*, a rent contract although nearly never applied to money was at least applied to money-like fungible things (REIFNER U., 2014). For legal definitions, features and the historical development of credit contracts, respectively long-term relational contracts see REIFNER U. (2014), respectively NOGLER L., REIFNER U. (2014).

<sup>3</sup> See e.g. PETERSEN M.A., RAJAN R.G. (1994); BERGER A.N., UDELL G.F. (1995); ELSAS R., KRAHNEN J.P. (1998); HARHOFF D., KÖRTING T. (1998); DEGRYSE H., VAN CAYSEELE P. (2000); LEHMANN E., NEUBERGER D. (2001); BRICK I.E., PALIA D. (2007). For a literature review see DEGRYSE H. *et AL.* (2009).

Small, regional banks have a comparative advantage in relationship lending as they are closer to local market customers to gather and verify soft information (Agarwal, Hauswald, 2009). Soft information is difficult to quantify and transmit through the communication channels of large organizations (Berger, Udell, 2002; 2003), which in turn may reap economies of scale in the processing of hard information and specialize in transaction lending.<sup>4</sup> Thus, consolidation of the banking market may reduce lending to SMEs.<sup>5</sup>

Commercial banks that specialize in monitored long-term loans and fund them by deposits or short-term debt benefit the economy by allocating savings to productive uses and providing liquidity to depositors. However, this maturity transformation involves the risk of illiquidity, if deposits are withdrawn or short-term funding is not renewed, and if the long-term loans cannot easily be liquidated. The risk of a bank run, where many depositors demand their money at the same time because they fear that the bank will become insolvent, is a kind of market failure arising from asymmetric information. The resulting real economic damage can be prevented by government provision of deposit insurance (Diamond, Dybvig, 1983), as created in the US in 1935 following the Great Depression and in many other countries afterwards. However, this protective regulation involves moral hazard, providing the incentives for bank managers to increase portfolio risk. Thus, it should be complemented with prudential regulations such as bulk risk limits and minimum equity capital requirements. Limiting banks' exposures to individual counterparties helps to improve diversification, but does not suffice, because it does not prevent a bank from making many small loans that are likely to default at the same time because they are correlated. This is especially the case if bank diversification is limited by geographic restrictions to foster relationship lending to local borrowers (Admati, Hellwig, 2013, page 88). Higher equity capital reduces banks' insolvency risk both by its loss-absorbing function and by deterring excessive risk-taking of bankers at the expense of creditors or taxpayers. Since this also lowers systemic risk by contagion via asset sales,

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<sup>4</sup> There might be no disadvantage for large banks providing credit to opaque SMEs if they use transaction lending technologies well-suited to these enterprises, such as SME credit scoring, asset-based lending, factoring, fixed-asset lending, and leasing (BERGER A.N., UDELL G.F., 2006). But, BARTOLI F. *et AL.* (2013) find that relationship banking (RL) technologies cannot be entirely substituted by transactional lending (TL) technologies in SME lending. In fact, RL technologies produce more soft information which, in turn, lowers the probability of credit rationing.

<sup>5</sup> For empirical evidence see e.g. BERGER A.N. *et AL.* (1998); BONACCORSI DI PATTI E., GOBBI G. (2001) and AVERY R.B., SAMOLYK K.A. (2004).

minimum capital requirements are the most effective prudential regulation (Admati, Hellwig, 2013, page 94).

### 3. - Complete Information and the Theory of Finance

In contrast with the just outlined theory of banking intermediation, the theory of finance hinges on the assumption of market efficiency and postulates the availability and the exclusive use of public information. Well before the broader rational expectations revolution made its way into macroeconomics (Fischer, 1980), the center of the theory of finance had been occupied by the concept that prices are formed rationally reflecting all publicly available information. Once again Eugene Fama may be credited as one of the most important contributors. Writing his Ph.D. thesis at the University of Chicago Booth School of Business in the early 1960s, he developed the central concept of the Efficient Market Hypothesis (EMH; Fama, 1965; 1970).

Besides the usual utility maximization, the EMH postulates that agents have rational expectations. That is, on average they are correct (even if no one person is) and whenever new relevant information appears, the agents update their expectations appropriately. To be fair, the EMH doesn't prescribe that all agents be rational. All that the EMH requires is that investors' reactions be random and follow a normal distribution pattern so that the net effect on market prices doesn't allow abnormal profits to be made. Thus, any individual agent might be wrong about the market but the market as a whole is always right. As well known, the EMH is usually stated along three common different forms: weak-form efficiency, semi-strong-form efficiency and strong-form efficiency. In the weak form, the information set used by the agents consists only of information contained in past prices and returns. In the semi-strong form, the information set incorporates all publicly available information (which also includes past prices and returns). In the strong form, prices reflect all information that can possibly be known, including «inside information», (e.g., such as an impending announcement of a takeover or merger). The strong form is best expressed by Jensen (1978): «A market is efficient with respect to an information set  $\Omega_t$  if it is impossible to make economic profits by trading on the basis of  $\Omega_t$ . By economic profits we mean the risk adjusted rate of return, net of all costs».

An implication of the above is that under the EMH the investment analyst cannot “pick winners” by using publicly available information and therefore “ac-

tive” investment managers are wasteful. We can go even further, the individual investor should simply buy a “passive” index fund (e.g. mutual fund or unit trusts) which tracks a particular market index such as the S&P500 and has low transactions costs (e.g. less than 1% p.a.). Thus, according to the prevailing theory it is not clear why in reality we see so many practitioners such as investment managers whose skills should largely be redundant, given a competitive efficient market. Paradoxically, we could note with Grossman, Stiglitz (1980) that active managers do help ensure that information is rapidly assimilated in prices, so even though they may not earn excess returns (corrected for risk) they do help make the market efficient by their trading activities.

As synthesized by Cuthbertson, Nitzsche (2004), testing the validity of the EMH has typically taken three different routes:

1. Tests of whether excess (abnormal) returns  $\eta_{t+1}^p = R_{it+1} - E_t^p R_{it+1}$  are independent of information  $\Omega_t$  available at time  $t$  or earlier. So, the stock price and its return should be random walk variables, whose future value is impossible to predict *ex ante* different from zero. These are tests of informational efficiency and require an explicit representation of the equilibrium asset pricing model used by agents. This model has generally been identified with the Capital Asset Pricing Model (CAPM; Sharpe, 1964; Lintner, 1965; Black, 1972).
2. Tests of whether actual “trading rules” (e.g. “active” strategies such as buy low cap stocks, short-sell high cap stocks) can earn abnormal profits after taking account of transaction costs and the (systematic) risk of the “active” strategy. Abnormal profits are usually measured relative to a benchmark passive strategy (e.g. holding the S&P500): These tests mimic possible investor behavior and include explicit trading rules (e.g. stock-pickers), active strategies based on regression and so called ‘anomalies’.
3. Tests of whether market prices always equal fundamental value. These tests use past data and calculate fundamental value (or the variance of fundamental value of stocks) using some form of dividend discount model (e.g. the Rational Valuation Formula). One then tests whether the variation in actual prices is consistent with that compiled by the variability in fundamentals.

As it is well known, the equilibrium pricing model enshrined along the EMH, the CAPM, prescribes that each risky asset be priced according to its contribution to the diversification of risk in the market portfolio. That is, the expected return on risky asset  $i$  should be such that:

$$(1) \quad (ER_i - r)_t = \beta_i (ER^m - r)_t$$

where  $ER_i$  is the expected return on risky asset  $i$ ;  $r$  is the risk free rate of interest;  $\beta_i = cov(R_{i,t}, R_t^m) / var(R_t^m)$  measures the contribution to diversification given by risky asset  $i$ ;  $ER^m$  is the expected return on the diversified market portfolio;  $t$  is any time period. In other words, risky asset  $i$  should receive an excess return with respect to the risk free interest rate in proportion of the excess return gained by the diversified market portfolio where the proportionality coefficient is given by  $\beta_i$ .

Violations of type 1 tests generally embody a joint problem for the EMH together with the rational expectations hypothesis (REH) and it is not always possible to tell which of the two hypotheses is violated in reality. There is some evidence problematic for the EMH here like mean reversion in stock prices or that new information is not always immediately incorporated into stock prices. On the first point, some studies have pointed out how stock returns display mean reversion: Stocks with low returns today tend to have high returns in the future, and *vice versa* (Poterba, Summers, 1988; Fama, French K.R., 1988; Lo, MacKinlay, 1988). Hence stocks that have done poorly in the past are more likely to do well in the future, because mean reversion indicates that there will be a predictable positive change in the future price, suggesting that stock prices are not a random walk. On the second objection, although it is generally found that stock prices adjust rapidly to new information, as suggested by the EMH, evidence suggests that, inconsistent with the efficient market hypothesis, stock prices do not instantaneously adjust to profit announcements. Instead, on average, stock prices continue to rise for some time after the announcement of unexpectedly high profits, and they continue to fall after surprisingly low profit announcements (Chan *et al.*, 1996; Fama, 1998). It should be stressed that all these anomalies pose problems not only for the EMH but also for the CAPM, and it is not easy to tell which of the two theories doesn't pass the test.

Violations of type 2 tests are typically associated with the evidence of market anomalies like the small firm effect (Reinganum, 1983), the run of the year effect (Ritter, 1988) or the Value Line Survey anomaly, where one of the most prominent investment advice newsletters has produced stock recommendations that seem to have yielded abnormally high returns on average (Black, 1973; Huberman, Kandel, 1990). However, the quantitative impact of these anomalies seems to be rather limited in size (Alexander, 1961; 1964; Allen, Karjalainen, 1999).



Violations of type 3 tests have been found, e.g., by Shiller (1981; 1989) and French (1986). Specifically, Shiller found that fluctuations in the S&P500 stock index could not be justified by the subsequent fluctuations in the dividends of the stocks making up this index. Though these findings were subjected to various critiques as being inconclusive (e.g., Cochrane, 1991; Schwert 1991), they were rather influential on the following debate.

The most severe blow to the EMH perhaps comes from behavioral finance whose main objective is to explain why market participants make systematic errors contrary to the assumption of rational market participants. If those errors are pervasive and persistent, they will eventually affect prices and returns, creating market inefficiencies. The types of inefficiencies that are usually studied by behavioral finance involve under-reactions and over-reactions to information as causes of market trends as well as of bubbles. Such reactions have been attributed to limited investor attention, overconfidence, over-optimism, mimicry (herding instinct) and noise trading. Furthermore behavioral finance studies also the asymmetry between decisions to acquire or keep resources, and loss aversion like when investors hesitate to sell stocks when this would cause materializing nominal losses (see e.g. Shiller, 2003).

Purportedly, there are two main roots of behavioral finance theory: the application of psychology to finance – also by recurring to the experimental methodology – and the empirical econometric literature identifying major contradictions to the prescriptions of the EMH. Regarding the first root, the progress started with Kahneman, Tversky (1979) and Tversky, Kahneman (1990) who brought from psychology to asset pricing studies the prospect theory, implying a violation of the expected utility theory and, thus, of the traditional principles of rational economic behavior. For instance, Benartzi, Thaler (1995), applying a version of the prospect theory, claim to have solved the equity premium puzzle, something conventional finance models find it difficult to do. Experimental finance applies the experimental method, e.g., creating an artificial market by some kind of simulation software to study people's decision-making process and behavior in financial markets. Regarding the second root of behavioral finance, the most vocal contributor has been Robert Shiller and his group of scholars whose contributions have been already referred to above a propos of the market anomalies difficult to explain for the EMH (Shiller, 2003).<sup>6</sup>

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<sup>6</sup> Incidentally, we cannot but notice that, given the intellectual antagonism between the two, it was somewhat mind-boggling to split the Nobel Prize in economics 2013 between Eugene Fama and Robert Shiller (together with the econometrician Lars Peter Hansen).

It is hard to predict whether the mainstream theory of finance – building on the EMH and coupled with the CAPM – will be able to withstand the criticisms that have only become louder with the global financial crisis started in 2007-2009 (Krugman, 2009). In spite of the answer to that question, what we can say for certain is that up to now the dominance has been granitic. Therefore, without loss of generality we can stick to the EMH as wholly representative of the prevailing theory of finance.

At this point, we should underline once more that, according to the prevailing theory, financial markets don't need private (soft) information as they work on the basis of public information only. Private information can, at times, count also for financial markets but only in the moment of price discovery (e.g., Maloney, Mulherin, 2003). Thereafter, that private information becomes public and risks become commodities. Accordingly, everything boils down to the benefits of risk diversification, as evidenced by the equilibrium pricing prescribed by the CAPM, something for which private info should not help. In fact, private information is already fully incorporated in the prices the market has determined as equilibrium prices.

#### **4. - How Finance Theory Prevailed over Bank Intermediation Theory in Shaping Regulation**

Neoliberal policies based on the view of complete financial markets led to a wave of deregulation in the 1970s and 1980s, when many of the rules that had been introduced after the Great Depression were dismantled. An anti-regulation ideology was coupled with an increasing political influence of banks which convinced politicians and regulators that markets worked well enough so that tight regulations were not needed or that banking regulation would impose costs on the real economy. This prevented for example an initiative in 1998-2000 to increase transparency in derivatives markets, something that would have been entirely justified by the collapse in 1998 of Long Term Capital Management, the largest hedge fund up to then (Lowenstein, 2001). The Commodity Futures Modernization Act, passed in 2000, exempted most over-the-counter derivatives from regulation (Admati, Hellwig, 2013, pages 96, 204, 325). The existing national regulations were an obstacle to the aim of global banking markets. To create a level playing field for internationally active banks regulators from major countries began to coordinate banking regulation internationally when they first

met in Basel in the late 1980s. Basel I, the Basel Accord of 1988, established the first international prudential regulation with minimum capital requirements, which began to be the main instrument of banking regulation. This was also the beginning of a banking regulatory bubble. While the Basel I agreement was only 30 pages long (Basel Committee on Banking Supervision, 1988), Basel II, its revision agreed in 2004 comprises 347 pages (Basel Committee on Banking Supervision, 2004) and Basel III, the second revision agreed in 2010, comprises 616 pages, almost double Basel II (Basel Committee on Banking Supervision, 2010; Haldane, 2012, page 9).<sup>7</sup>

This bubble in size does not necessarily reflect more regulation<sup>8</sup>, but for certain growing complexity and fine-tuning or even self-regulation by banks. Basel I defined five different risk weights from zero to 100% for credit risks of broad asset classes rather than individual exposures, so that regulatory capital requirements could be easily calculated using pad and pen. The regulatory rules only served as a backstop to banks' own risk assessments, which should be supported, but not replaced, because they could not capture "every raindrop" (Haldane, 2012, page 8). Thus, Basel I is still consistent with the theory of banks as delegated monitors that specialize on credit risk assessment of the loans they provide and hold.

The bluntness of the Basel I risk weights was increasingly questioned and arbitrated, when banks created new credit and market risk models in the 1990s. In 1996, the Market Risk Amendment (Basel Committee on Banking Supervision, 1996) introduced the concept of the trading book and allowed banks for the first time to calculate regulatory capital against market risk using internal models. In 2004, internal credit risk models were allowed to calibrate credit risk, both with the agreement of Basel II for international banks and a ruling of the SEC for US investment banks.<sup>9</sup> This created the incentives for banks to upgrade

<sup>7</sup> This refers to Basel II + Basel II.5 + Basel III and covers liquidity, leverage and risk-based capital requirements (HALDANE A., 2012, page 9).

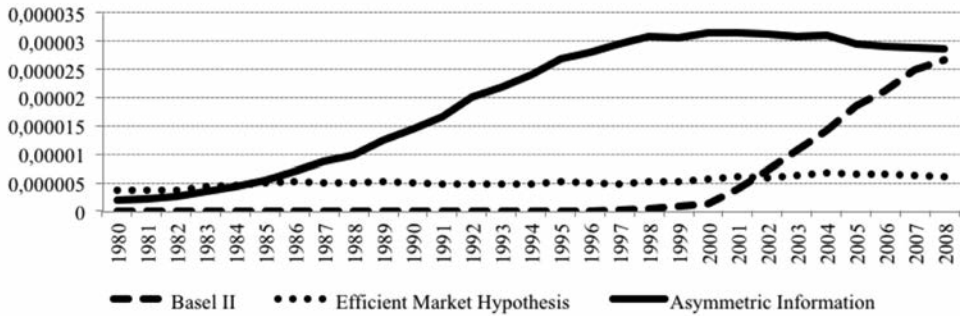
<sup>8</sup> Long laws cannot be equated with more regulation. In the case of bank law in Continental Europe most of the law text concerns exemptions. US bank legislation does not even accept any general principle and instead of regulating exemptions it regulates all instances where the law would apply. Lobbyism is thus hidden behind the text unlike our exemptive law. Roman law was the highest regulation of money matters you can imagine but would have had place on one page. We are grateful to Udo Reifner for this comment.

<sup>9</sup> This enabled investment banks such as Lehman Brothers to become highly indebted and vulnerable (ADMATI A., HELLOWIG M., 2013, page 204). Basel II came into force not before 2008. However, it has never been implemented in the US for banks insured by the FDIC, because the chair of the FDIC recognized the leeway the regulation provided to banks to economize on equity (ADMATI A., HELLOWIG M., 2013, page 274).

their risk management and design internal models to reduce their capital charges. «With hindsight, a regulatory rubicon had been crossed. This was not so much the use of risk models as the blurring of the distinction between commercial and regulatory risk judgments. The acceptance of banks' own models meant the baton had been passed. The regulatory backstop had been lifted, replaced by a complex, commercial judgment. The Basel regime became, if not self-regulating, then self-calibrating» (Haldane, 2012, page 8).

GRAPH 1

PERCENTAGE INCIDENCE OF THE OCCURRENCES OF "ASYMMETRIC INFORMATION", "EFFICIENT MARKET HYPOTHESIS", "BASEL II"



Source: [www.books.google.com/ngrams](http://www.books.google.com/ngrams).

Searching the huge library set up by Google using the package Google Ngram Viewer over the period 1980–2008, we find that the percentage occurrences of the expression “asymmetric information” were initially smaller than those of “efficient market hypothesis” (Graph 1). However, the modern theory of banking intermediation was being published at that time. The occurrences of the two were even by 1985. Thereafter, while “efficient market hypothesis” was stable, the percentage occurrences of “asymmetric information” kept increasing until 1998, since when they stabilized at about six times the occurrences of “efficient market hypothesis”. Of course, there was no occurrence of “Basel II” until 1998, when the discussion on reforming the Basel Accord initiated. However, it is astonishing to notice how the “Basel II” occurrences had skyrocketed to almost the same level as those of “asymmetric information” by 2008 in spite of the fact that “efficient market hypothesis” occurrences kept stable at a substantive distance. This evidence seems to suggest that the fame of Basel II grew up out of causes different

from its theoretical underpinnings. The question then arises: Why did regulation depart so evidently from (good) theory?

The financial crisis made evident that the Basel regime contained gaping holes. To close these gaps, large upwards revisions to the calibration of the Basel framework were agreed in 2010 with Basel III. Because of the movement to internal models and the replacement of broad asset classes by individual loan exposures the number of risk weights and calculations ballooned. This increased not only the regulatory burden for banks<sup>10</sup> (large banks having to estimate several thousand default probability and loss-given-default parameters across their banking books), but even more for supervisors, for whom the number of parameters to calculate regulatory capital requirements increased by another order of magnitude. As a consequence, there are serious concerns about the opacity of the Basel risk weights and their consistency across firms (Haldane, 2012, page 10; Le Leslé, Avramova, 2012). Rising opacity and regulatory complexity also with respect to the definition of regulatory capital jeopardizes the robustness of the regulatory framework and inhibits the task for investors to price banks' financial instruments (Haldane, 2012, page 10). Empirical evidence shows that the quality of the credit portfolio performance of European banks does not depend on the level and quality of bank capital (Reifner *et al.*, 2011).

Fine-tuning of capital regulation is based on an illusion, not only because it can be influenced and manipulated by banks, but also because banks themselves lack the information to measure them properly, as the risks are changing all the time. The approach poses too much confidence in our ability to assess probabilities and the occurrence of potentially large losses in the case of so-called tail events (Admati, Hellwig, 2013, pages 186, 314). The use of quantitative risk models in capital regulation as well as in derivative markets provides a sense of control for risk management that may make people less careful, similar to the introduction of seat belts that caused people to drive less carefully (Admati, Hellwig, 2013, page 73).

By increasing opacity, the regulatory bubble increased regulatory arbitrage by banks. The introduction of risk-based capital requirements by Basel II contributed greatly to the 2007-2009 crisis by incentivizing banks to concentrate in assets for which manipulation of risk assessments was relatively easy, such as mortgage-re-

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<sup>10</sup> FERRI G., PESCE G. (2012) document the exponential growth of the regulatory compliance burden for mutual cooperative banks in Italy between 2000 and 2010. They also argue that, since these costs have a fixed component, the ballooning compliance costs may be introducing hidden regulatory-induced economies of scale.

lated securities held in the trading book, as opposed to small-business loans in the banking book. It also created an artificial demand for AAA-rated securities and the incentives to create such securities, which «contributed to the complete breakdown of market discipline in mortgage lending and securitization and, later, to the complete breakdown of many markets» (Admati, Hellwig, 2013, page 185). Moreover, regulators and supervisors in the US and Europe allowed banks to circumvent capital requirements by creating off-balance sheet entities and they failed to limit the exposures to such shadow banks. The failure of regulators and supervisors to set and enforce proper rules is also due to regulatory capture (Admati, Hellwig, 2013, page 204) that grew along with the regulatory bubble.

All of this pushed banking into, *de facto*, lower credit standards and accumulated systemic risk. The great amounts of systemic risk that had been built emerged blatantly in the occasion of the first phase of the global financial crisis. In the years before the crisis, banks increasingly used market-based funding at the expense of deposits and replaced the buy-and-hold model by the originate-to-distribute model in their corporate lending business, whereby they originate a loan and sell or securitize a portion of it at the time of origination or later (Bord, Santos, 2012; ECB, 2008). With the rapid growth of the market for structured finance products in the US and Europe since 2004, the complexity of these products increased substantially, and the distinction between market and credit risk was more and more blurred. Benign macroeconomic conditions had caused a search for yield and the development of new capital market products, which offered the opportunity of increased revenues for banks and other market participants. The existing regulation did not mitigate the incentives for increased complexity «by significantly differentiating the prudential treatment of complex instruments from that of more standardised products» (ECB, 2008, page 19) and did not take into account that an adequate flow of information and a proper alignment of incentives between the various participants in the originate-to-distribute model are crucial for the efficient performance of the structured finance markets. The crisis made it evident that the use of this model involved conflicts of interest and misaligned incentives, over-reliance on rating agencies and a lack of transparency with regard to collateral and deal structures (ECB, 2011). The two principal-agent relationships (bank-borrower, depositor-bank) in the traditional bank business model, whose costs are minimized by delegated monitoring (Diamond, 1984) and relationship lending, were substituted by many bilateral principal-agent relationships between originators (banks, mortgage brokers), intermediaries (arrangers, collateral managers), investors and third parties (credit rating agencies, servicers, underwriters, trustees),

with possible conflicts of interest and agency costs due to asymmetric information. The fundamental agency conflict between originators (as agents) and intermediaries and/or investors (as principals) is a reduced effort of originators in screening and monitoring borrowers and in selecting the originated assets that are sold to intermediaries, implying a lower asset quality and performance. In the relationship between intermediaries and investors, conflicts of interest arise, if revenue maximization by intermediaries leads to securitization pools or structured finance transactions that are riskier than those desired by investors. The investors as principals are further harmed, if they rely on credit rating agencies, which have the incentives to expand rating coverage to complex and highly innovative structured products, to be too compliant with arrangers because being paid by the issuer, or to withhold relevant information to increase their revenues. Finally, servicers may make inefficient decisions if they are not adequately remunerated for e.g. modifying loan terms or liquidating assets. Both asymmetric information between the various actors and investors' over-reliance on credit rating agencies constrain the disciplining role of investors. "While in some cases this over-reliance could be attributed to loose diligence from the investors, the challenge of ongoing screening and monitoring of risks should not be underestimated, especially due to the insufficient information on the underlying assets through the life of the transaction" (ECB, 2008; p. 19). However, not only the investors as ultimate principals, but also the borrowers are harmed by the originate-to-distribute model, because the benefits of relationship lending and the possibility to renegotiate their loans are lost (Bord, Santos, 2012, page 23).

The valuation of some structured finance products relied heavily on market prices under the assumption of smooth and liquid markets, while substantial ratings downgrades showed failures of the originate-to-distribute model. As a consequence, the price discovery process broke down. Banks were forced to increasingly use models based on unobservable inputs and more and more assets moved from Level 2 to Level 3 of the marking to market taxonomy that had been introduced by the Financial Accounting Standards Board.<sup>11</sup>

But up to now there doesn't seem to be a full understanding of the implications of the deep responsibilities of regulation in fostering the build up of such fragilities. On the contrary, even though requiring banks to hold additional cap-

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<sup>11</sup> Level 1 indicates assets with observable market prices, Level 2 indicates less frequently traded assets that can be priced by reference to similar assets, and Level 3 indicates assets with unobservable inputs and model-based values (ECB, 2008, page 20).

ital, Basel III and the CRD IV package<sup>12</sup> have continued with the same logic of the past in terms of quantifying credit risk. Risk weights are set according to credit ratings, with the exception of government debt which is still treated as perfectly safe in the Eurozone and therefore has a zero risk weight. This shows that changes in credit risk are not adequately taken into account. Also the periodic stress tests that are conducted by regulators and supervisors in the US and Europe to determine whether banks have sufficient equity rely on quantitative models (Admati, Hellwig, 2013, page 186). Thus, risk measurement based on hard, historical information and diversification benefits – derived from the theory of finance – are still at the center of the regulatory approach while the benefits of specialization in banking – in gathering and using soft information to prop up screening to tame *ex ante* adverse selection via screening and *ex post* moral hazard via monitoring – are neglected.

The Basel II and III regulations neglect the soft information and implicit contracts of long-term lending relationships, as shown by two examples:

1. In its second pillar (Supervisory Review Process), Basel II sets rules for “better risk management techniques”, requiring among others that internal credit ratings should be an important tool in monitoring credit risk and that they should be used to identify and measure risk from all credit exposures (Basel Committee on Banking Supervision, 2004, page 734). This means that the creditworthiness assessment of an individual borrower has to be based on a scoring system with the use of hard data about the borrower. In Germany, the implementations of Basel II and III in the Minimum Requirements for Risk Management (MaRisk) even prescribe that loan prices have to be related to the credit score. This prevents an intertemporal smoothing of loan rates in long-term lending relationships. Since internal as well as external credit scoring systems from credit bureaus assess the creditworthiness only on the basis of past experience with the borrower, they favor credit history over credit future. This may lead to higher loan prices for whole borrower groups, such as younger entrepreneurs (Neuberger, R athke-D oppner, 2014) or to rationing of good borrowers whose quality cannot be observed by the use of hard data alone.

<sup>12</sup> The CRD IV package comprises the new EU capital rules for banks and investment firms set out in the fourth Capital Requirements Directive 2013/36/EU (CRD IV) and the Capital Requirements Regulation (Regulation (EU) no. 575/2013) (CRR), which came into effect on 31 December 2013 and 1 January 2014, respectively.



2. Following the principle-agent-theory of complete (explicit) contracts under asymmetric information, regulatory reforms of the originate-to-distribute model aim to improve the alignment of incentives and risk sharing among the various participants of the securitization chain by redesigning remuneration schemes and requiring retention of ownership. For example, the retention rule introduced in the EU by the Capital Requirements Regulation and in the US by the Dodd-Frank Wall Street Reform and Consumer Protection Act requires originators to hold a minimum of 5% of a securitized asset pool<sup>13</sup> to increase their efforts in screening and monitoring borrowers. It is doubtful whether this threshold will provide the right incentives (ECB, 2011, page 27). After the crisis, the demand for securitized products has been bolstered by massive government-related support (ECB, 2011).<sup>14</sup>

The increased reliance on the market mechanism and the Basel approach of risk-based capital requirements also contributed to the vast reach of the 2007-2009 financial crisis. Banking crises that happened before that date were mostly limited in scope and did not cross national boundaries. The financial institutions all over the world that had bought the mortgage-related securities were linked to each other by the market prices of these assets. Short-term funding from money market funds is more susceptible to contagion and runs than funding by deposits, because money market funds and their investors are not covered by deposit insurance (Admati, Hellwig, 2013, pages 65-66). The Basel approach of risk-based capital requirements increased the interconnectedness in the financial system by incentivising banks to use e.g. credit default swaps, which made them ignore credit risk and the credit insurer's ability to pay (Admati, Hellwig, 2013, page 185).

Another factor responsible for the size of the crisis is the "fair value" approach of mark-to-market valuation of securities according to the Anglosaxon accounting rules (US Generally Accepted Accounting Principles GAAP and International Financial Reporting Standards IFRS, adopted by the EU in 2003). The use of mark-to-market accounting fuelled the financial market bubble when market prices were above fundamentals as high valuation allowed investors to borrow more and increase leverage. When the bubble burst and asset prices fell below fundamentals, mark-to-market accounting forced excessive write-downs and margin calls leading

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<sup>13</sup> In the US only for of ABSs and CDOs, but not RMBSs (ECB, 2011, page 27).

<sup>14</sup> For example, securitized products used as collateral by the Eurosystem credit operations, GSE-supported issuance of RMBSs in the US or the guarantee program for certain securities in Spain.

to further fire sales of illiquid assets. Combined with the risk-based capital requirements of Basel II, mark-to market accounting led to pro-cyclical bank capital requirements (Roubini, 2008, page 6). By treating asset-backed securities as market risks, rather than credit risks, financial institutions were allowed to determine capital requirements on the basis of their own internal models. As these risks have to be accounted by the principle of mark-to-market, declines in market values in recessions (or, in the case of a market break-down, estimates of the market prices if the market did function) immediately enter the banks' financial statements and increase capital requirements, while rising market values in periods of booms or bubbles reduce them. In contrast, banks that followed the traditional buy-and-hold model of lending and used the traditional accounting for assets in the credit books could disregard fluctuations in market values and determine write-downs according to their doubts about future debt service rather than market prices (Hellwig, 2008, page 18).

Thus, the accounting and banking regulations based on finance theory were counterproductive, having impaired rather than improved cross-sectional, geographical and intertemporal risk diversification with the result of higher systemic risk. Instead of going back to the traditional bank-based rules, new macroprudential regulatory measures were agreed with Basel III that again follow the illusion of calculability of risks and fine-tuning. Counter-cyclical capital requirements shall mitigate the procyclicality of the risk-based capital requirements by forcing banks to build up capital in good times and reduce it in more difficult times. However, for an efficient counter-cyclical capital requirement to work, the regulator must be able to accurately predict the business cycle and to prevent regulatory imposed business cycles to occur (Hanson *et al.*, 2011; Reifner *et al.*, 2011, page 27). Experience of counter-cyclical capital requirements shows that a restraining effect may be relatively small, and the ability of banks to by-pass such requirements should not be underestimated (Reifner *et al.*, 2011, page 28). New global liquidity standards (Liquidity Coverage Ratio LCR and Net Stable Funding Ratio NSFR) shall reduce the potential for a future liquidity crisis by requiring banks to maintain higher and better-quality liquid assets. However, the combination of mark-to-market accounting and liquidity regulations has the potential to induce asset market downturns and simultaneous shortfalls resulting from interconnectedness of various institutions. Liquidity rules may also increase asset concentrations and correlation across certain types of assets by inducing banks to take similar actions (Reifner *et al.*, 2011, page 37; IMF, 2011). Systemic risks are even more difficult to quantify than the insolvency risk of individual banks,

which increases the potential of regulatory failure. The one-size-fits-all approach of the Basel framework to achieve a level playing field in international capital markets cannot accommodate the complexity of the financial system and the diversity of bank business models and is therefore not a robust framework for financial stability (Neuberger, Rissi, 2014).

## 5. - Towards a Sounder Approach to Banking Regulation

A sounder approach to bank regulation seems to require a total change of logic. Only a limited part of the banking assets – such as securities holdings – can usefully be treated as commodity risks. On the contrary, the bulk of bank assets – especially loans – are idiosyncratic risks whose quantification demands attaching to them not only the objective properties derived from hard information and statistical risk distributions but also the ability of screening and monitoring behind those loans. This seems to bring in the need to evaluate the relationship on the basis of which each loan has been made and is followed up.

A promising approach might require factoring into regulation the bank business model, since different bank business models will deliver different abilities to screen the loan applicants and monitor the granted loans.<sup>15</sup> For instance, Akhigbe, McNulty (2011) document that more intense monitoring makes banks more profit efficient. Bank business models do not change overnight and they could provide a reasonable gauge as to that ability. Of course, alongside with that a stronger and more interventionist empowering of supervision would also be needed. If loans are not commodities and we need to restore discretionary choice

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<sup>15</sup> See also the discussion by LLEWELLYN D. (2013) on how the transformation of the bank business model contributed to the Great Crisis. MICHIE J., OUGHTON C. (2013) argue for the benefits of diversity in banking and propose new approaches to measure such diversity. Building on CUEVAS C.E., FISHER K.P. (2006); COCO G., FERRI G. (2010) argue that stakeholder banks – not focusing just on profit maximization – provide a more sustainable lending mode. MASERA R. (2011) has been particularly clear on the danger of relying exclusively on minimum capital requirements along an automatic – hands off – type of regulation. Later on, MASERA R. (2012), he has been even more explicit regarding the importance of the banks' business model: «The very nature of the business model of the banks should provide a fundamental reference for evaluating risk. The intrinsic stability of a well managed traditional type bank is not recognized ... the banking model that better than others can lead to financial stability, growth and employment creation the economies characterized by the dominating role of SMEs might be the memorable casualty of the Basel system» (page 35). Similar considerations may be found in DE LAROSIÈRE J. (2010; 2011).

to the banker, to secure bankers' accountability supervisors should not lay back continuing to rely on purely mechanic quantifications of risk but ought to become more invasive (Ayadi *et al.*, 2012).

Even in the case we are not in the position to move to this alternative approach to bank regulation, following Haldane (2012) we should at least recognize that abandoning the risk weighted asset approach would make a promising first step.<sup>16</sup> Here the alternative is clear. One could move on relying more on the leverage *ratio*. At least two benefits could be envisaged. First, the leverage *ratio* approach would seem to be neutral in terms of the bank business model. Second, it would likely reduce drastically the costs of regulatory compliance whose ballooning is dramatically burdening banks with insufficient visible benefits.

We could even subscribe a more radical view, according to which a total change of logic is also necessary with respect to (1) the goal of regulation and (2) information versus regulation. Regarding (1), The Basel framework as well as the current financial services regulations in the EU aim to protect investors or depositors, being based on finance theory and the economic analysis of law developed by the Chicago School, according to which the only aim of law is to render investments profitable. The current EU Directives (Consumer Credit Directive, Mortgage Directive, different insurance directives, payment services directive, distant marketing of Financial Services Directive, MIFID I and II, IMD I and II) focus on the sale of financial services providing in particular extensive pre-contractual hard information and a technical harmonization of products and supervision, but neglect duties concerning the life time of the debtors who use these services, such as access, exploitation, cancellation, usury, debt enforcement, adaptation and continuity (Nogler, Reifner, 2014, page 41). Like the Basel framework, these EU directives are based on a false model of credit contracts. Both focus on the sales model and omit that according to the traditional theory of financial intermediation and relationship lending, the main task of banks is to channel savings to productive uses, which requires not only to make the investment sane and solid, but also to protect debtors as the users of capital from irresponsible lending in long-term credit contracts. From an investor's point of view it makes sense to help render the relation productive since it finally secures the total investment in

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<sup>16</sup> BLUNDELL-WIGNALL A. *et al.* (2013) state that a regulation based on the leverage ratio would improve on Basel II and III. In particular, they argue that Basel risk weighting and the use of internal bank models for determining them leads to systematic regulatory arbitrage that undermines its effectiveness.

society. From the debtors' point of view, there is no need for investments to become safe if investment as such does not have a societal justification. This justification can be seen in the ability of the debtor to "use" the labor of others ("capital") in a productive way. If this is so he can share his profit with the investor (interest) so that the investor gets an additional incentive to provide loans and save. If the interest has to be paid back from those elements of the debtor's fortune which have nothing to do with the process in which credit was taken out the whole credit relation is a failure from a macro-economic perspective. So all regulation should look at the debtor and his or her ability to make a productive (profitable) use of the borrowed capital.

Regarding (2), information and regulation are alternatives. Either you control markets through public information or you stir them by regulating products and prices. If you stir them with information you will put informational duties (provision of hard information at the time of contract conclusion) into a legal form. Such laws can be very lengthy (see Consumer Credit Directive 2008/48/EC), but in fact they do not "regulate". Therefore, they create a textual bubble, but a regulatory erosion.<sup>17</sup> What we argue for credit relations to protect consumers concerns the regulatory model. The informational market model provides information to people who have no need for it because it would either not help them (the poor) or they cannot apply it (because they lack financial literacy or the information is illusionary). Without the need for information, information is useless and paternalistic. The assumption that the core elements of long-term contracts for consumers is the information provided at the time when the contract is signed is empirically unfounded and neglects especially vulnerable consumers, justice and security (Nogler, Reifner, 2014, page 41).

To replace the sales law model of the Consumer Rights Directive of 2011 and the Consumer Credit Directive of 2008 by a model based on long-term contracts, aiming to «provide social justice related to human needs and life time, to which economic efficiency in the sense of profitability can only be a means» (Nogler, Reifner, 2014, page xxxii), an international group of academics has laid down principles of social long-term contracts in consumer credit (as well as labour and tenancy) law in the European Social Contract Declaration (EUSOCO, 2014).

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<sup>17</sup> Thus, the so-called consumer law in the EU is basically a market law, which reflects the informational model of consumer protection, but omits the market compensatory law in the model of social consumer protection (NOGLER L., REIFNER U., 2014, page 41; CARRILLO E.P., OLMEDO F.G., 2014; REIFNER U., 2014).

They require among others ensuring an on-going co-operation of the contract partners, restricting early termination, protecting the weaker party of the contract, ensuring the productive use of the rendered services, ensuring access, non-discriminatory prices, adaptation of the contract to changes in the social and economic circumstances, information during the life time of the contract and reducing social risks such as over-indebtedness (Nogler, Reifner, 2014, page xxi; EUSOCO, 2014). For credit contracts, a similar initiative on a more general socio-economic basis has been made by the European Coalition for Responsible Credit with its seven principles of responsible credit (ECRC, 2014).

## 6. - Conclusions

The view of banks and markets as purely and only substitutes rather than complements (as instead suggested by Allen, Gale, 2000) coupled with the belief that financial markets are more evolved institutions than banks<sup>18</sup> brought the complete markets approach typical of the theory of finance to shape banking and financial services regulation as well. Examples of that are: The application of the marking to market principle, the reliance on hard rather than soft information, and the protection of investors rather than borrowers in various ways (e.g., International Accounting Standards; rating-inspired regulation to determine risk weighted assets and capital requirements like in Basel II and III, EU Consumer Credit Directive of 2008). Its subjugation to the rules of finance pushed banking to operate in ways that relied more and more on hard information and less and less on soft information. Relationship banking was judged as devious and inefficient. Loans were treated as commodities whose intrinsic risk profile was believed unchanging even as those loans moved out of the bank's balance sheet being sold and bundled in securitized pools. Building on the banking intermediation literature, we have argued that "informed credit" – where a loan is created along a borrower-bank relationship in which the latter screens and monitors the former – is intrinsically different from "commodity credit" – where the loans are originated to be sold. We claimed that the passage from informed credit to commodity credit was one of the causes behind excessive credit creation coupled with lower lending stan-

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<sup>18</sup> See, e.g., GOLDSMITH R.W. (1966; 1969) and many followers thereafter. Among them it's worth recalling BRYAN L.L. (1988), a former McKinsey partner who laid out a kind of ideological to transform banking from the old and inefficient originate-to-distribute business model to the new and efficient originate-to-distribute model.

dards that led to the Great Crisis of 2007-2009 mostly at the expense of vulnerable borrowers.

Then the key question is: Have regulators learned the lesson of the crisis and reacted in appropriate ways to bring back sound banking? Our answer is a qualified no. Indeed, some of the measures introduced along with Basel III may foster bank stability. For one, asking banks to hold more and better quality capital should make them more resilient. However, the stability of banks depends primarily on the fact that they do their business properly. In that respect, not much has changed with Basel III with respect to the situation under Basel II. We have argued that, subjugating banking to the diktats of the theory of finance, the risk weighted asset approach is bound to generally divert banks from the business conduct most appropriate for them. In view of that, along the famous Zen inspiration of the finger pointing the moon, Basel III regulators appear to have focused on the finger – there was not enough capital in banks – rather than on the moon – the true culprit: (most) banks, also because of wrong regulation, were not doing their business properly.

In our view, regulators have largely missed the great opportunity of the aftermath of the crisis for revising the regulatory framework. Contrary to the experience of the early 1930s, this time there was no Pecora Commission to bring about the rapid stiffening of banking regulation (Krugman, 2010*a*; 2010*b*). The Dodd-Frank Act took long time to pass and seems to have been retarded and watered down in its enforcement. Also the process of coming up with Basel III and CRD IV was lengthy. In both cases it seems that the spirit of Pecora – *i.e.* bringing back commercial banks to do their business properly and limiting their exposure to financial market risks (at that time via the Glass-Steagall Act) – has been missing. The current Basel framework and EU financial services directives are counterproductive, because they focus on harmonizing regulations around the world or at the EU level, neglecting the diversity of bank business models and the role of banks to provide long-term relational contracts to the benefits of borrowers. While regulating any business will always have to come to terms with vested interests and powerful lobbying, our opinion is that progress towards sounder banking would accelerate if only regulators will adopt the “right” theory. Reviewing the theory of financial intermediation – as we have done here – would lead regulators to question their approaches of the past and quickly move on to take a much different attitude.

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# Fifteen Years of Single Monetary Policy in the Euro Area: A Bird's Eye View, Effects on Italian Banks During the Crisis, and Lessons to Draw

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*In the first fifteen years of its life the ECB has delivered price stability through an accommodative monetary policy stance. It has played a crucial role during the sovereign crisis. At the start of 2012, the severe liquidity stress, fixed through the LTROs, has signalled that Italian banks have to address their funding gap problem. To do it without hurting credit flows, a resumption of domestic savings is needed. Thus, the real lesson for Italian banks (and for Italy) is that the ultimate way out of the crisis lies in a quantum leap in the capability of generating higher profits (and income).*

[JEL Classification: E52; E58].

**Keywords:** ECB; monetary policy; LTRO; OMT; banks; profitability.

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## 1. - Introduction

January 1, 2014, the ECB has celebrated its fifteenth birthday. This policy paper draws on this special occasion to offer a number of scattered remarks on a single monetary policy (SMP) that has gone, in a short period of time, through many different phases (foundation, consolidation, financial and sovereign crises) and has seen unprecedented macroeconomic changes (the burst of a couple of asset bubbles, rapid and unbalanced Gdp expansions, double-dip recessions).

On these topics much ink has been spilled. A list, albeit incomplete, of crucial issues includes: *i*) how to manage a single monetary policy when price and wage rigidities are different from country to country and when labor markets mobility is low (see Mundell, 1961 and subsequent literature); or, put differently, how relevant for the effectiveness of monetary policy the one-size-fits-all problem can be and, more generally, the issue of asymmetries of macroeconomic shocks (see, among others, Miller and Sutherland, 1991; Baldwin *et al.*, 2010); *ii*) what is the best rule of conduct for a central bank in order to pursue its objectives (Taylor, 1993 and subsequent literature); *iii*) whether and how financial stability should be an explicit objective of the central bank (De Grauwe, 2012); *iv*) what has to be the relation between fiscal policy and monetary policy in a single currency area and, more specifically, how can be managed a common monetary policy in a context in which budgetary policies are essentially designed at national level; to what extent the euro system can or must act as a lender of last resort (Baldwin and Wyplosz, 2012); *v*) to what extent, provided that price stability is its primary goal, the ECB has also pursued economic growth stabilization (Malkin and Necho, 2011; De Grauwe, 2012); *vi*) how the monetary policy stance can affect the banks' performance and how important can be, on this front, the effects of the non-standard policy measures (Carpenter *et al.*, 2013).

This paper is not a technical one and it does not pretend to originally contribute to this vast amount of literature. In fact, its aim is reviewing, mainly through simple data inspection, a number of issues which have been at the heart of the debate in the past years. Accordingly, section 2 looks at the conventional monetary policy and attempts an answer at the very basic question, namely what general assessment can be made of the SMP performance with respect to the specific policy objective assigned (e.g. price stability<sup>1</sup>) and of the monetary policy

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<sup>1</sup> According to Article 127(1) TFEU: «The primary objective of the European System of Central Banks shall be to maintain price stability. Without prejudice to the objective of price stability, ./.

stance. The same section tries to understand if, when, and to what extent, beside its primary objective, the conduct of the ECB SMP has supported the business cycle stabilization in the different regions of the Euro Area (EA). Then we also analyse what have been the effects of the SMP on the European banking systems, and notably on the Italian one. Section 3 offers some data analysis on the effects of the unconventional monetary measures, with a special focus on the long term refinancing operations. Section 4 offers a short discussion of the lessons that must be learnt from the SMP experience, especially in light of the crisis.

## 2. - The Conventional Monetary Policy

The analysis of a dataset covering quarterly and monthly data from the ECB, FED, Bank of Italy, Eurostat and Istat for the 1999-2013 period, supports the following general impression: in its first fifteen years the ECB has been successful in delivering price stability. In achieving this goal, the policy stance has been essentially accommodative and, more importantly, it has been an example of progressive adaptation to the US FED policy scheme. The process of imitation of the FED model has probably been slowed, to some extent, by the influence of the Bundesbank culture.

We believe that such conclusions can be reached on the basis of simple data analysis. Graph 1 shows headline and core inflation from 1999 to 2013. With the exception of the Great Recession period, headline inflation has more or less fluctuated around the 2 per cent, and as a period average, it has been exactly equal to 2%: that represents, quite apart from any other consideration, a success<sup>2</sup>.

With regard to the monetary stance we again rely on simple indicators and compare (Graph 2) nominal short-term interest rate and nominal Gdp growth rate. With the only exception of the 2008-09 great recession period, when much

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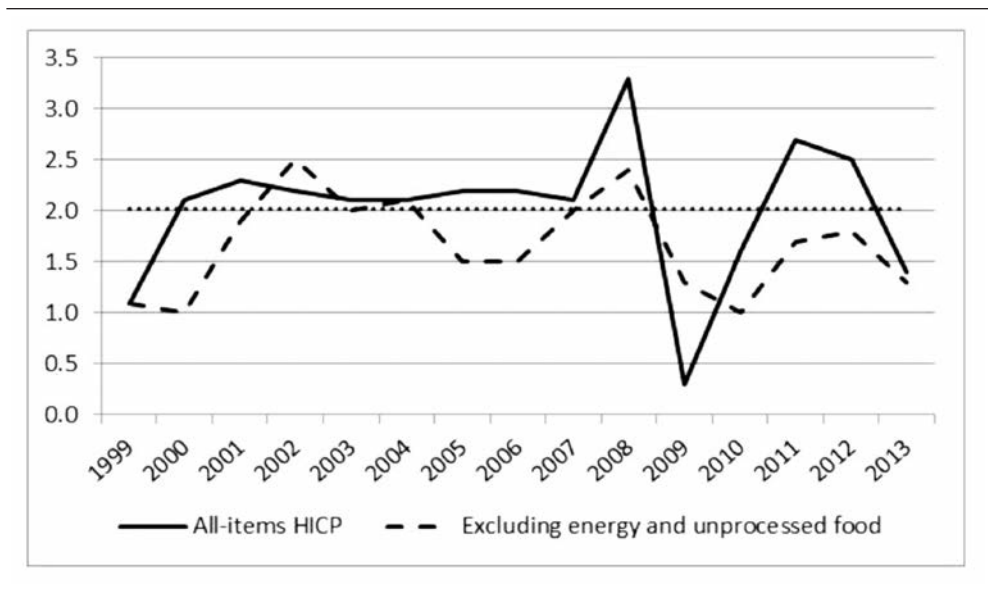
the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union». In addition Article 127(5) TFEU states: «The ESCB shall Article 3(1) TEU states: «The Union's aim is to promote peace, its values and the *well-being of its peoples*. (...)» and in Paragraph 3 it is written «The Union shall establish an internal market. It shall work for the sustainable development of Europe based on *balanced economic growth and price stability*, a highly competitive social market economy, aiming at *full employment* and social progress, and a high level of protection and improvement of the quality of the environment».

<sup>2</sup> The ECB objective has been defined as an inflation rate close to, but below, 2%. Over the reference period, inflation expectations have remained low and the dispersion of consumer price changes across EA member states has diminished.

lower interest rates would have been necessary to contrast the adverse cyclical conditions, short-term interest rate has always remained below nominal Gdp growth rate. This simple evidence supports the view that, all in all, the ECB monetary policy can be labelled as accommodative. Indeed, the accommodative stance seems to have mirrored, although less intensely, what has been registered in the US.

GRAPH 1

EURO AREA: INFLATION RATES (%)



Source: authors' computations on EUROSTAT.

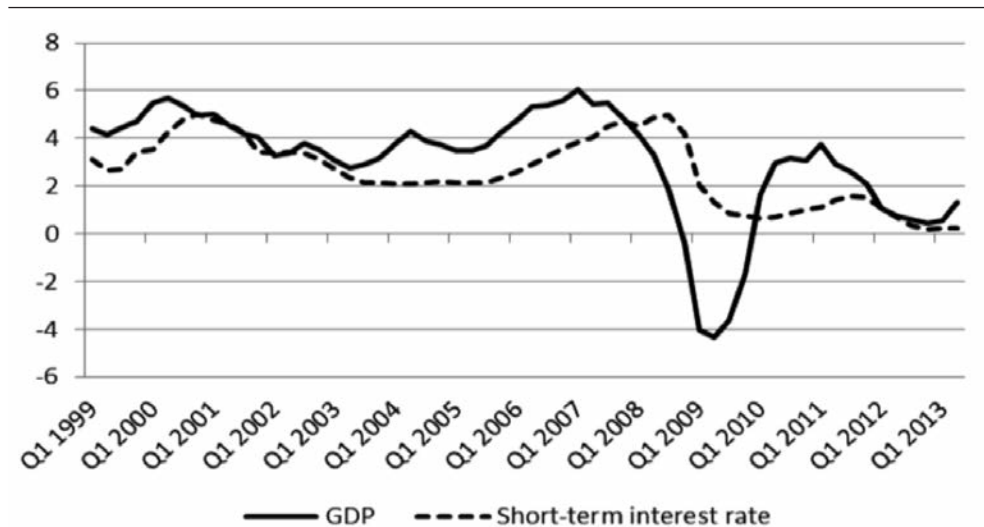
If we consider the differential between the actual short-term interest rate and its theoretical target value – the nominal Gdp growth rate – we can observe that in the US it has almost always been lower than in the EA: over the 1999-2013 period such a difference was -1.5 percentage points (p.p.) on average in the US and -0.5 p.p. in the EA; in the last three years, despite an economic crisis tougher in Europe than in the US, the above mentioned differential was -3.6 p.p. in the US and only -1.1 p.p. in the EA.

2.1 Interest Rates and Gdp Growth: Core vs. GIPSI Countries

Beside the comparison between the degree of monetary policy accommodation in the EA and the US, an interesting question is to what extent the ECB monetary

GRAPH 2

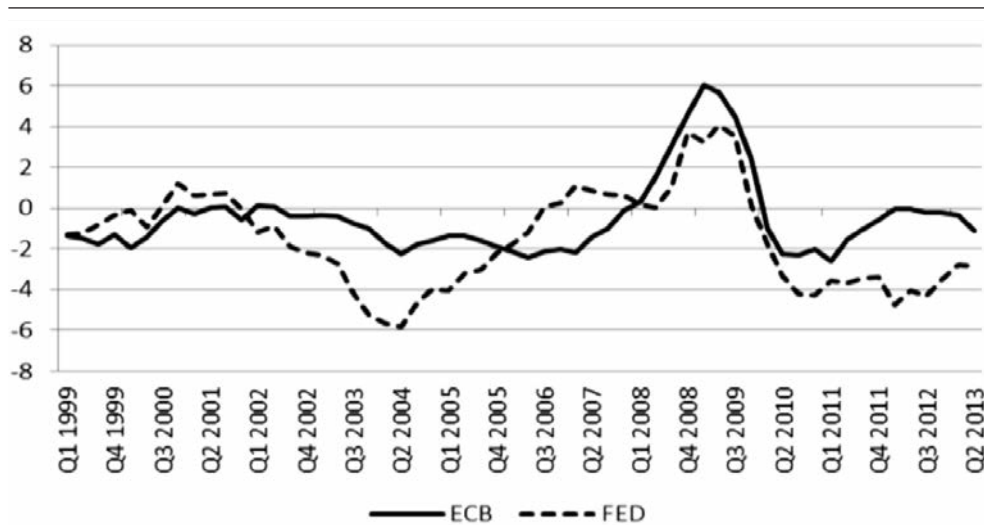
NOMINAL GDP GROWTH AND SHORT-TERM INTEREST RATE  
(EURO AREA %)



Source: authors' computations on EUROSTAT and ECB data.

GRAPH 3

SHORT-TERM INTEREST RATE AND GDP GROWTH:  
(EURO AREA AND US %)



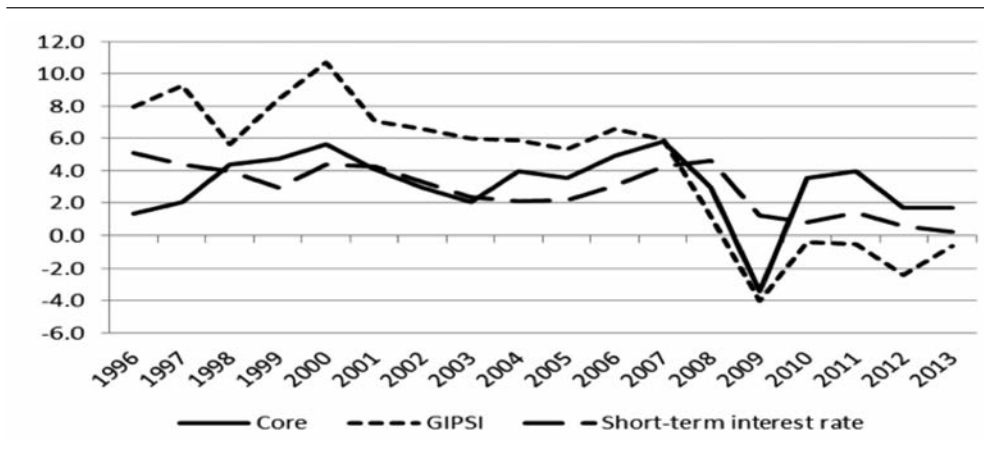
Source: authors' computations of EUROSTAT, ECB, FED.

policy stance has been different for different regions of the EA itself, namely for the stressed countries on the one hand, those which experienced the most acute problems in terms of sovereign crisis (the GIPSI group<sup>3</sup>), and the other group of countries, the Core group.

In Graph 4 we show the short-term interest rate and the nominal Gdp growth rates in these two groups of countries. First of all, the graph shows that up until 2007 interest rates moved broadly in line with the growth rate of the Core countries which were growing at a rather slow pace. On the contrary, they were too much supportive for the stressed group of countries, so to fuel, according to many commentators and especially in countries like Spain and Ireland (less so in Greece and Portugal and not so in Italy), an unsustainable economic growth. After the outbreak of the global financial crisis, the situation has changed. Indeed, in correspondence of the sovereign crisis the nexus has turned in favour of the GIPSI group.

GRAPH 4

SHORT-TERM INTEREST RATE AND GDP GROWTH:  
(CORE VS. GIPSI COUNTRIES, %)



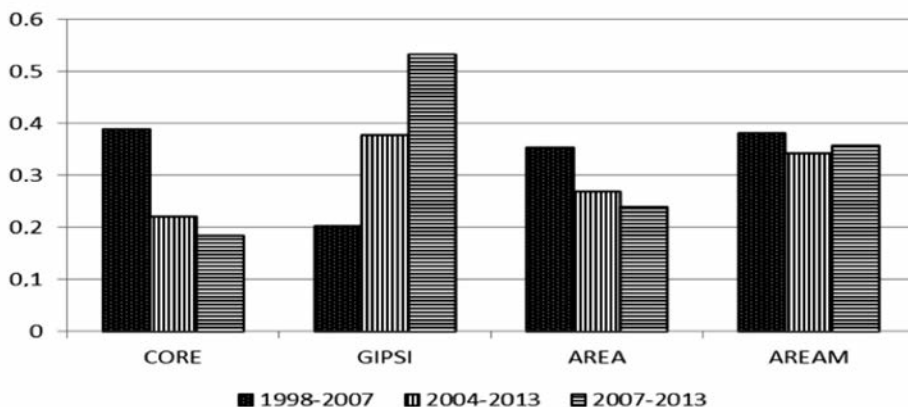
Source: authors' computations on EUROSTAT, ECB and FED data.

The graphical evidence provided so far, is confirmed by some statistical computations. We run a OLS regression of the short term interest rate on the Gdp rate of growth. This simple model considers as explanatory variable four different alternatives: the GIPSI group; the Core group; the weighted and simple average figures for the entire EA (AREA and AREAM, respectively).

<sup>3</sup> In this group are included: Greece, Ireland, Portugal, Spain and Italy.

GRAPH 5

THE INFLUENCE OF GDP GROWTH ON SHORT-TERM INTEREST RATES:  
( $R^2$  OF BIVARIATE OLS REGRESSIONS, %)



Source: authors' computations.

Graph 5 reports the explanatory power of the equations, measured by the  $R^2$  of the regression, in three specific phases of the fifteen years of SMP: *i*) the decade from 1998 to 2007 (pre-global financial crisis); *ii*) the seven years from 2007 to 2013 (post-global financial crisis); *iii*) the decade from 2004 to 2013 (the second phase of EMU).

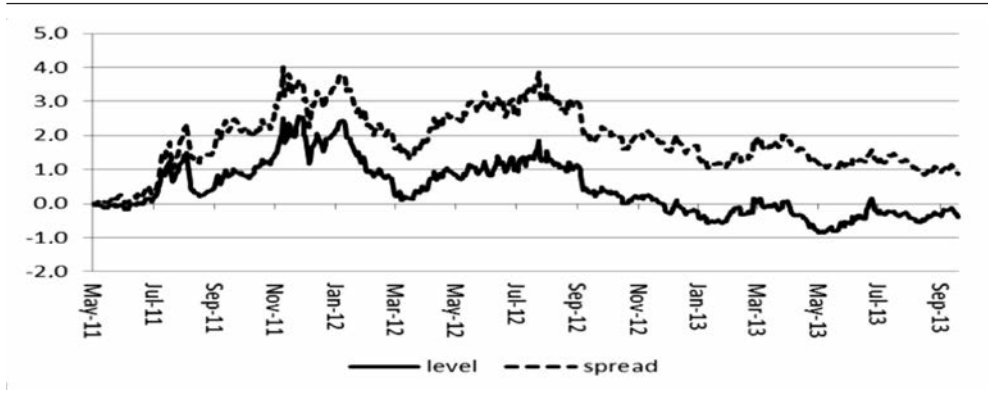
Provided that monetary policy decisions have always been mainly guided by the objective of delivering price stability, the results of our simple regressions confirm the impression drawn from the inspection of Graph 4: in a first phase the variability of the short-term interest rate is better explained by the Gdp growth dynamics of the Core group whereas in a second phase, and notably after the eruption of the Great Crisis, the economic cycle of the GIPSI group gains importance relative to the Core one.

## 2.2 What the Effects of Conventional Monetary Policy on Italian Banks?

The globally *accommodative stance* of the ECB monetary policy has probably had relevant effects on Italian banks. Anyhow, it is difficult to evaluate whether they have been positive or negative in terms of profitability. On this front a couple of points must be touched upon, to underline the different forces at work especially after the outbreak of the Great Crisis.

GRAPH 6

INTEREST RATES ON 10Y ITALIAN GOVERNMENT BONDS:  
(LEVELS AND SPREADS VS. 10Y BUND, 5 MAY 2011=0)

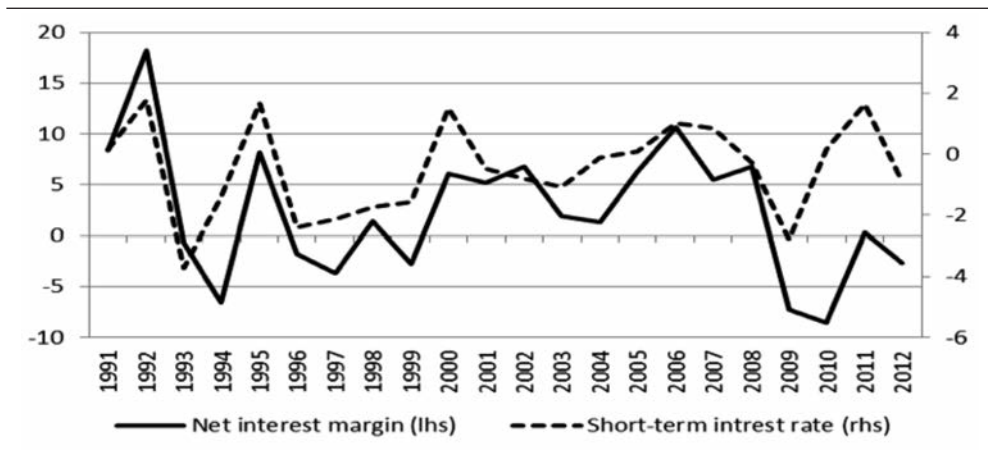


Source: authors' computations on Thomson Reuters data.

On the one hand, the low level of long term interest rates has mitigated the negative effects on economic growth arising from a swift increase in the riskiness of the bank activities when the deep and prolonged recessionary phase started in 2008. If at the end of 2013 the 10y Btp-Bund spread was still 100 basis points (b.p.) above that prevailing at the beginning of May 2011, on the contrary the level of the 10y Italian Btp was almost 50 b.p. below. The beneficial effects of

GRAPH 7

NET INTEREST MARGIN AND SHORT-TERM INTEREST RATES  
(ANNUAL PERCENTAGE AND ABSOLUTE CHANGES)



Source: authors' computations on Bank of Italy data.

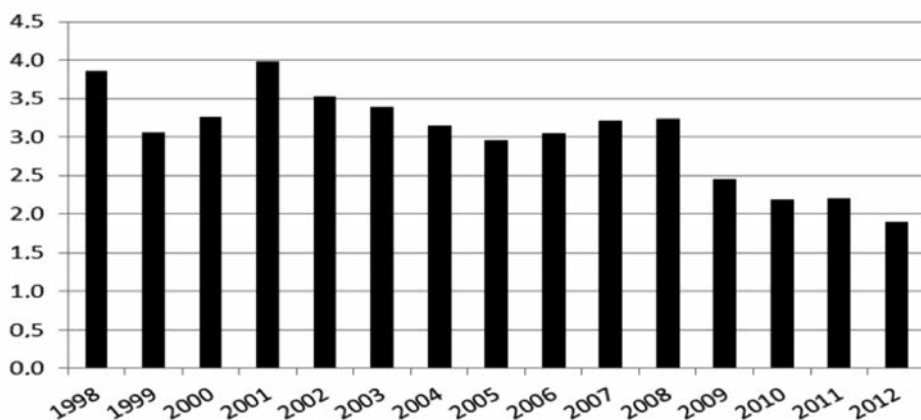
such a trend have been particularly important in terms of mitigation of the increase in the cost of long term bank funding.

On the other hand, as shown in Graph 7, low interest rates changes tend to be positively correlated to changes in the net interest margin. This is true especially for banking systems in which the share of short term assets on total assets is high as it is in the Italian case<sup>4</sup>. Graph 8 shows that the lending-funding interest rate spread<sup>5</sup>, which was well above 300 b.p. until 2008 has declined below 200 b.p. in 2012.

Graph 9 splits lending-funding spread into two components: the mark-up, namely the differential between the loan interest rate and the money market interest rate, and the mark-down, that is the difference between the money market interest rate and the average cost of bank funding. The graph clearly shows that while in 2007-2008 the mark-down gave a contribution almost equal to that coming from the mark-up, after the financial crisis such a contribution became negative (80 b.p. on average, 170 less than the pre-crisis average). Moreover, this loss of profitability has been only slightly mitigated by the mark-up increase (40 b.p. between 2009 and 2012).

GRAPH 8

THE SQUEEZE IN THE LENDING-FUNDING INTEREST RATE SPREADS  
(P.P.)



Source: authors' computations on Bank of Italy data.

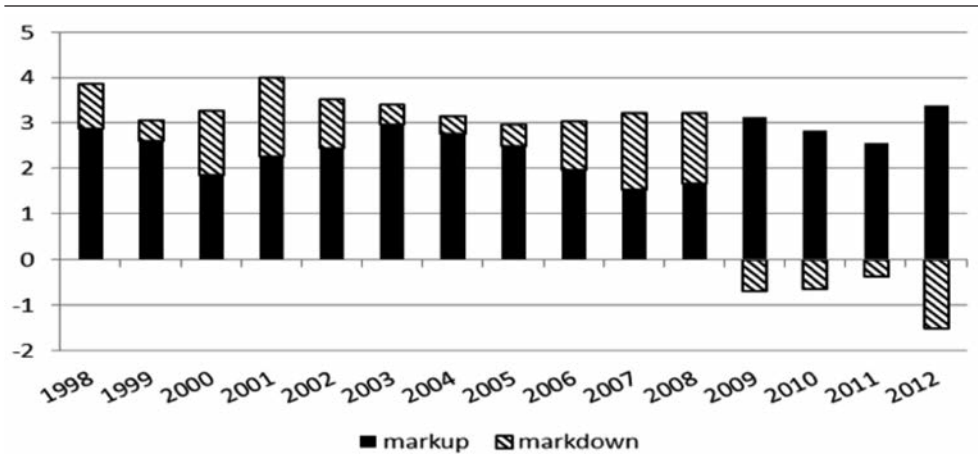
<sup>4</sup> In Italy the *ratio* of revolving and overdraft loans to total loans is above 20% as compared to 7% in Germany.

<sup>5</sup> Difference between the average return on the stock of lending and the average cost of the stock of funding (deposits +bonds).



GRAPH 9

CONTRIBUTIONS OF MARK-UP AND MARK-DOWN TO THE  
LENDING-FUNDING INTEREST RATE SPREAD  
(P.P.)



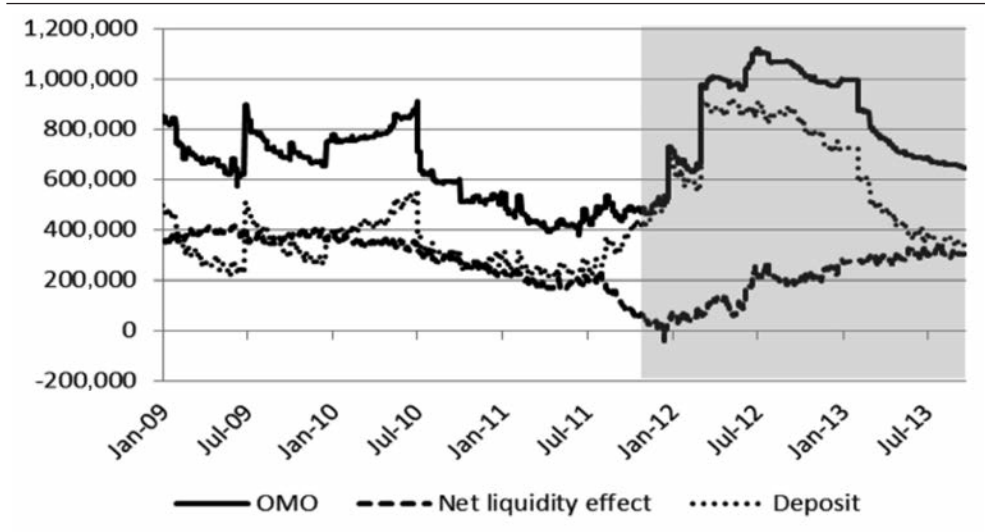
Source: authors' computations on Bank of Italy data.

All in all, the low interest rates environment determined by the ECB may have not had beneficial effects on Italian banks, as far as the pure effects on net interest income and profitability are concerned. However, the global effects of the ECB conduct on bank activity has been undoubtedly positive especially when the stabilizing effects on financial and sovereign debt markets are taken into account.

### 3. - The Unconventional Monetary Measures and the Liquidity Management During the Sovereign Crisis

So far we have mainly dealt with the conventional or standard monetary policy measures, namely the management of interest policy rates. The other relevant pillar of the ECB monetary policy is the unconventional block of measures, and notably its role in the long term refinancing operations. On this front, one can find a discontinuity in the ECB monetary policy conduct when the Trichet and Draghi tenures are compared. Indeed, gross volumes of ECB refinancing provided under the Trichet tenure in 2009 were not much lower than those provided by Draghi from the end of 2011 onwards: 800 bln. and 1,000 bln. euro respectively.

GRAPH 10

REFINANCING OPERATIONS AND LIQUIDITY MANAGEMENT  
(MLN. EURO)

Source: authors' computations on ECB data.

However, a discontinuity can be tracked as far as *net flows* are concerned: Graph 10 shows that starting from 2010, net liquidity, which was around 400 bln. euro in 2009, started to dry up mainly as a consequence of the withdrawal of funds from the interbank market by some major players. When the sovereign crisis spread over countries like Spain and Italy, in the summer of 2011, the net ECB refinancing level was 200 bln. euro lower than the pre-crisis one; moreover, in November and December 2011 net liquidity seemed completely dried up, mainly due to deposit demand from Core countries, a liquidity hoarding not dissimilar from what experienced in the aftermath of the Lehman crisis when the ECB response was not sufficient to avoid the resetting of the net position of EA banks.

Quite differently from the past, thanks to a more determined conduct, Draghi ECB was able: *i*) first to contrast the net liquidity drop; *ii*) and then to allow for a return to annual flows around 300 bln. euro, the average of 2009.

Further insights are provided by Table 1. It shows that in the final part of the Trichet tenure – from May to October 2011 – while the refinancing volumes towards Italian and Spanish banks increased by 124 bln. euro, French and German banks deposits at the ECB increased by 156 bln. euro. In the first nine months of the Draghi tenure the refinancing flows (Open Market Operations - OMO) to-

wards Spanish and Italian banks increased by 487 bln. euro, in correspondence of an increase in the deposit facilities of French and German banks for 353 bln. euro.

TABLE 1

ECB REFINANCING VOLUMES AND DEPOSIT FACILITIES  
(BLN. EURO)

	Italy		Spain		Germany		France	
	OMO	Deposit	OMO	Deposit	OMO	Deposit	OMO	Deposit
May 11 - Oct 11	80.6	3.7	43.9	4.9	-30.8	117.1	119.6	39.3
Nov 11 - Jul 12	169.2	1.7	317.8	6.7	57.3	209.6	76.2	143.3
Aug 12 - Jul 12	-35.6	-4.3	-160.3	-20.6	-66.4	-234.7	-83.3	-103.8

Source: authors' computations on ECB data.

Thanks to the ECB conduct, and notably, to Draghi's commitment to preserve the euro (communicated in a neat way at the end of July 2012<sup>6</sup> and "ratified" by the formal approval, few days later, of the Outright Monetary Transactions - OMTs), markets confidence started to resume and the ECB refinancing to the banks of the most stressed countries to diminish: Italian banks reduced their indebtedness towards the ECB by 36 bln. euro, the Spanish ones by 160 bln. euro.

In sum, Draghi ECB seems to have promptly understood that the defence of the Euro Area and of the Euro itself, would have been ensured only by guaranteeing sufficient liquidity to the countries (Spain and Italy *in primis*) under attack. To put it in another way, the ECB has understood that higher present refinancing volumes would have meant lower future refinancing resources; available data show that that's exactly what has really happened. In ECB deposit facilities returned around their pre-crisis level and the total refinancing level is now around 600 bln. euro, 500 bln. less than the 2012 record high and in line with the 2009 values. In some way, Draghi has done what European governments have not been able to do when they dealt with the Greek crisis: minimizing, thanks to a prompt action, future costs both in terms of public finances and real economic growth.

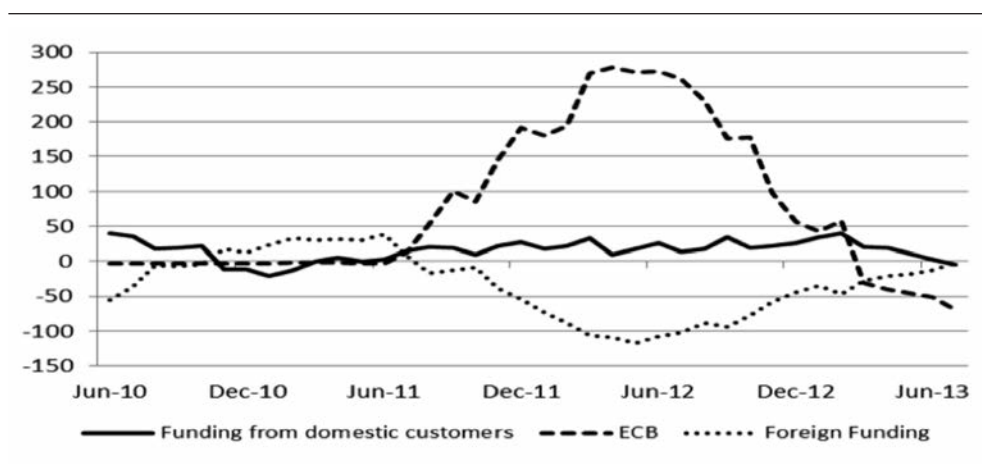
The support of the ECB unconventional measures to the Italian banking sector was of utmost relevance, as it emerges by analysing the funding flows of the last three years. Graph 11 shows that with the eruption of the sovereign crisis net for-

<sup>6</sup> DRAGHI M. (2012) :«When people talk about the fragility of the euro and the increasing fragility of the euro, and perhaps the crisis of the euro, very often non-euro area member states or leaders, underestimate the amount of political capital that is being invested in the euro. Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough».

eign funding fell by an order of magnitude of 120 bln. euro on a yearly basis whereas domestic funding was unable to compensate for such outflows (it stayed below 50 bln. euro). In such a financially over-stressed environment, the ECB provided almost 250 bln. euro (gross amount), which enabled Italian banks to manage the reimbursement of a great amount of expiring liabilities (bonds) and avoid a disorderly deleveraging.

GRAPH 11

FUNDING AT ITALIAN BANKS: THE ECB EFFECT  
ANNUAL FLOWS (BLN. EURO)



Source: authors' computations on ECB and Bank of Italy data.

Thanks to the ECB support it was possible to successfully reinforce investors' confidence: starting from July 2013, foreign funding outflows came to a halt and Italian banks started to reduce their liabilities *vis-à-vis* ECB.

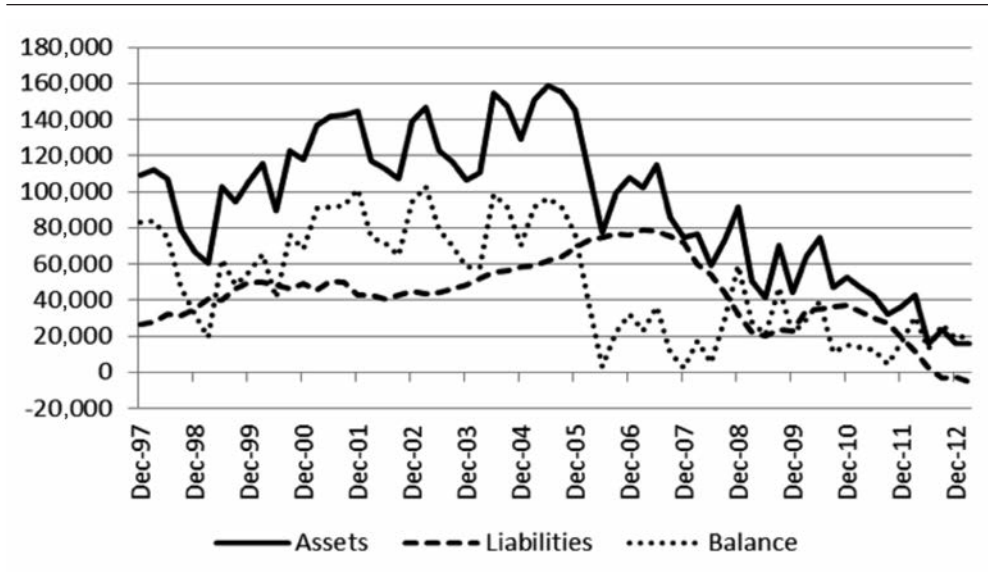
The described trends have well highlighted, *inter alia*, a structural feature of the Italian banking system: the presence of a funding gap problem, namely a gap between the amounts of loans to residents on one side and stable resources that banks are able to collect from residents on the other. Graph 12 shows that the Italian households financial balance (difference between financial assets and liabilities) fell dramatically since 2006. In 2012 it only amounted to 20 bln. euro, down from 80 bln. euro in the previous five years, on average. At the root of such a trend is the steady fall in the flows of households' financial assets<sup>7</sup>: since 2005

<sup>7</sup> It is worth noting, however, that the share of banking assets in total financial assets increased during the crisis.

they moved down from 120 bln. euro to 20 bln. euro per year, while a simultaneous reduction in liabilities could only mitigate the balance drop.

GRAPH 12

HOUSEHOLDS' FINANCIAL BALANCES  
(MLN. EURO)



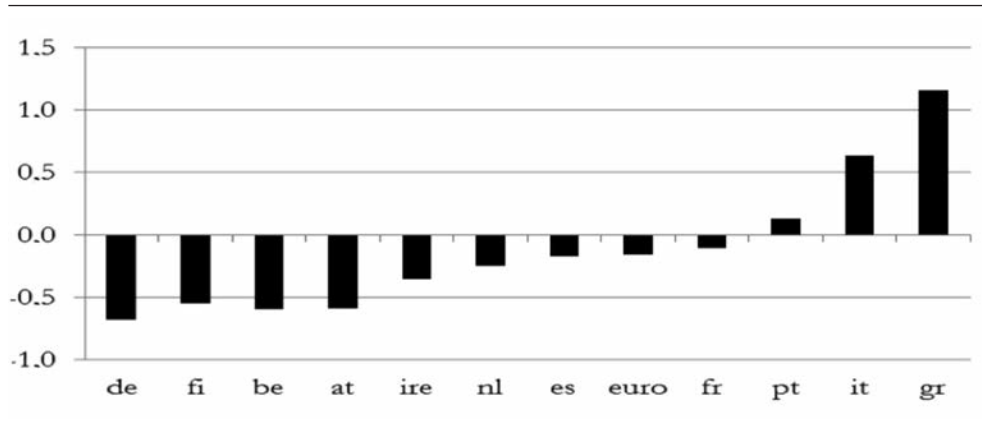
Source: authors' computations on Bank of Italy data.

If ECB non-conventional instruments were able to prevent dramatic liquidity problems for EA stressed countries, they were not able to avoid, pre-emptively, the fragmentation of the European financial market, that has been at the root of the breach in the monetary policy transmission mechanism. In fact, data show that the cut of policy interest rates was fully passed-through to bank interest rates in the Core EA countries, while it could not be so in the stressed countries, due to the dramatic increase in the long term government bond spreads and consequently in the cost of bank funding.

From the end of 2009 to April 2013 interest rates on new bank deposits (Graph 13) moved down (50 b.p.) in EA core countries and up in stressed countries (100 b.p. in Greece, more than 50 b.p. in Italy). Such a discrepancy had consequences on lending interest rates: in the GIPSI group of countries bank loans interest rates grew between 50 and 150 b.p. (Graph 13), whereas they went down by almost 100 b.p. in Germany.

GRAPH 13

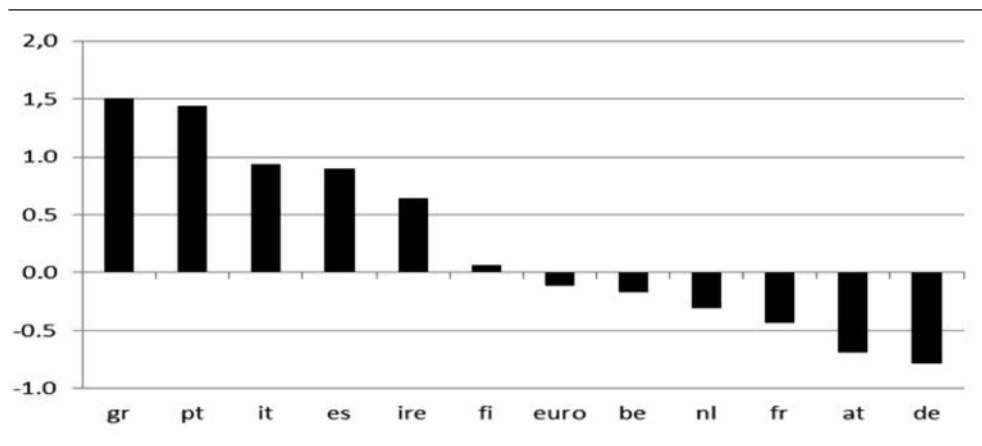
EURO AREA: INTEREST RATES CHANGES ON NEW BANK DEPOSITS  
(DECEMBER 2009 - APRIL 2013 - P.P.)



Source: authors' computations on ECB data.

GRAPH 14

EURO AREA: INTEREST RATES CHANGES ON NEW BANK LOANS  
(DECEMBER 2009 - APRIL 2013 - P.P.)



Source: authors' computations on ECB data.

To sum up, in its first fifteen years of life the ECB has represented – both in terms of interest rates management and of non-standard policy measures – a firm anchor for the stability of the EMU. That seems to be true in general, but is particularly true when the ECB conduct under Draghi's tenure is considered.

While in a first part of its life the EA central bank paid fundamental attention to building its reputation as a strong defender of price stability (in a sort of continuity with the Bundesbank culture), in a second part of its life – certainly in a context radically modified by the Great Financial crisis – the ECB seems to have inspired its action a bit more to the FED behaviour, with an increasing attention to economic growth and financial stability. Under the Draghi tenure the ECB has become the cornerstone of the EMU.

#### 4. - Lessons and Policy Implications

The ECB SMP experience has important lessons to teach both to governments and politicians on the one hand, and to banking systems on the another.

Some macro imbalances (for instance an excess of credit expansion in some peripheral countries) which led to the Euro crisis, reflect weaknesses in the way in which the EMU was conceived: an excess of reliance on fiscal indicators and almost no attention to variables regarding real economy convergence and financial aggregates: relative productivity and cost trends; the savings-investment balance; credit and leverage, and so forth. In the recent past suggestions were made to fix these weaknesses. For instance, Spaventa and Giavazzi (2010) in indicating the abnormal credit expansion in some peripheral countries as one of the main fault lines, suggested, *inter alia*, that «some supervisory and regulatory powers should be entrusted to a supranational body». With the European Banking Union and the Single Supervisory Mechanism now under construction, this lesson seems to be learned and the year 2014 will be a key year in this respect.

But some other lessons are of utmost importance especially for Italy and the Italian banks:

- ECB can only act, as it is now actually acting, to ensure a fluid transmission of monetary policy impulses to the economy; monetary policy cannot become a substitute for other economic policy instruments (fiscal policy, structural reforms policies, *etc.*): above all, ECB has lent time to governments and private agents and the gained time has to be used to address the adjustments needed;
- in a monetary union country-level imbalances matter: both governments and single industries must take them into serious consideration and fix them;
- with reference to the adjustments and imbalances of the country, Italy has to firmly stick to the medium term program of fiscal consolidation and to the Fiscal Compact prescriptions, gearing future budgetary measures towards cur-

rent expenditure cuts, fiscal pressure easing, and, more generally, growth friendly interventions;

- for Italian banks the liquidity and wholesale interbank market crisis, managed by the ECB through the LTROs, has highlighted a funding gap problem which has to be addressed; to avoid that such a process resolves in an unsustainable fall of the credit stock, resumption of domestic savings is key;
- to address the profitability problem Italian banks have to work both on the revenue and cost side. As to the former, there is room for *(i)* establishing deeper relationships with firms and offer them more value-added services (for instance, advisory services to direct access to financial markets), which can increase fee-based income without absorbing regulatory capital and *(ii)* exploiting upside potential in financial services segments such as wealth management, pension funds, health care funds, and alike. As to the latter, it is now key *(iii)* aligning wage dynamics to productivity trends, through a gaining of momentum for the firm-level labour contracts; *(iv)* dismantling the excess of capacity built up in the past decade (over-branching, dismissal of non-core activities).

In the end, the real lesson of the recent past SMP for both Italy (the Italian sovereign) and the Italian banks is that there is only one direction to point to: a material increase in the capabilities of generating income (and profits).



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# Learning on the Road towards the Banking Union

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*The European Banking Union entered the EU’s agenda in the summer of 2012. The design of the project has been proceeding quickly. This paper is a summary of the issues which have been better understood while walking towards the union. It discusses the implications for central bank independence and governance as well as for non-euro area countries. Besides fighting the euro area fragmentation, the union appears to be an indispensable complement of the single currency for the single market, also triggering the best practices in regulation, supervision and crisis management and favoring the structural banking policies and reforms that Europe needs.*

[JEL Classification: F36; G21; G28; E58].

**Keywords:** European banking union; euro area; central banking; supervision; resolution.

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## 1. - Introduction

The European Banking Union (EBU) suddenly entered the EU's agenda at the beginning of the summer of 2012, after the idea had been floating around for a few months. Since then, the design of the project and the efforts for its implementation have been proceeding rather quickly. Considering the importance and the political and technical difficulties of EBU, the speed of advancement has been surprising even if, while finalizing this paper, some among both the protagonists and the commentators of this venture seem unsatisfied as they find that the glass looks more half empty than half full and they think that the dysfunctional European banking sector would require a more radical and less gradual reform process.

The paper is based on the pieces of legislation approved and the political agreements reached as of the end of the first quarter of 2014. Many features of EBU are still uncertain in spite of the fact that it should start entering into force in less than one year. More than trying to forecast the coming developments and the probabilities of success or failure of the project, the paper draws a summary of the issues which have been better understood while walking along the rough road towards the banking union. One thing we have undoubtedly learned on this road is the old lesson that often needs to be re-learned: that the timing of the advances of European integration and institutions are difficult to forecast, they happen and accelerate as suddenly as they later slow-down and nearly stop, to be resuscitated precisely when the euro-pessimism is dominating the scene.

Section 2 describes how the financial crisis gave rise to the idea. Section 3 discusses the steps towards its design and implementation, stressing the evolution of the attitudes of the protagonists towards the plan and of the documents produced. Section 4 concentrates on the perilous transition phase that takes place during 2014. Section 5 deals with the relationship between EBU and central bank independence and governance. Section 6 deals with the relationship between EBU and non-euro area countries. Section 7 briefly discusses EBU in the perspective of EU's banking policies and of the cross-border euro payments system. Section 8 concludes. The paper is conceived as an open folder where to insert the new lessons that can be learned in the coming months as new problems, proposals, thoughts and documents appear on the road towards the completion of a true European banking union.

## 2. - The Financial Crisis, the Single European Currency and the Plan for a Banking Union

As the global financial crisis, which started in 2007 in the US, spread in the EU, it gradually became clear that the Union lacked a solid and well interconnected regulatory and supervisory framework that would probably have limited the involvement of its banks in the risky operation originated during the previous years from the other side of the Atlantic and, in any case, would have facilitated the management of European financial troubles. Member countries, also within the single currency area, had different financial rules and their supervisory authorities behaved with non homogeneous styles, widely varying degrees of rigor and a totally insufficient cooperation in collecting and sharing information.

The problem had been on the table for many years, notably after the famous 2001 Lamfalussy Report on securities markets regulation<sup>1</sup>, the extension of the Lamfalussy process with the setting up of the Committees of European supervisors in 2009 and their transformation in European supervisory authorities in 2011<sup>2</sup>, including the London based European Banking Authority (EBA). But it was evident that the solutions that had been implemented were still inadequate and that the degree of centralization of prudential policies was still insufficient to secure the efficiency and the stability of European financial markets.

Later, when in 2010 the European sovereign debt crisis exploded, the need for a strongly centralized prudential framework became even more evident. The blockage of European interbank liquidity flows that had already hurt the Union's economy in 2008-2009, *then* reflecting the lack of trust between *individual banks* all around Europe, evolved in a "sudden stop" of cross country flows, *now* reflecting the market's perception of risks of default of the various *peripheral countries* in the euro area. Sovereign and banking risks appeared to the market highly interconnected, resulting in a *fragmentation of the euro area* money market, with a Germany-centered, liquidity overabundant core sub-area bordered by the lack of liquidity of the periphery, where interest rates of all sorts included high country specific spreads over the very low "risk free" rate determined by monetary policy

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<sup>1</sup> [http://ec.europa.eu/internal\\_market/securities/docs/lamfalussy/wisemen/final-report-wise-men\\_en.pdf](http://ec.europa.eu/internal_market/securities/docs/lamfalussy/wisemen/final-report-wise-men_en.pdf)

<sup>2</sup> To trace the evolution of the process of integration of European financial supervision see: [http://ec.europa.eu/internal\\_market/finances/committees/index\\_en.htm](http://ec.europa.eu/internal_market/finances/committees/index_en.htm).

and over the yield of German bunds. Such a *segmentation*<sup>3</sup> rapidly turned into a true crisis of the single currency as interest rate spreads were conceived as “conversion risk” *premia*, that is compensations for the risk of a euro break-up with the reintroduction of national currencies. Moreover it became clear that with segmentation there is no single monetary policy, as the same move at the centre results in different impacts in the different member countries.

The nature of the fragmentation problem was largely independent from the nature of the origins of the sovereign crisis. The idea that the latter had its main roots in the structural divergences of real competitiveness among euro area countries, and in the consequent structural balance of payments disequilibria, is now widely accepted. But the proximate cause of most of the unwinding of liquidity flows to deficit countries was the connection between sovereign and bank risks, as government debt had a heavy and growing weight on banks’ portfolios while bank fragilities appeared backed by governments’ implicit commitments to bail them out in case of a crisis.

In January 2012 an elegant synthesis of the segmentation issue was provided in a paper by Pisani-Ferry<sup>4</sup> where a “new impossible trinity” was pictured in a Graph (see Graph 1) to argue that, as long as the Treaty-based rules of strict non-monetary financing and no co-responsibility for public debts prevail in the euro area, bank-sovereign interconnection renders the area fragile “because adverse shocks to sovereign solvency tend to interact perversely with adverse shocks to bank solvency”<sup>5</sup>. The incompatibility between the three elements of the trio could be solved either with fiscal co-responsibility or with ECB’s lending to sovereigns. But these solutions contrast with the Treaty. A more feasible solution is to break bank-sovereign connection with *financial* union. Given the weight of bank credit in European finance, the project of a European *banking* union is the main part of this solution.

The basic features of such a project have been designed during 2012 and the first part of 2013. Later the attention has been increasingly concentrating on the

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<sup>3</sup> The words *fragmentation* and *segmentation* are used by the ECB as synonymous (see, for instance the explanatory note issued in August 2012 where “segmentation” is in the title while the text mostly uses “fragmentation”: [http://www.ecb.europa.eu/pub/pdf/other/is120802\\_media\\_request.en.pdf](http://www.ecb.europa.eu/pub/pdf/other/is120802_media_request.en.pdf)) to express a concept which is crucial for understanding the EBU project: the imperfect integration (in particular across national borders) of the money and financial markets. Also in this paper both words will be used with the same meaning.

<sup>4</sup> PISANI-FERRY J. (2012).

<sup>5</sup> *Ibidem*, page 9.

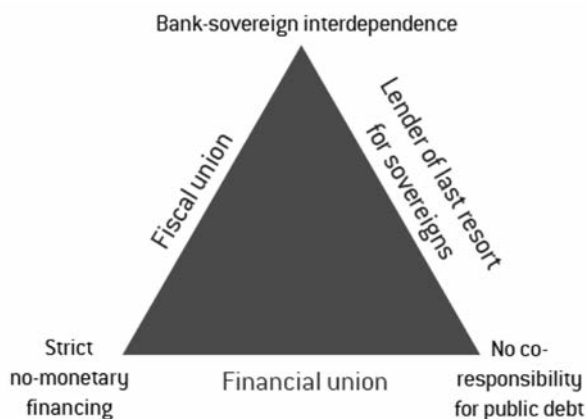
most delicate part of the idea: the harmonization and/or centralization of banks' crisis management. The target has been kept to reach an agreement on the whole project before the Parliament is dissolved and European elections take place in Spring 2014. EBU should start being enforced in 2015. In December 2013 the European Council reached an agreement that originated controversial informal tripartite meetings ("trilogue") with the Parliament and the Commission. Three months later the trilogue resulted in a new provisional agreement that, while these notes are written, many consider sufficient to allow a final co-decision of the Council and the Parliament before the latter's Spring dissolution. Some confusion arises from the fact that a shorter-term plan of harmonizing national resolution systems is kept alive together with the target of unification and centralization, with the latter to be implemented much later but agreed and voted in the next few months. While the European Commission (2014) defines the agreement «a major step towards completing the banking union», complex and hard discussions will most probably take place in the coming months. Political difficulties and uncertainties are still substantial, so that it is better here to concentrate on the basic concepts and conceptual issues underlying the project, conceived in its general and "pure" form, than to describe and discuss the details, the timing and the prospects of the legislation which is under consideration. Therefore, only a few comments on the legislative process are shortly exposed in the next section: the rest of the note is devoted to general conceptual issues.

GRAPH 1

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 THE "NEW IMPOSSIBLE TRINITY" AS FROM PISANI-FERRY
 

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 Source: PISANI-FERRY J. (2012).

A first important concept is worthwhile stating immediately: that *monetary unification cannot stand without banking union* is as intuitive as the fact that blood cannot keep the human body alive and well without a unified and centrally supervised system of the vessels, arteries and veins, that allow the blood to effectively circulate. Money has a value as long as it is smoothly accepted in the economy; it is useless if its circulation is full of regulatory obstacles and impeded by the lack of trust between agents that should use it for credit operations and payments. *Only a de-nationalized banking system can support a de-nationalized currency*. It is often said that fiscal centralization is a necessary condition for the sustainability of monetary unification: but one could argue that banking union is an even more indispensable feature of a sustainable single currency area.

### 3. - Where Are We in the Process of Banking Union?

The plans for moving towards EBU, following various “academic” analyses and proposals such as the Pisani-Ferry paper cited above<sup>6</sup>, started to take an official shape during the spring of 2012, when the stress caused by the illiquidity and segmentation of the euro area was reaching a critical strength. As reconstructed by Nicholas Véron<sup>7</sup>, the vision of EBU was “forcefully advocated” in April both by the Managing Director of the IMF<sup>8</sup> and by the President of the ECB<sup>9</sup>; on the political front, EBU was endorsed in May by President Hollande and in early June by Chancellor Angela Merkel<sup>10</sup>.

The first official document mentioning EBU (using the wide expression “an integrated financial framework”) was the 26 June version of the van Rompuy Report “Towards a genuine economic monetary union”<sup>11</sup>, immediately followed by

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<sup>6</sup> In some of the numerous contributions of the preceding years, arguing in favor of an EBU-type evolution, an “Impossible Trinity” more general but somewhat similar to Pisani-Ferry’s – always reminiscent of the famous Mundell-based textbook incompatible trio, made of fixed exchange rates, freedom of capital movements and autonomy of national monetary policies – was identified as constituted by “financial stability, financial integration and national financial policies”: see, for instance, SCHOENMAKER D. (2011).

<sup>7</sup> VÉRON N. (2012).

<sup>8</sup> LAGARDE C. (2013).

<sup>9</sup> DRAGHI M. (2012).

<sup>10</sup> VÉRON N. (2012, footnote 19 and 20).

<sup>11</sup> [http://ec.europa.eu/economy\\_finance/focuson/crisis/documents/131201\\_en.pdf](http://ec.europa.eu/economy_finance/focuson/crisis/documents/131201_en.pdf)

a neat statement by the 29 June Euro Area Summit<sup>12</sup> serving as an input for the European Council that launched a schedule for the implementation of EBU along 2013-2014 as reported in its Conclusions in October<sup>13</sup> and December<sup>14</sup>. The Commission produced detailed legislative proposals and an important “Roadmap” towards EBU in September<sup>15</sup>. But precisely in the work of the Commission one can see a proof of the novelty and of the controversial nature of the EBU idea and of the rush towards its realization: three months earlier and just three weeks before the June Euro Area Summit statement, a Commission’s proposed Directive on reforming bank crisis management<sup>16</sup> was still framed in a very decentralized way with no mention whatsoever of ideas such as EBU.

To synthesize very much the *main characteristics of the EBU project* as born out of 2012 proposals and deliberations, one could unite them under four points.

- (i) The legal basis chosen for starting to build EBU is Article 127(6) of the Treaty on the Functioning of the European Union (TFEU) which enables the Council to “confer specific tasks upon the ECB concerning policies relating to the prudential supervision of credit institutions and other financial institutions”. This does not exclude that the completion of the project will sooner or later require a Treaty change. The main implication of this choice<sup>17</sup> is that *the ECB becomes the central institution in the project*, the designed supranational prudential authority, which poses several problems. Among them:
- the necessity to rightly balance separation and cooperation between monetary and prudential policies, which are often thought as suggesting conflicting actions<sup>18</sup>;

<sup>12</sup> «We affirm that it is imperative to break the vicious circle between banks and sovereigns: The Commission will present Proposals on the basis of Art. 127(6) for a single supervisory mechanism shortly. We ask the Council to consider these Proposals as a matter of urgency by the end of 2012», [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/131359.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/131359.pdf)

<sup>13</sup> [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/133004.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/133004.pdf)

<sup>14</sup> [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/134353.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/134353.pdf)

<sup>15</sup> [www.rte.ie/news/2012/0912/reform.pdf](http://www.rte.ie/news/2012/0912/reform.pdf)

<sup>16</sup> EUROPEAN COMMISSION (2012).

<sup>17</sup> Two alternatives were available to the use of art. 127(6) as the legal basis for the single supervision: art. 114, centred on the single internal market, and art. 352, a window – which looks too wide to be uncontroversial – for the introduction of new central powers and policies, often referred to as the “flexibility clause”.

<sup>18</sup> Note that, by contrast, now, before EBU, in the euro area, where monetary policy has been delegated at the centre while prudential policies are national, the danger of such a conflict makes little sense.



- the need for an appropriate evolution of the governance of the ECB to host its new prudential tasks;
- the question of how to deal with EU member states that are not in the euro area and are therefore not represented in the Governing Council of the ECB, while they participate in the European Banking Authority (EBA) which is responsible for harmonizing banking regulation<sup>19</sup>;
- the issue of what is the precise and operational distinction between regulation and supervision – and therefore between the specific responsibilities of the EBA and the ECB – as the latter often implies the prescription of certain behaviors of banks;
- the need to detail the tasks, powers and responsibilities of the ECB as a central authority in a European network of supervision that, presumably, will have a somewhat federal shape as it is impossible to avoid keeping important roles for national supervisory authorities.

(ii) As a long-term project, EBU comprises at least *four pillars*.

- First: well unified *regulation* (single rulebook);
- Second: effectively centralized *supervision*;
- Third: highly harmonized and possibly centralized rules and institutions for the recovery and *resolution* of problem banks (“we must ensure that banks are both European in life and European in death”<sup>20</sup>), including those that have multinational activity and/or ownership, with adequate funding for facilitating the reorganization of troubled intermediaries while keeping systemic stability and avoiding panic and contagion, also providing support to institutions under resolution via loans, guarantees, asset purchases, or capital for bridge-banks.
- Fourth: highly harmonized and possibly unified national deposit insurance funds, to guarantee “small” bank deposits of defaulting banks.

The path chosen by European authorities for building EBU is based on the idea that it is *possible to effectively start centralized supervision* (the second pillar) *even before* the completion of the other pillars, in particular before *the institution of a single resolution authority*. This confers to the EBU project the characteristic of a *debatable but substantial gradualness*, with pillars that naturally complement each other but are supposed to stand alone, at least temporarily.

<sup>19</sup> Section 6 of this paper deals with this issue.

<sup>20</sup> MERSCH Y. (2013).

(iii) A very important link has been decided between EBU and the tasks of the European Stability Mechanism (ESM), the intergovernmental institution endowed with funds to help member states' public debt refinancing. The link consists in the fact that, when EBU will have completed the implementation of a truly empowered single supervisory authority at the ECB, the ESM will be allowed to use its resources also to help the *direct* recapitalization of banks, without passing through government finances and, therefore, without burdening sovereign debts. This link could encourage the ECB to accept the responsibility of supervising banks that need restructuring and recapitalization, even before the third pillar sub (ii) above has been completely set up, *i.e.* before appropriate rules and alternative funds for fiscally backing bank restructuring have been decided. The official start of the ECB role in supervision thus becomes a crucial date also for scheduling those reorganizations and recapitalizations of European banks that will not appear completed during the transition period of 2014. Unfortunately *this crucial decision* to allow the ESM to perform direct recapitalizations when the single supervision will enter into force, while officially "affirmed" in the Euro Area Summit Statement of 29 June 2012<sup>21</sup>, reaffirmed in an Eurogroup agreement one year later<sup>22</sup>, emphasized again by the Council on 15 October 2013 in communicating the final approval of the Single Supervisory Mechanism<sup>23</sup>, *has never been followed by firm and definitive deliberations*, does not appear in the ESM's "Guidelines for Financial Assistance for the Recapitalization of Financial Institutions"<sup>24</sup>: since the end of 2013, the idea seems to have become again controversial, especially in Germany. A step-back on this front would increase the difficulty of reaching a functional and unified European system to manage problem-banks; an unwarranted fear to run towards a moral-hazard-driven "transfer Union" would prevent the use

<sup>21</sup> [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/131359.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/131359.pdf).

<sup>22</sup> <http://www.eurozone.europa.eu/media/436873/20130621-ESM-direct-recaps-main-features.pdf>.

<sup>23</sup> «Establishment of the SSM is a precondition for enabling the ESM to have the possibility of recapitalizing banks directly, as agreed by eurozone heads of state and government in June 2012 ... direct recapitalization will enable the vicious circle between banks and sovereigns – which has been a salient feature of the debt crisis in Europe – to be broken»: [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/139012.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/139012.pdf). An indicator of the importance of the SSM-ESM linkage might be derived by observing that the lines dedicated to it amount to 15% of the important official announcement of the final approval of the SSM.

<sup>24</sup> [www.esm.europa.eu/pdf/ESM%20Guideline%20on%20recapitalisation%20of%20financial%20institutions.pdf](http://www.esm.europa.eu/pdf/ESM%20Guideline%20on%20recapitalisation%20of%20financial%20institutions.pdf), where Art. 15 of the ESM Treaty is recalled which considers only recapitalization via loans to the governments where the banks' are based.

of an already established intergovernmental institution to help providing some prudent fiscal backstop for bank-restructuring, centrally managed and directed to enhance the systemic efficiency and stability of Europe's banking as a whole.

(iv) *The timing of EBU's construction is uncertain:*

- The first pillar is making slow progresses: it is still even difficult to forecast when it will be possible to reach a satisfactory agreement on a truly single rulebook on important aspects like minimum capital requirements, in spite of the fact that:
  - the regulatory pillar of EBU can be fully completed, thus reaching total harmonization of all financial regulations, without any changes to the existing Treaties, using art. 114 of the TFEU which is the basis of all single market legislation, the fundamental aim of Europe's unification process since its post World War II very beginning;
  - efforts in this direction have been started many years before the EBU project and formally robust institutions like the EBA already exist with a precise mandate to unify regulations;
  - several directives have been passed, starting many years ago, to harmonize financial regulations and frequent official reassurances are issued that regulatory unification is near to be completed; in fact the latest regulation and a directive on banks' capital requirements (CRD IV) entered into force on 17 July 2013 and apply from January 1<sup>st</sup> 2014<sup>25</sup>; but its implementation will take several years and it is still criticized both for being too demanding and for the opposite reason, that is for leaving too much room to discretion (also via an excessive technical complexity) and therefore to the potential persistence of different regulatory settings<sup>26</sup>.
  
- Apparently, the commitment to complete the second pillar is considered more stringent and urgent: but the official handover of supervisory powers to the ECB has been postponed to the second half of 2014, twelve months after the entry into force of the new regulation (proposed by the Commission in September 2012<sup>27</sup>) following its approval by the Parliament (which

<sup>25</sup> [http://ec.europa.eu/internal\\_market/bank/regcapital/legislation\\_in\\_force\\_en.htm](http://ec.europa.eu/internal_market/bank/regcapital/legislation_in_force_en.htm).

<sup>26</sup> As an example see a comment reported by the *Financial Times* at <http://discussions.ft.com/alchemy/forums/cfa-institute/implementing-basel-iii-in-europe-issues-and-concerns-about-the-crd-iv-package>

<sup>27</sup> EUROPEAN COMMISSION (2012b). Ecofin agreed with the proposal in December ([http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/134265.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/134265.pdf)), deciding to negotiate with the Parliament «with the aim of adopting the legislation before the end of 2012».

has approved on September the 12<sup>th</sup><sup>28</sup>) and by the Council (which has approved shortly after, on October the 18<sup>th</sup>, 2013<sup>29</sup>).

- As for the third pillar, “a Commission’s proposal for a Single Resolution Mechanism together with appropriate and effective backstop arrangements should be examined as a matter of priority with the intention of adopting them during the current Parliamentary cycle”<sup>30</sup>, *i.e.* within the spring of 2014. Backstops arrangements are obviously a delicate issue, with different positions of core and non-core euro area countries, as they potentially involve international fiscal transfers to support a bank-financed revolving fund to help the urgent financing needs of bank restructurings.
- There is no clear design nor date for the completion of the fourth pillar, the single deposit insurance, but the tendency seems to be to increasingly consider the pillar merged with the third one on resolution.

During 2013, until July, the work on EBU has been mostly directed to elaborate on the issues listed above, finalizing official documents and thinking about the details and the timing. The European Council Conclusions, in March<sup>31</sup> and, particularly, in June<sup>32</sup>, have kept stressing the EBU agenda and taking stock of the preparations for the new legislation. The Commission, at the beginning of July, has added to the previously cited September 2012 detailed proposal on the supervisory pillar of EBU, which was adopted in October 2013, a proposal on the third pillar listed above – sub (ii) –, consisting in a Regulation establishing a *single resolution mechanism and a single bank resolution fund*<sup>33</sup>. A crucial aspect

<sup>28</sup> [www.europarl.europa.eu/news/en/new\\_room/content/20130906IPR18829/html/Green-light-for-single-supervisor-for-banks-s-](http://www.europarl.europa.eu/news/en/new_room/content/20130906IPR18829/html/Green-light-for-single-supervisor-for-banks-s-)

<sup>29</sup> [http://europa.eu/rapid/press-release\\_MEMO-13-899\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-13-899_en.htm?locale=en), and [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/139012.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/139012.pdf). The final text of the Regulation (EU) No 1024/2013 - “conferring specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions” - has been published on the *Official Journal of the European Union* on 29.10.2013: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?Uri=OJ:L:2013:287:0063:0089:EN:PDF>.

<sup>30</sup> COM(2013) 520 final, 2013/0253 (COD), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0520:FIN:EN:PDF>, page 2.

<sup>31</sup> [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/136151.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/136151.pdf): par. 11-14 .

<sup>32</sup> [www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/137634.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/137634.pdf): par. 13.

<sup>33</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2013:0520:FIN:EN:PDF>.

of the latter is that it indicated the Commission itself as the central resolution authority. Further discussions have brought important changes to the proposal and, under the effective pressure of the Lithuanian Presidency of the EU, in December an agreement has been reached, as already noted in section 2 of this paper, by Ecofin<sup>34</sup>, and welcomed by the European Council<sup>35</sup>, on a “general approach” and a “compromised draft regulation” on the *single resolution mechanism*, relying on a *single resolution board*, independent of the Commission, and on a *single resolution fund* financed by bank levies raised at national level, initially consisting by “national compartments that would be gradually merged over ten years. During this period, mutualisation between national compartments would progressively increase. So, while during the first years the cost of resolving banks would mainly come from the compartments of the member states where the banks are located, the share would gradually decrease as the contribution from other countries’ compartments will increase”.

The agreement seemed more general and vague when coming to the design of a *fiscal backstop* to integrate the resources of the resolution fund, especially during the numerous years during which gradually accumulated banks’ fees paid into the fund would be insufficient to serve the even temporary needs of bank restructuring. The idea might be that contributions could come from the European Stability Mechanism and from cross-country lending as well, with the final aim of counting on a specific common European backstop.

The general characteristics of this plan for the third pillar could look encouraging. They also included the principle of fiscal solidarity to manage bank crises. Moreover, the timing to formalize the decision looked adequate as the agreement committed the member states «to negotiate, by 1 March 2014, an intergovernmental agreement on the functioning of the single resolution fund» and had the aim of agreeing with the European Parliament the regulation of the single resolution mechanism «at first reading before the end of the Parliament’s current legislature (May 2014)». But the task of finalizing the details of such a “general” agreement immediately appeared hard to be completed, considering also that

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<sup>34</sup> Press release: [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/140193.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/140193.pdf);  
text: <http://register.consilium.europa.eu/doc/srv?l=EN&t=PDF&gc=true&sc=false&f=ST%2018070%202013%20INIT&r=http%3A%2F%2Fregister.consilium.europa.eu%2Fpd%2Fen%2F13%2Fst18%2Fst18070.en13>

<sup>35</sup> See par. 29 in [www.consilium.europa.eu/uedocs/cms\\_Data/docs/pressdata/en/ec/140245.pdf](http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/140245.pdf)

the first reactions of the Parliament, and of the ECB as well, were far from enthusiastic<sup>36</sup>.

Some hard diplomatic and technical work followed with constructive discussions in the trilogue. An important result was reached on March the 20<sup>th</sup>, 2014, after a final 16-hours long session of talks. A *new agreement was reached* with the approval of both the representatives of the Parliament and the Council and of the Commission as well. Compared to the December 2013 finance ministers' plan, the proposed resolution mechanism<sup>37</sup>: (i) clarifies that the ECB is the main "triggering authority" to decide whether a bank is on the brink of failing and greatly streamlines the decision-making process of the Resolution Board, making it compatible with the speediness required by the markets (the substantial part of the decision should normally take no more than a weekend) to avoid panic and disorders; in particular: the Commission will adopt draft resolution schemes and the Council will be involved only at the Commission express request; (ii) the bank-financed single resolution fund will be able to borrow, thus increasing its firepower, especially in the first years when the building-up of the fund will have accumulated a still insufficient capitalization; (iii) the process of mutualisation of the fund, whereby separated national sections of the fund will be gradually merged in a common backstop fund, is very much accelerated: it will take eight years but the national funds will pool 60% of their resources already by year two. Rapid mutualisation has an obvious important and symbolical political meaning. The Parliament was very hard on this point also to compensate for the fact that the resolution fund itself (differ-

<sup>36</sup> "By common consent [in the Parliament], the Council proposal is complex, procedurally cumbersome and – many argue – lacks sufficient financial "backstops" to deal with problem banks in the years before all elements of the banking union are in place". As for the ECB, "the impact of this approach on the speed of decision making is most worrying" ... and "an emergency procedure should be adopted that would ensure resolution decisions could be taken within 24 hours": "Global Risk Regulator" ([www.globalriskregulator.com](http://www.globalriskregulator.com)), January 2014. The very critical letter, dated 15 January, sent to the Greek presidency by the Committee on Monetary Affairs of the European Parliament is at: [www.europarl.europa.eu/document/activities/cont/201401/20140116ATT77594/20140116ATT7759EN.pdf](http://www.europarl.europa.eu/document/activities/cont/201401/20140116ATT77594/20140116ATT7759EN.pdf); the Report of the European Parliament on the proposal, dated 20 December 2013 is at: [www.europarl.europa.eu/document/activities/cont/201312/20131220ATT76612/20131220ATT76612EN.pdf](http://www.europarl.europa.eu/document/activities/cont/201312/20131220ATT76612/20131220ATT76612EN.pdf)

<sup>37</sup> A press release by the EUROPEAN PARLIAMENT (2014) and a Statement by the EUROPEAN COMMISSION (2014), both dated 20 March 2014, summarise the features of the agreement. A useful immediate comment has been published by MERLER S. and WOLFF G.B. (2014). For the Council's confirmation of the agreement an official draft document on the final compromise, dated 27<sup>th</sup> March 2014, see EUROPEAN COUNCIL (2014a and 2014b).

ently from the resolution mechanism and board, which will result from a regulation) keeps being proposed as an intergovernmental agreement.

Some uncertainty is obviously allowed until the whole plan is definitively detailed, approved and implemented, to start in 2016. The uncertainty also derives from the fact that the Ecofin, together with the agreement on the *single* resolution mechanism, in December simultaneously confirmed an agreement with the European Parliament on a draft directive aimed at *harmonizing national rules on bank recovery and resolution*<sup>38</sup>, based on a previous proposal presented in June<sup>39</sup>. In a certain sense this draft directive is a very important document and the fact that an agreement has been reached on its substance is crucial for the future of the European banking, even if one leaves aside the complete project of the banking union. The draft directive contains a highly detailed set of rules for managing banking crises that is based on *fundamental principles* as the amount of “*bail-in*” of defaulting banks’ shareholders and unsecured creditors that must be enforced before bailing-out the bank using taxpayers’ money. The bail-in principle is indispensable to protect public finances from banks’ defaults, a fundamental precondition to unbundle sovereign from bank risk which is one of the main aims of the banking union. Aiming at *early intervention* on problem banks and seeking the *least-cost solutions* in banks’ crisis management are other examples of the crucial pillars of the *rulebook on how to deal with crises* on which member states have apparently agreed to converge. The spirit and, to some extent, the letter of this rulebook are meant to be the base also for the action of the future single resolution mechanism. But, in the meantime, the idea is simply to harmonize national resolution rules and institutions.

Therefore, in a different sense, the agreement on the draft directive is a weak point in the process of building the banking union. As long as resolution powers stay decentralized, harmonization cannot but remain very imperfect and the degree of discretion *de facto* allowed to national authorities will be too large to significantly reduce “national” banking risks and create a level playing field in crisis management. Moreover, while short-term harmonization is not incompatible with a gradual implementation of a single unified resolution mechanism, the po-

<sup>38</sup> Press release: [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ecofin/140277.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/140277.pdf).  
Text: <http://register.consilium.europa.eu/doc/srv?l=EN&t=PDF&f=ST+17436+2013+REV+1+COR+1>

<sup>39</sup> <http://register.consilium.europa.eu/doc/srv?l=EN&t=PDF&gc=true&sc=false&f=ST%2011148%202013%20INIT&r=http%3A%2F%2Fregister.consilium.europa.eu%2Fpd%2Fen%2F13%2Fst11%2Fst11148.en13.pdf>

litical effort to strengthen and keep national resolution systems alive weakens the probability of being successful in overcoming the political difficulties of a timely implementation of the agreement on the complete though gradual unification and centralization of crisis management policies and authorities. One must also consider that the centralized resolution mechanism, as from the agreement reached, will only apply to the 120-130 large banks falling under the direct supervision of the ECB: the crises of smaller “national” banks will have to rely on harmonized national resolution schemes. Therefore, in spite of the important success of the March 2014 trilogue agreement, even if the Parliament will be able to vote it before being dissolved, 2014 and 2015 will still require hard efforts to eliminate residual uncertainties.

The uncertainty with which the EBU project has evolved has several origins. First: the whole European *legislative process has been “blocked” for a long period, during 2013, waiting for German elections* and the subsequent agreement to form the governing coalition. EBU was very relevant for the German political debate, both because not all influential German banks would be enthusiastic to be disciplined by supranational prudential authorities and because the project contains an element of “solidarity”, to support European systemic banking stability, that in Germany can be presented as implying the danger for taxpayers to “pay for other countries’ indiscipline”.

Second: before becoming the central supervisory authority, *the ECB is conducting an extensive, delicate and complex review of the present risks built into the balance sheet of individual European banks*. Some of them will probably be required to substantially increase their capital and/or to restructure their operations and business models. The review will be complemented by a series of *stress-tests* in cooperation with the EBA. This preparatory phase – which has also been explicitly mentioned in the Conclusions of the European Council of June 2013<sup>40</sup> – could be concluded before the end of 2014. But complications and delays could arise also as a consequence of the fact that needed bank reorganizations will have to be backed by national funding as, most probably, the future support by the ESM will not be allowed to bail out the so called “*legacy assets*”, that is the legacy of past supervisory failures, banks’ troubled assets already in existence when the single supervision will start operating. Many European banks, with the guidance

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<sup>40</sup> See point *b*) in art. 13 of [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/137634.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/137634.pdf)



and assistance of national prudential authorities, have started preparing for this reviews and tests during 2013 and have already initiated some needed recapitalizations and restructuring. This difficult and somewhat painful review period is discussed in the following section of this paper; its happy end is a necessary condition for a true start of EBU.

Third: it is highly probable that, in spite of the opposite current official position of the European authorities, a complete banking union will sooner or later require a *Treaty change*, given the importance of the powers that have to be centralized and that are not even referred to in the Treaties. Moreover, a complete EBU must be backed by a degree of *European fiscal capacity and co-responsibility* that are currently excluded by the Treaties, as well as by a *substantial increase in the democratic legitimacy and accountability of European authorities*, as officially planned in the Van Rompuy's document "Towards a genuine economic and monetary union"<sup>41</sup>. In fact the availability to consider Treaty changes for EBU has been officially declared by member states in April 2013<sup>42</sup>. But Treaty changes, obviously, require complex political efforts as well as uncertain outcomes, they take time and tend to open up dangerous Pandora's boxes.

Given the uncertainties and the risks that complicate the path towards EBU, the attitude towards the plan can be to double the political and technical efforts for jumping as soon as possible into the final set of unified rules and institutions, also for the fear that any gradualism can increase the intricacies of the issue, reinforce the enemies of the project and lead to failure. The alternative is to contain the ambitions and accept the idea of a slower speed to reach the important result of a complete and carefully constructed unification of the European banking system. This attitude means conceiving the implementation of EBU with prudence, thus avoiding to nourish illusions that could backfire, abruptly interrupting the gradual transition to a unified banking system, compromising the credibility of European policies and bureaucracy and generating new financial instability.

According to the wording of the title of a paper on this issue<sup>43</sup>, the task is then to build a "realistic bridge towards European banking union", a bridge leading, in the wording of the German Finance Minister<sup>44</sup>, from a "timber-framed to a

<sup>41</sup> See section V of the 5 December 2012 version of the document: [www.consilium.europa.eu/uedocs/cms\\_Data/docs/pressdata/en/ec/134069.pdf](http://www.consilium.europa.eu/uedocs/cms_Data/docs/pressdata/en/ec/134069.pdf)

<sup>42</sup> Declaration of Member States, Informal meeting of Ministers and Governors, 12 April 2013: <http://register.consilium.europa.eu/pdf/en/13/st08/st08417-re01.en13.pdf>

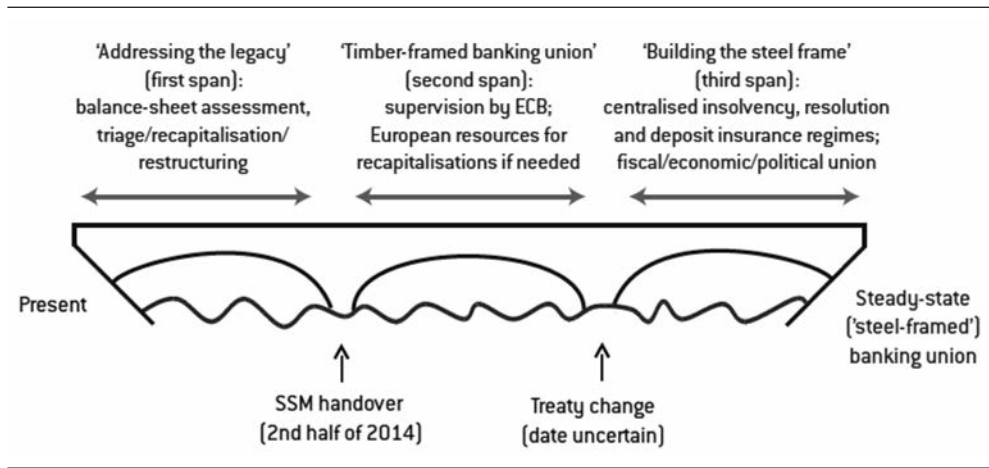
<sup>43</sup> VÉRON N. (2013).

<sup>44</sup> SCHAEUBLE W. (2013).

steel-framed banking union”, as pictured in Graph 2. Even if the first span of the bridge will be travelled in one year, as from the stated plan, gradualism requires to tolerate a certain degree of uncertainty as to the length of the second and third spans, as the cost of delaying the end of the travel can be compensated by reaching a really steel-framed EBU. Some of the considerations exposed in the next sections of this paper might be useful to decide whether or not a *cautious travel on a bridge* is better than an ambitious and *courageous jump*.

GRAPH 2

THE BRIDGE TOWARDS EUROPEAN BANKING UNION



Source: BRUEGEL. Note: SSM=Single Supervisory mechanism.

#### 4. - Assessing Banks’ Health before the Handover of Supervision to the ECB<sup>45</sup>

Even considering all the difficulties that will be encountered to complete EBU, the first step, that is taking place during 2014, is probably the most crucial. It consists in an assessment of European banks’ health that the ECB, with the cooperation of EBA and national supervisors, will conduct *before* accepting to become the single supervisor. If this starting step of the process will be successful, the probability to walk at an acceptable speed towards EBU will rapidly increase; on the contrary, a botchy start would destroy the credibility of the whole project,

<sup>45</sup> To reconstruct the issues and the debate on the topics dealt with in sections 4 and 5, see also EUROPEAN SHADOW FINANCIAL REGULATORY COMMITTEE (2012) and EUROPEAN SHADOW FINANCIAL REGULATORY COMMITTEE (2013).

thus inflating the importance of all future technical and political obstacles. In fact the ECB has retained a delaying option to avoid taking responsibilities in case the inherited situation appears unmanageable<sup>46</sup>.

The fundamental discontinuity in such a step is the direct access, by a supra-national supervisor, to all *information* on the balance sheet and management of European banks. For the first time somebody will be in the position to try to get to know nearly everything on every European bank, in particular on the large multinational ones. On this front, Europe will be able to try and fill the gap with US supervisors that have cleaned and recapitalized a large part of their commercial banks since 2009-10. The ECB will assess approximately 130 banks, accounting for more than 80% of euro area bank assets and including at least all the “large” ones, that it will *directly* supervise after the handover – while for smaller banks its tasks will be exercised through national supervisory authorities. The assessment will require an exhaustive collection of information on the quality of the assets and the nature of the liabilities and risks, understanding *whether or not reorganizations and restructurings are required and leading to an evaluation of the adequacy of banks’ capital*. EBA will add some stress tests showing the potential reaction of each bank’s accounts to external shocks of various sort. But one of the ECB problems will be precisely to overcome the loss of credibility of stress testing deriving from the failure of EBA’s tests in 2010 and 2011, when the tests were passed by several banks then turned out to be problem banks.

The criteria governing this “comprehensive assessment” of EU banks have been published in October by the ECB<sup>47</sup>. This preparation to the handover is a gigantic logistical and technical exercise, with at least four main types of difficulties.

- While the *cooperation of national supervisors* (that, among other things, should release all the information that have been jealously retained at the national level for many years) is necessary for the success of the operation, national authorities might feel the incentive to avoid that the ECB’s review highlights the failures of their past supervisory work. Hopefully, the staff devoted to the exercise, even if coming in part from the national supervisory authorities (and with the help of private consultants), will be able to look into the future and be loyal and cooperative with the new institution, under which they will prob-

<sup>46</sup> Fourth *sub*-paragraph of article 33 of Council Regulation (EU) No 1024/2013 of 15 October 2013, see footnote 29 above.

<sup>47</sup> [www.ecb.europa.eu/pub/pdf/other/notecomprehensiveassessment201310en.pdf?05b50eec1c449918a5f9c387465d6703](http://www.ecb.europa.eu/pub/pdf/other/notecomprehensiveassessment201310en.pdf?05b50eec1c449918a5f9c387465d6703). See also the other material published by the ECB in his starting and growing website on banking supervision: [www.ecb.europa.eu/ssm/html/index.en.html](http://www.ecb.europa.eu/ssm/html/index.en.html).

ably keep working in the following years and that is in process of becoming responsible for the whole European supervisory system.

- The situation will have to be evaluated at a given date, thus separating problems and losses that derive from the past from future problems that might arise when each bank will operate under the new single supervisor. This is the so called problem of “*legacy assets*” which originates from a statement of a group of members of the euro area<sup>48</sup> saying that European funds pooled in the ESM will not be allowed to be used to alleviate problems rooted in times when the single supervisor was still not in charge: “*legacy assets should be under the responsibility of national authorities*”. The European Council Conclusions of December 2012 seem to have accepted the idea of that group of three, planning for “*a definition of legacy assets*”. The tentative (and sometimes conceptually and technically difficult) separation of legacy assets could have negative and a positive consequences: while the exclusion of joint European support for problems inherited from national supervisors could have the undesired effect of producing international spillovers and systemic pan-European problems, it is sound that, to the extent that the single supervision will be enabled to start without embarrassing inheritances, future bank troubles will have no residual reason to be charged to national budgets and will therefore have to be taken care with the support of some kind of pooled European funds. A complete banking union implies that member countries share the risks and costs of keeping bank stability in Europe.
- In a number of cases it will be unavoidable, for dealing with legacy losses without burdening sovereign finances with excessive bail-out costs, to “*bail in*” problem banks’ shareholders and also various categories of their uninsured creditors, with a legislated order of priority as proposed in the (above mentioned) Council Directive of 2013 to coordinate national resolution legislations. Consensus for bailing-in – as opposed to charging public finances with private bank losses – has been growing in Europe since 2011, when the consequences of the socialization of losses, which took place, for instance, in the first phase of the tremendous Irish bank crisis, appeared economically dangerous and political unjust.

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<sup>48</sup> Joint Statement of the Ministers of Finance of Germany, the Netherlands and Finland, September 25 2012, [www.vm.fi/vml/en/03\\_press\\_releases\\_and\\_speeches/01\\_press\\_releases/20120925\\_JointS/name.jsp](http://www.vm.fi/vml/en/03_press_releases_and_speeches/01_press_releases/20120925_JointS/name.jsp).

In fact Commissioner's Barnier comment to the March 2014 trilogue agreement on the resolution mechanism<sup>49</sup> stresses the fact that the "completed banking union will put an end to the era of massive bailouts". But the Resolution Directive is taking time to enter into force, it still allows a substantial amount of discretion to national authorities – as discretionary differences among member countries can be seriously limited only with the above mentioned proposed creation of the single resolution authority – and the anti-bail-in lobbies are obviously at work. These lobbies have special interests to defend as well as valid public interest arguments. Among the latter are:

- the danger of prohibiting, in all cases and circumstances, that European and national public funds are used to improve banks' capitalizations in absence of consistent bail-ins: this prohibition would be illogical and counterproductive, for instance, for relatively sound but somewhat illiquid and mildly undercapitalized banks;
  - the danger of generating panic or Cyprus-like confusions by involving in bail-ins liquid uninsured deposits of medium-large size;
  - the risk of international spillovers of severe bail-ins, when they are decided in absence of a supranational authority that can guarantee against differential treatments of depositors thus stopping their flight towards less risky – or simply more bail-out oriented – national banking systems.
- International spillovers of discriminatory uses of bail-in rules, conducted by national authorities, are not the only potential systemic consequence of the pre-handover ECB's review. The latter will be aimed at *individual banks*. But if substantial and diffused liquidity and solvency issues, with implied large capital shortages, will emerge from the review, truly *systemic problems* will arise, even with perfectly homogeneous and well conducted national efforts to restructure and resolve problem banks. Contagion will be more serious if bank problems will generate losses and capital needs also outside the banking system by hitting borrowers and-or bank creditors. Markets could have already priced in these risks, but there is a relevant probability that the banks' assets review period will cause dangerous increases of financial volatility. To cope with it, a smart euro area wide liquidity management by the ECB will be indispensable as well as a good communication policy about bank reviews. The elimination of all doubts that the ESM will be allowed to help with direct recapitalizations

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<sup>49</sup> EUROPEAN COMMISSION (2014).

when the SSM will be in place will also be helpful, together with well grounded expectations that, as promised by the 20 March 2014 trilogue agreement, a future of complete banking union will not be delayed too much, with new bank losses backed by truly European funds and managed via a truly single resolution mechanism and a single resolution authority.

## 5. - The Independence of Central Banking and the Governance of the Banking Union

A well known tradition of thought argues that *conferring prudential tasks to central banks decreases their independence* from both political and market pressures. Special interests are strongly at work in prudential matters and can transmit their influence to monetary policy decisions. Moreover the objectives of the latter can often be in genuine conflict with prudential aims like when high interest rates are required for avoiding inflation while banks' liquidity problems call for printing money.

To the extent that these views contain some truth, having the ECB as the single supervisor, with an obvious influence also on banks' restructurings and resolutions, can endanger the independence of the European monetary authority and therefore decrease the credibility of its announcements as well as the effectiveness of its policies.

It would be less important to discuss this issue if nowadays other causes were not joining with it in endangering central banks' independence:

- The global international financial and economic crisis exploded in 2007 has pushed monetary policies into *liquidity traps and quantitative easing* to the point that exit policies seem difficult to implement and suspects of fiscal dominance often seem justified, like critiques pointing to the risk that money is printed to support unsustainable asset prices.
- In the meantime, *financial globalization* hinders the autonomy of national monetary management.
- Also *monetary theory* is weaker in arguing in favor of price stability as a clearly stated specialized monetary policy objective, without which the independence of central banks is difficult to defend: besides adding the objective of financial stability, economists are increasingly favorable to monetary policies targeting real variables like GDP growth rates or unemployment levels.

Compared to other central banks, the ECB's independence problem is less severe. Without a strong central political power in Brussels, the autonomy of the central bank faces weaker challenges. This line of reasoning can be pushed to the point of arguing that, as prudential policies are still decentralized, adding them to ECB's responsibilities increases the independence with which they are exercised without important sacrifices of monetary policy autonomy. The ECB can be looked at as a rocky, sturdy independent institutional box where new functions can be inserted to preserve them from distorting influences.

Even skipping an adequate discussion of this point of view, it is possible to state that the EBU project is not in strong contrast with it. In fact the project includes a rearrangement of the governance of the ECB that relies on a solid presence of independence in the DNA of the Frankfurt-based institution.

*The new supervisory functions will be nested in the existing governance.* The central responsible body of the ECB will remain the Governing Council with its present composition, including the six members of the Executive Board. Supervisory functions will be delegated to a *Supervisory Board*, vice-chaired by a member of the Executive Board and including representatives of national supervisory authorities. The governance, as represented in Graph 3, should insure that all the final responsibilities are clearly grounded in the Governing Council but, in the same time, that some kind of "Chinese wall" is present to deal with problems of potential conflicts of interests between the monetary and supervisory functions<sup>50</sup>.

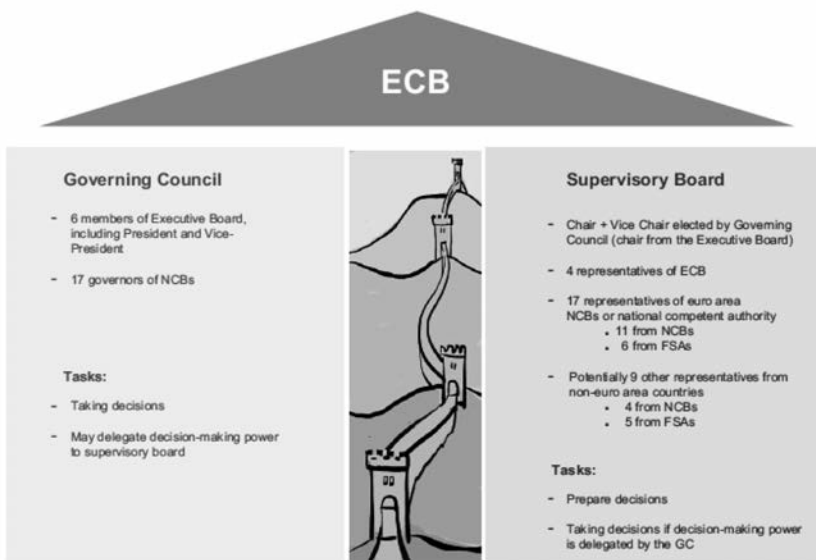
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<sup>50</sup> «We will make sure that the ECB's monetary policy mandate focused on price stability will not be affected by considerations and decisions related to banking supervision. Internal rules are therefore being developed for the separation of monetary policy and supervisory functions: The units involved in decision-making will be clearly separated. We are putting in place an organisational set-up whereby the information flow between the two functions will be limited to a 'need to know' basis. However, we will avoid unnecessary duplication of structures not involved in the decision-making process. This is cost-efficient, and I am sure you will appreciate this», DRAGHI M. (2013*a*).

GRAPH 3

THE GOVERNANCE OF THE EUROPEAN CENTRAL BANK

CHINESE WALL BETWEEN MONETARY POLICY AND SUPERVISION ?



Source: BACK T. and GROS D. (2012).

Problems will remain though. Three of them are easy to detect.

- *Non euro area member countries* – that can adhere to EBU and, particularly in the case of Great Britain that has already refused to adhere, *should* adhere to make EBU strong and the EU financial market a level playing field – will not have a representative in the Governing Council: they will only be present in the Supervisory Board which doesn't hold the ultimate responsibility for the delegated functions. In principle this problem should not exist, as the members of the Council are bound by the Treaty to act not as representatives of their country of origin but in the interest of the whole euro area.
- Approximately half of EU countries have *national supervisory authorities that do not coincide with central banks* and that are *dependent of their governments*. This fact creates potential tensions between the Council and the Board.
- A problem can exist also with the other countries, where supervision is a responsibility of the central bank: their *representatives in the Supervisory Board*



*will be, at home, under the authority of their governors* that sit in ECB's Governing Council. This could decrease the autonomy with which they take decisions and weaken the Chinese walls between the two functions.

To decide *which is the right degree of autonomy of supervision from monetary policy* is a problem in itself. First because, when autonomy results in a better management of potential conflicts between the two functions, with each of them pursuing its own target without interfering with the other, it is optimal that the two functions share the maximum amount of information, which is one of the advantages of delegating supervision to the central bank, as the latter's macro information set comes together with the micro set of the supervisors. Second because, even when the conflict between the two policies is neat and strong, like when lower interest rates would benefit banks' stability but increase inflation, it is far from clear that separate, uncoordinated monetary and prudential actions will yield better results than a carefully calculated trade-off, overcoming any Chinese wall, between the various alternative combinations of monetary and prudential moves.

The usefulness of trading off monetary with prudential actions appears, in particular, when one considers the impact of pure monetary policy decisions on financial stability. This impact was not clear in the literature before the international financial crisis, during which it became evident that too low interest rates for too much time, during periods along the decade before the crisis, had triggered excessive risk exposures of banks and other debtors, in many parts of the world. The crossing of the impacts of: (i) monetary policy instruments on financial stability, via their influence on the risk appetite of markets and intermediaries, and of (ii) the strictness of prudential policies on credit and production cycles, is an important reason to prefer a joint, coordinated decision of monetary and prudential measures.

One could object that this way of reasoning applies to what has been labeled – in particular after the experience of the global financial crisis – “macro-prudential” policy – as opposed to *micro* supervision – consisting in measures to regulate the risks of the banking system as a whole and to prevent systemic stability problems. The idea is generally accepted that macro-prudential measures, targeting systemic financial stability – like countercyclical changes of minimum capital or loan-to value *ratios* –, can be effectively coordinated with monetary policy and must be taken with a deep involvement of the central bank<sup>51</sup>. The responsibilities

<sup>51</sup> In Europe the President of the ECB chairs the General Board of the European Systemic Risk Board, responsible for the macro-prudential oversight of the financial system: <http://www.esrb.europa.eu/about/tasks/html/index.en.html>.

for micro-prudential policies, that deal with *individual* banks' stability, could instead be located further away from the central bank, to better preserve its independence. A convincing counterargument can be based on the fact that there are obvious and enormous *economies of scope* – including those deriving from the sharing of micro and aggregate information – *in having micro and macro prudential powers under the same roof*.

A perhaps more serious problem, in deciding the optimal allocation of prudential powers, is *where to locate the resolution authority*. As of now, as explained above, the EBU plan is preparing two different solutions that generate some uncertainty about what we should expect for the coming years. On one side the idea is to keep the resolution powers, at least in the short-medium run, at the national level, with a Directive imposing harmonization and coordination of the various national rules for crisis management, resolution and restructuring of problem banks. On the other side an agreement has been reached in March 2014 to centralize resolution powers by creating a specific institution, a single resolution mechanism, a single board and a single fund. Centralization would be implemented gradually and, apparently, would not require a Treaty change.

Does it make sense to keep resolution powers separated from supervisory ones? The question is important in the short run, when it will be difficult to avoid leaving the latter, at least in part, at the national level. It seems obvious that *central supervision without supranational resolution risks being rather weak*. This is perhaps the most serious problem of the current planned governance of European policies for financial stability. But the same question is also important – and difficult to answer – in the longer run, when the plan is to centralize resolution but locate the corresponding powers outside the central bank.

On one side it is prudent to avoid the involvement of the central bank with resolution procedures that can require an even temporary support relying on public funds. The central bank can provide very short-term bridge financing to cope with some liquidity issues in a resolution procedure, but the decision to commit taxpayers' money to finance a least-cost (hopefully) solution for a problem bank is a political decision that must not be taken by the monetary authority. In the European context there is the additional complication that no central government exists with which the central bank can coordinate a resolution procedure, neither there is a unified judicial system to be involved in the legal issues that arise when a bank is resolved. Moreover, as it is often suggested in the literature, it might be a good thing to keep certain supervisory powers – like the authorization of the establishment of a bank – separated from the powers to resolve problem banks,

because the authorizing institution could have an incentive to be excessively forbearing in imposing corrections of emerging problems, in order not to stress its previous lack of accuracy in supervision.

On the other side, there are good reasons to keep resolution powers rather near to the supervisor, to exploit the economies of scope between resolution and both supervision and the central bank's task to act as the lender of last resort for illiquid banks. A central bank supervisor has the information and the sensitivity for timely jumping on a bank that is developing a liquidity or solvency problem and for initiating what is called a "prompt corrective action" that cannot be easily separated from a resolution or a threat to resolve the bank<sup>52</sup>. *Preventive single supervision is more powerful when exercised by an authority that can also centrally order restructurings and assist resolutions.*

The official opinion of the ECB is strongly against becoming also the single resolution authority<sup>53</sup>; moreover this would be a solution requiring a Treaty change to widen the responsibilities of the ECB. The initial idea of the Commission to keep central resolution powers within itself<sup>54</sup> was based on an emphasis on the *state aid issues* that could arise from resolutions and on the choice of trying

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<sup>52</sup> The existence of a "grey zone" where some overlapping of supervision with resolution responsibilities is unavoidable is well revealed by the following answer to a question in a press conference of the President of the ECB, where Mario Draghi cannot avoid (see the nearly contradictory and somewhat hesitating style of his sentence: «... well, first of all...») to admit that something called "supervisory action" exists precisely when he tries to emphasize the separation between resolution and supervision: «It is the supervisors who look at the viability of a bank in a certain situation. If they were to decide that the bank is not viable, then they would simply communicate this to the authority which has the responsibility to – well, first of all, there is what is called "supervisory action", namely the bank would be asked to raise capital, sell assets, do a bail-in and so on...», DRAGHI M. (2013*b*).

<sup>53</sup> «But suppose ... you simply judge that the bank is unviable no matter what supervisory action is undertaken. In that case you hand the bank to the resolution authority, which is often the government but is often separate. In our proposed legislation it will be a separate entity; whether it is the Commission or another authority is not clear yet. And they will decide what to do, because it is up to them, as they are using, or may be using, public money, or they may be considering that the further bail-in could be feasible. But the assessment is made by the supervisor. The actions required to respond to this assessment would be decided upon by the independent authority. And that is pretty clear and that has been the view of the ECB», DRAGHI M. (2013*b*). «We, as a supervisory body, decide only whether a bank is viable or not. Then the resolution authority has to decide what to do with the bank: close it, split it up or sell it», DRAGHI M. (2013*c*).

<sup>54</sup> See above, footnote 33.

to avoid a Treaty change by *grounding the legislation on the single resolution in Art. 114 of the Treaty* as part of the pursue of the single market<sup>55</sup>. The legal basis of Art.114 is also involved in the subsequent December agreement of the Council and in the March 2014 trilogue agreement, to go for new intergovernmental resolution authority. The proposed intergovernmental agreement<sup>56</sup>, to be ratified by participating member states, could avoid a deeper and difficult political work to change the Treaty by explicitly including the centralization of the crucial powers connected with the use of a resolution fund to help resolving banks. But one can still have doubts and the plan to implement the single resolution mechanism by 2016, can perhaps be still looked as an exercise in optimism. An important factor that increases the probability of success of the exercise is the determination of the ECB to condition the final acceptance of the role of single supervisor to the existence of a single resolution mechanism<sup>57</sup>.

The conclusion is that the more complicated problem to be solved in order to optimize the governance of EBU is *the organization and location of resolution powers*. One possibility could be to go as far as possible towards an arrangement similar to Italy's, where the resolution powers of the central bank are very substantial.

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<sup>55</sup> Art. 114 of the Treaty on the Functioning of the European Union («...The European Parliament and the Council shall, acting in accordance with the ordinary legislative procedure, and after consulting the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their objective the establishment and functioning of the internal market ...») has also been the basis for the establishment of the European Banking Authority.

<sup>56</sup> See above, footnote 34.

<sup>57</sup> «The Single Supervisory Mechanism will provide a timely and unbiased assessment of the need for resolution, while the Single Resolution Authority will ensure prompt and efficient action once the trigger is reached. This will avoid misaligned incentives that could arise with supervision moved to the European level while resolution responsibility remained national», DRAGHI M.(2013*d*). «The single resolution mechanism is a necessary complement to the single supervisory mechanism [and] ... must therefore be established by the time the ECB assumes its supervisory responsibility in full», page 2 in EUROPEAN CENTRAL BANK (2013). «The SSM needs a strong and credible Single Resolution Mechanism as its counterpart. Responsibilities for supervision and resolution need to be aligned at the European level. Thus, I urge you and the Council to swiftly set-up a robust Single Resolution Mechanism, for which three elements are essential in practice: a single system, a single authority, and a single fund. We should not create a Single Resolution Mechanism that is single in name only. In this respect, I am concerned that decision-making may become overly complex and financing arrangements may not be adequate. I trust that the European Parliament, together with the Council, will succeed in creating a true Banking Union», DRAGHI M. (2013*a*).

By listing in detail the resolution powers (that could better be labeled “bank crisis management powers”), a large set of them could be kept within the central bank, thus exploiting the economies of scope with its functions as a single supervisor and lender of last resort to illiquid banks. In exercising these powers the ECB should cooperate with the intergovernmental specialized resolution authority. The latter should become fully responsible for the management of the rest of the crisis only when a true “resolution” of the bank has been decided<sup>58</sup> and temporary public funding (to a bank which is officially considered insolvent) is required to support the process in order to avoid panic and negative systemic spillovers by contagion. At this point the central bank should abandon the role of leading crisis manager and act as a technical and executive supporter of the resolution authority, thus defending itself against conflicting objectives, misalignment of incentives and political interferences. A strong and well connected centralized fiscal backing should also be available and could be provided by the ESM which is already authorized to recapitalize banks directly as soon as single supervision is enacted and it is therefore designed to have an important working relationship with the ECB supervisory functions. It looks difficult, to be sure, to find good reasons for not granting to the ESM itself the resolution powers that cannot be kept with the ECB. This might in fact happen in the long run, thus creating a simpler, better coordinated and possibly more effective European institutional setting for managing European financial crises.

During 2014, the transition period towards the single supervisory mechanism, with asset quality reviews and stress tests, and perhaps also for sometime later, while the single resolution mechanism will not have entered into force, Europe will have to content itself of keeping resolution at the national level – where adequate fiscal backing has also to be provided<sup>59</sup> – while trying to maximize its har-

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<sup>58</sup> This two-phase organisation of the relationship between the ECB and the central resolution authority seems the underlying idea of the central bank, as resulting from the legal opinion on the Commission’s proposal (see above footnote 55). In particular, see section 2.3 of the opinion, where an “early intervention phase” is required to be under the responsibility and full control of the single supervisor. See also footnote 50 above on the concept of “supervisory action” and the grey zone between supervision and resolution.

<sup>59</sup> The Commission could consider to exclude at least part of the public funds that a country might decide to use for recapitalizing problem banks from the calculation of the deficit that must not be “excessive” (higher than 3% of Gdp). In his press conference on 9 January 2014, the President of the ECB (DRAGHI M., 2014) has stated his trust in the availability of national fiscal backstops when needed as a consequences of the results of the asset quality review and

monization as well as the indirect influence and the moral suasion of the single supervisor and of the Commission on national resolution authorities.

## 6. - Banking Union and Countries outside the Euro Area

All Euro area countries will be included, since the beginning, in all the mechanisms of the banking union. But *also non-euro area EU members will be allowed to participate* in the single supervisory mechanism and, perhaps, also to share with euro countries other aspects of the banking union including parts of the single resolution mechanism. As of the beginning of 2014, only the UK has explicitly excluded its participation: given the financial importance of that country its exclusion is not going to be without consequences for the efficiency and stability of both the British and the euro area banking systems and for the progress in unifying the EU internal market as well. Other non-euro area countries will have to decide whether or not they will become “*participating member states*”, *i.e.* states that participate in the single supervisory mechanism, when the latter will start, hopefully at the beginning of 2015.

To the extent that there is some overlapping or interference of regulation and supervision, and therefore of the tasks of the European Banking Authority (EBA), where all EU countries are members, and the tasks of the ECB as the single supervisor, non-participating member states may think that the unification of supervision will decrease their influence on “regulation” (defined at large), because they will have no voting powers in the ECB. To overcome this problem EBA’s voting rules were changed, considerably increasing the power of members that will stay out of the single supervisory mechanism: *a double majority will be required for EBA’s decisions*, a majority of both participating and non-participating countries. This decision, that was pushed in particular by the UK, will complicate the already difficult decision-making procedure of EBA, thus decreasing its effectiveness, possibly weakening the first pillar of the banking union but also increasing the incentives for supervisory decisions to try and invade the grounds of regulation. As on other fronts of UK’s attitude with Europe, the British boycott

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of the connected stress-tests: « ... there has been a solid commitment by leaders, which has been confirmed by the Ecofin Council and by the Eurogroup, so that all governments have basically committed themselves to provide public backstops [related to the outcomes of the asset quality review] that would be put in place according to established regulations.... So I think there is an explicit commitment that I have no reason to put in question».

of the banking union could turn out to be counterproductive for the influence of UK's financial legislation on the EU and the world, leaving to the British only the doubtful advantages, if any, of isolation.

As for the powers of participating countries in the governance of ECB, the single supervisor, they will be exerted in the Supervisory Board, as explained in the preceding section of this paper, which leaves the final responsibilities to the Governing Council where non-euro countries are not represented. But non euro participating countries will be allowed to exit the single supervisory mechanism after three years, without qualifications, and also before, in case of a major disagreement with a supervisory decision impacting the country. This *opt-out clause* is a privilege of non-euro participating countries that should act as an incentive to participate even for countries tending to favor national over common European interests. It will also be possible for the ECB to order their exit in case of a major non-compliance with its supervisory decisions.

Difficult problems may arise to supervise (and resolve) *multinational banks* when either the parent or the subsidiary<sup>60</sup> is located in a non-participating country. Non-euro area members where there are important subsidiaries of banks based in participating countries would facilitate cross country supervision by deciding to participate. To the extent that these countries are relatively small and with little financial influence, such a decision would certainly favor also their own national interest, as they participation will increase their voice and grant them a vote in the unified supervisory mechanism<sup>61</sup>. This is probably the case of most central and eastern European countries but also Sweden might find convenient to participate, given its deep banking relations with Baltic countries and other participating countries.

Another *incentive to participate* in the single supervision for a non-euro country could be to avoid suffering from a decreasing banking and financial integration with the euro area. Multinational banks based in the latter could decide to reduce their involvement in countries where there is the complication of a different regulation, where there is the threat of reciprocal discriminatory treatments between the local and euro authorities in regulating cross-border liquidity flows and capital operations and where their subsidiaries will be certainly excluded from the single resolution mechanism. On the other hand, the experience and often good rela-

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<sup>60</sup> In the case of branches, supervision is with the authority of the parent bank's country.

<sup>61</sup> DARVAS Z. and WOLFF G.B. (2013) provides a detailed discussion of the question: «Should non euro-area countries join the single supervisory mechanism?».

tions acquired in the past with local regulators, as well as profitability reasons, could compensate the negative aspects of enhancing the activity of euro area based banks' subsidiaries in non participating countries.

From the point of view of non participating countries' banks, a *reputational problem* could arise in case markets will judge their supervisory and crisis management mechanisms less efficient, less best practice-oriented and less solid than those adopted in the euro area. The consequence could be a higher cost of funding. This possibility could act as an incentive to participate. An incentive could also derive from the fact that a participating country will have the *opportunity to influence the detailed design of supervisory practices*, especially if the intention to participate is announced early enough during 2014, as well as to "learn by doing" during the first practical experiences with the single mechanism. Another important incentive is the *flow of information* that participating countries will receive on the overall situation of euro area based multinational banking groups of which they host branches and subsidiaries. In fact the insufficiency of this type of information has often been in the past a ground for complaint by hosting countries' authorities. A more general incentive is the mere *defense of financial stability* in an integrated financial market: "the impossible trinity of financial integration, financial stability, and national responsibility for crisis prevention and management, holds for the entire [European] region, and not just for the euro area. The Swedish and Danish banking systems [in particular] are not only large in proportion to the GDP of the two countries, but they are also closely integrated with the rest of Europe"<sup>62</sup>.

On the whole, it looks like the choice to participate in the single supervisory system would bring net benefits to many non euro area member countries. Their *participation could also be a good thing for the euro area members*, provided that they trust the commitment to closely cooperate that non euro area participating countries must give. Enlarging the area where the single supervision will be applied will also reinforce the case for progressing in the unification of regulations, in the integration of internal market, in the elimination of distorting and protectionist regulatory barriers against cross-country M&As in the banking industry (leading to what has been labeled "private banking union"<sup>63</sup>) and, possibly, in the enlargement of the euro area and in enhancing of the global roles of the European currency and of the European banking industry.

<sup>62</sup> ASMUSSEN J. (2013*a*).

<sup>63</sup> *ibidem*.



A more complex problem will arise with the single resolution mechanism, when its characteristics will be finalized: the convenience for euro area countries to share the resolution mechanism with other countries will depend on many details of the mechanism, including the precise scheme that will be adopted to set up a fiscal backstop to assist bank restructuring and crisis management.

Until the banking union project is fully implemented, both in the euro area and in some non-euro EU countries, “*emerging Europe*” is a region – including also non-EU countries – that needs special attention in matters of financial stability. It is a region where banks are mostly based abroad, many of them in the euro area, and where international coordination in regulation, supervision and resolution is a particularly delicate and important issue. This fact has been evident during the first phase of the global financial crisis, in 2009, when international banks’ deleveraging and capital outflows caused an unsustainable strain on emerging Europe. In that occasion the so called *Vienna initiative*<sup>64</sup> was launched, bringing together international institutions like the IMF and private and public stakeholders of EU-based cross-border banks active in that region. The results were positive and highly appreciated so that a new edition of the initiative (“Vienna 2.0”) was set up following the new wave of euro area crisis towards the end of 2011. This type of forum for cooperation should keep being very active during the complex and uncertain transition period towards the establishment of a complete banking union in the euro area and in a certain number of other countries. The forum should assist<sup>65</sup> in coordinating the building of the union with banking policies in countries of emerging Europe, both EU members and non EU countries, both candidates to participate in the banking union and countries that are very far from considering participation. As Italian banks are very important in the region, Italy should be keen to promote and develop an initiative such as Vienna 2.0.

## 7. - Monetary and Banking Policies, the Payments System and the Banking Union

As reported in section 2 of this paper, the EBU project was born with the main aim of overcoming the dangerous segmentation that hinders the smooth functioning of the money market in the euro area, preventing liquidity to freely

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<sup>64</sup> <http://vienna-initiative.com/>

<sup>65</sup> See, for instance, VIENNA INITIATIVE (2013).

flow towards where it is most needed and to refinance the banks without regard for the sovereign risk of the country where they are based. The fragmentation problem is also an obstacle for monetary policy, as its impulses cannot reach in a homogeneous way the different member countries: a single monetary policy for the whole euro area becomes impossible and the newly created liquidity tends to pile up in the national segments of the European banking system that are already most liquid. Therefore EBU also serves the specific needs of monetary policy.

But EBU alone is an insufficient reform to enhance the effectiveness and homogeneity of the single European monetary policy; at the same time, its benefits are also directed to other aims. The problem of fragmentation arises when risks of financial stability tend to be country-specific. The European financial crisis has stressed how country-specific financial macro-risk can originate from excessive and persistent *balance of payments disequilibria*. “Peripheral” European countries have lost competitiveness and their current account deficits, following the creation of the euro and the disappearance of exchange rate risks, have been financed with capital inflows from “core” countries, especially from Germany. Suddenly, in 2010-2011, the accumulated debts of deficit countries, that had inflated their inflows of interbank credit and the foreign holdings of their sovereign securities, started to frighten the markets with potential risks of default and of “redenomination” (exit from the euro) as well. “Sudden stops” of capital flows to the periphery disrupted the euro area, brutally inverting their direction. This outflows triggered the intervention of the ECB, providing credit to the periphery and the accumulation of large surpluses by the core countries on the European payment system that connects national central bank accounts. The so called “*Target 2*” *balance*<sup>66</sup> became very negative for peripheral countries and excessively positive for Germany and the core. The latter felt the burden of a forced financing of the periphery through the accounts of the central bank. International political tensions followed, nourishing market expectations of a break-up of the euro. The situation improved only when the ECB committed to do “whatever it takes” to defend the irreversibility of monetary unification with unlimited interventions in support of the periphery’s sovereign debt<sup>67</sup>.

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<sup>66</sup> [www.ecb.europa.eu/paym/t2/html/index.en.html](http://www.ecb.europa.eu/paym/t2/html/index.en.html)

<sup>67</sup> The Outright Monetary Transactions (OMTs): the technical features of the OMTs were summarized in a press release dated 6 September 2012 ([http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906\\_1.en.html](http://www.ecb.europa.eu/press/pr/date/2012/html/pr120906_1.en.html)). Useful reading is also the ECB explanation of the OMTs before the German Federal Institutional Court, in June 2013, ASMUSSEN J. (2013*b*).

This complex story of financial instability and indiscipline could unfold because of the characteristics the European central bank credit and payments system. A very elastic supply of central bank liquidity is ready to refinance interbank debts and the “Target 2” system allows surplus countries to accumulate “money” that would have otherwise be spent in real productive investments abroad or in commercial imports, thus favoring the return to equilibrium of the national balances of payments in the euro area. *Central bank credit and Target 2 tend to allow persistent disequilibria and therefore nourish fragmentation and financial instability.* This is the euro area version of a well known and very old problem of the international monetary system, where the accumulation of international money holdings allows creditor countries to avoid doing their part in the correction of balance of payments disequilibria: *the burden of correction thus falls entirely on the debtor countries*, causing a more difficult, controversial and often counterproductive process of adjustment. In the case of the euro area, new international money is created that, while favoring the persistence of disequilibria and fragmentation, drives the area in an increasingly deep liquidity trap.

The banking union, by reducing the importance of the nationality of banks, can help avoiding “sudden stops” in international liquidity flows and prevent triggering Target 2 unbalances. But *a reform of the payments system* could also be helpful to deal with the problem. Suppose the following:

- *a Target 3 system is created*, where only central bank debts and credits originating from international direct real productive investments and commercial (import-export of goods and services) operations are registered, excluding balances that correspond to financial investments and disinvestments. The latter would be left on, say, Target 2.
- *central bank credit to banks that finance international direct investments and commercial imports is extended at a privileged rate* while credit for purely financial operations, like buying sovereign or private securities, is granted at higher rates.
- *Target 3 positive or negative balances of a country are charged with significant and fully symmetric fees* when accumulated beyond a certain limit.

The result would be a central bank credit and payments system that contains incentives for symmetric rebalancing of international deficits and surpluses and prevents unsustainable and destabilizing international financial flows. A reform of this type<sup>68</sup> would be *a complement of EBU* in reducing fragmentation and in

<sup>68</sup> As proposed in BRUNI F. and PAPETTI A. (2013).

normalizing monetary policy. *EBU, on its part, would help implementing the reform* because a single supervisor could better manage the distinction of payments that can enter Target 3 and administer more effectively the punitive fees on excessive unbalances.

Financial instability and fragmentation of euro area, causing problems for monetary policy, can also be grounded in other defects of European banking and financial markets that call for structural reforms. From this point of view EBU is a *complement* of several types of “*banking policies*” that aim at increasing the degree of integration and the allocative efficiency of finance in the euro area. These banking policies are on the agenda of European authorities and should be carefully connected to the process of EBU as the latter can also help the implementation of the policies. Relevant banking policies include *competition policy, conduct of business regulation, consumer protection, anti-money-laundering, taxes on financial services and institutions, housing finance, and Liikanen-report-type issues*<sup>69</sup> as well, such as “*separating*” *commercial and investment banking*. The responsibility for these policies lies with the EU Commission, mainly outside the ECB and far from the mechanisms that will constitute the EBU. But EBU, by reinforcing the unification of banking regulations and concentrating banks’ supervision and resolution can be obviously very helpful for implementing in an effective and homogeneous way all sorts of banking policies. Moreover, most European banking policies are prompted by the same principle as EBU, that is the *unification of internal markets*, as the fundamental aim of the single market is where the roots of EU and EMU can be found.

## 8. - Conclusions

The main lessons learned until now on the road to the banking union are that its design and implementation are absolutely necessary – much more crucial than was initially thought – for a healthy survival of the single currency, but also that it is a complex process, both technically and politically, that needs a right balance between speed and gradualism. The ECB seems to play the most influential role in shaping the process and in setting the conditions for its completion.

This paper has argued that the *EBU project has manifold aims*. Besides *fighting the euro area fragmentation*, sudden stops and vicious circles between banks’ and

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<sup>69</sup> HIGH LEVEL EXPERT GROUP ON REFORMING THE STRUCTURE OF THE EU BANKING SECTOR (2012).

sovereign risks, thus helping the implementation of a single monetary policy in the euro area, it is an indispensable and natural *complement of the single currency for a single market*. EBU is therefore as important as Maastricht's EMU. While essential for the ins, *i.e.* for the member countries of the euro area, for several reasons EBU can also be considered *desirable for the outs*, *i.e.* for non-euro area EU member countries that are offered the option of participating in the banking union, at least in its single supervisory mechanism.

EBU will also *trigger the implementation of the best practices* in regulation, supervision and crisis management, thus resulting in a stronger and more competitive euro area financial market, also supporting the global role of the euro. To this end the project must be *well connected to the numerous banking policies* that are on the EU's agenda, including structural reforms such as those proposed in the Liikanen report. The aims of EBU would be best obtained by *reforming also the central bank credit and payments system*, favoring the refinancing of bank operations directed to support cross border productive investments as well as exports and imports of goods and services, while discriminating against purely financial bank operations and imposing symmetric fees on excessive, prolonged, positive and negative current account payments unbalances. EBU, on its part, would help implementing such a reform.

The newly created banking union will consist in two main pillars: *a single supervisory mechanism*, already fully agreed and deliberated, with the ECB acting as the single supervisory authority for all the euro area and for other EU countries that want to participate; and *a single resolution mechanism*, based on a set of rules including the imposition of the *bail-in of banks' shareholders and unsecured creditors* before large bailouts with public funds are authorized.

The decision of where to locate the powers and responsibilities to manage the two mechanisms is a difficult and delicate problem in *optimizing the governance of EBU*. Supervisory powers have been assigned to the ECB and must find a satisfactory coordination with powers connected with the resolution pillar, taking into account the fact that a grey zone between the two cannot be avoided. The whole assignment of powers in the governance of EBU pictures a rather dispersed and complicated articulation of responsibilities that could benefit from some simplification: Table 1 tries a still rather uncertain summary.

In the last agreement of the Council and the Parliament, the resolution mechanism would rely on a newly created intergovernmental single resolution board and on a single resolution fund, financed by the banking industry but with some public fiscal backstop, with a degree of mutualism increasing for some years until

it eventually reaches a complete sharing of the private and public funds set aside to support bank restructuring and resolution.

TABLE 1

## ASSIGNING POWERS AND RESPONSIBILITIES IN THE GOVERNANCE OF EBU

EBA: European Banking Authority; ECB: European Central Bank; SRM: Single Resolution Board; ESM: European Stability Mechanism; ESRB: European Stability Risk Board.  
Smaller x indicate a secondary role

	EBA	ECB	SRB	ESM	ESRB	Com- mission	Member states
Regulation	X	x			X	X	x
Supervision		X			X		x
Resolution			X	x		x	X
Sovereign debt crisis management		x		X			X
Bank recapitalization				X			X
Prompt corrective action and general bank crisis management		X	x				X
Monetary policy		X					
Cross border payments system administration	X						x
Banking policies	X					X	X

The year 2014 is crucial for the successful introduction of both pillars: the single supervisor will start operating at the end of the year, provided that (i) an “asset quality review” *plus stress tests*, to be conducted by the ECB during the year, is successful in *dealing with the legacy* of past national supervisors and conducive to adequate *nationally decided and financed recapitalizations* and reorganizations of banks found in need of them, in such a way as to deliver to the new single supervisor a clean and sound situation; (ii) a single resolution mechanism with a central authority has been completely deliberated.

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# The Economic Impact of EU Competitiveness Programs on Italian SMEs

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*This paper focuses on how structural funds from the EU might alleviate the credit crunch on Italian SMEs. We found that resources directly available to SMEs represent only 0.19% of 2013 loan facilities: moreover, the allotted resources for SMEs in 2014-2020 programs is expected to be even less. Not only are available resources scarce, but they are also allocated in an inefficient way through procedures that are not always transparent. We conclude that it would be very useful to improve efficiency and transparency, by adopting simpler procedures and reducing compliance costs.*

[JEL Classification: H20; H30; H70].

**Keywords:** structural funds; SMEs; innovation.

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## 1. - Introduction

Small and medium-sized enterprises (SMEs) are extremely important Europe-wide. In the EU, SMEs contribute to the added value by 57%, and employ two thirds of workforce in the manufacturing industry.<sup>1</sup> In the major countries of the European Union, more than 99.6% of firms are small or medium-sized. The implementation of new EU programmes will take into account the forthcoming Industrial Compact, announced by the European Commission vice president Antonio Tajani in December 2013.<sup>2</sup>

The presence of SMEs in Italy outnumbers the same data in other countries across Europe. The relevance of SMEs in Italy is magnified by the fact that the total number of firms is by far higher than the number of firms in comparable countries. It follows that issues related to SMEs are likely to affect Italy more than other countries. This paper focuses on how structural funds from the EU might alleviate the credit crunch on SMEs, which in turn would affect the competitiveness of the Italian productive system as a whole. In considering the 2007-2013 EU financial framework, it has been found that the amount of available structural funds allocated to improve Italian SMEs' competitiveness is insufficient for the credit needs of Italian SMEs. In particular, if only the funds used for ongoing projects are considered, the total amount of funds for competitiveness of Italian SMEs is below 0.2%. Such a figure represents a largely insufficient impulse with respect to SMEs current needs in terms of credit funds. In order to maximize the chances for Italy to recover after the recession, it is crucial to allocate a larger share of structural funds to SMEs. Therefore, the funds' allotment mechanisms should be structured in a way which will improve competitiveness *via* a larger amount of resources available for SMEs, namely, for credit substitution or subsidization. The 2014-2020 EU financial framework partially resolves these issues by providing firms with some incentives to make use of advanced financial tools. As for funds specifically allocated to SMEs' competitiveness, it is still unclear whether the 2014-2020 seven-yearly program will determine a significant impulse to affect Italian SMEs needs. In fact, concerns regarding SMEs are addressed with specific measures, such as, for instance, the Equity Facility for Growth. However, the resources available for SMEs could be insufficient to create a significant effect on recovery. In particular, on the one hand the high-level SME programme (COSME), directly managed by the European Commission, has been weakened,

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<sup>1</sup> EUROPEAN COMMISSION (2013a).

<sup>2</sup> TAJANI A. (2013).

since its resource endowment is smaller than the homologous in the 2007-2013 programme (the CIP). On the other, financial underperformance of decentralized resources continues to constitute a risk. In fact, should the allotment mechanism remain unvaried, the allotted resources for SMEs competitiveness from decentralized funds in 2007-2013 programmes will be below 50%.

The structure of this paper is as follows. Firstly, in Section 2 the most relevant advancements in European policies for SMEs are illustrated. Secondly, section 3 analyzes the financial performance of decentralized funds destined to SMEs' competitiveness. Finally, Section 4 summarizes and concludes.

## 2. - The Most Recent European Policies for SMEs

The recent SMEs European policy focuses on two main aspects: the SMEs access to finance and credit constraint and SMEs investments in R&D, both to maintain a sound competitiveness level through the current Long Depression.

Picking up to a US approach, the European Commission's *Small business act* (SBA)<sup>3</sup>, adopted in June 2008 at the very beginning of the Crisis, entailed that entrepreneurs were particularly well placed «to reap opportunities from globalization and from the acceleration of technological change. Our capacity to build on the growth and innovation potential of small and medium-sized enterprises (SMEs) will therefore be decisive for the future prosperity of the EU. In a globally changing landscape characterized by continuous structural changes and enhanced competitive pressures, the role of SMEs in our society has become even more important as providers of employment opportunities and key players for the well-being of local and regional communities. Vibrant SMEs will make Europe more robust to stand against the uncertainty thrown up in the globalised world of today». The document was based on the *The mid-term review of the EU's Modern SME policy*<sup>4</sup> and concentrated on 10 topics, such as: creating an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded; ensuring that honest entrepreneurs who have faced bankruptcy quickly get a second chance; designing rules according to the "Think Small First" principle; making public administrations responsive to SMEs' needs; adapting public policy tools to SME needs; facilitating SMEs' participation in public procurement and better using State Aid possibilities for SMEs; facilitating SMEs' access to fi-

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<sup>3</sup> EUROPEAN COMMISSION (2008).

<sup>4</sup> EUROPEAN COMMISSION (2007).

nance and developing a legal and business environment supportive to timely payments in commercial transactions; helping SMEs to benefit more from the opportunities offered by the Single Market; promoting the upgrading of skills in SMEs and all forms of innovation; enabling SMEs to turn environmental challenges into opportunities and encouraging and supporting SMEs to benefit from the growth of markets.

In particular, dealing with SMEs access to finance the SBA focused on the EU's public support such as the Competitiveness and Innovation Framework Program (CIP)<sup>5</sup>, which provides over 1 billion euro to support SMEs' access to finance. The EIB Group channels a substantial amount of this sum.

By 2013, Cohesion Policy will provide some 27 billion euro explicitly destined to the support of SMEs. Around 10 billion euro will be allocated through financial engineering measures and some 3.1 billion euro through venture capital. The European Agricultural Fund for Rural Development also benefits SMEs as it promotes, among other things, entrepreneurship and encourages the economic diversification of rural areas.

The Small Business Act for Europe, originally provided a comprehensive SME policy framework, promoted entrepreneurship and anchored the "Think Small First" principle in law and policy making to strengthen SMEs' competitiveness. The former applies to all the independent companies, which have less than 250 employees (that means 99% of all European businesses), and has been reviewed in April 2011.<sup>6</sup>

According to the said SBA review, "To improve SMEs' access to finance, financial instruments within the Competitiveness and Innovation Framework Programme (CIP) continue to facilitate venture capital investments and provide guarantees for lending to SMEs. Microenterprises represent 90% of the over 100,000 SMEs that have benefited so far from the CIP financial instruments. A further 200,000 SMEs are expected to benefit by 2013".

As a response to the financial and economic crisis, most Member States have adopted measures to enhance SMEs' access to finance, especially bank lending, through advantageous subordinated loans, loan guarantee schemes or microcredit programmes. However, according to the Commission, only six Member States (Belgium, Hungary, France, Germany, Ireland and Finland) have created a

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<sup>5</sup> The CIP runs from 2007 to 2013 with an overall budget of € 3,621 million. The CIP was divided into three operational programmes: The Entrepreneurship and Innovation Program (EIP); The Information Communication Technologies Policy Support Programme (ICT-PSP); The Intelligent Energy Europe Programme (IEE).

<sup>6</sup> EUROPEAN COMMISSION (2011).

“credit ombudsman”.<sup>7</sup> In May 2010<sup>8</sup>, the Italian government adopted a recommendation to implement the SBA and set up a permanent working group gathering Ministries, Chambers, Business Organizations, Regions and an Italian member of the European Economic and Social Committee to monitor the implementation of the SBA and propose initiatives in this context.

Currently, six of the seven Europe 2020 Flagship Initiatives<sup>9</sup> help SMEs to achieve sustainable growth by placing small businesses at the heart of EU policy, while one of the seven focuses majorly on SMEs. Hence, Flagship «An industrial policy for the globalization era» improves «the business environment, notably for SMEs», and supports «the development of a strong and sustainable industrial base able to compete globally».

The 2013 *Entrepreneurship 2020 Action Plan, Reigniting the entrepreneurial spirit in Europe*<sup>10</sup> underlines that: «Since 2008 Europe has been suffering the effects of the most severe economic crisis it has seen in 50 years: for the first time in Europe there are over 25 million unemployed and in the majority of Member States small and medium-sized enterprises (SMEs) have not yet been able to bounce back to their *pre-crisis* levels».

At present, the Action plan is built on three main pillars: entrepreneurial education and training, creation of an environment where entrepreneurs can flourish and grow, and development of role models and reaching out to specific groups whose entrepreneurial potential is not being fully utilized.

The Commission – Innovation Union Competitiveness Report (2013)<sup>11</sup> confirms that, «Overall, the EU benefits from more finance to innovation in the form of venture capital and inwards FDI, and it has achieved a considerable average annual growth in knowledge transfer and R&D activity in small and medium-sized enterprises (SMEs)».

According to the European Central Bank Report, the results of the survey regarding the access to finance of SMEs in the euro area from October 2012 to March 2013<sup>12</sup> showed that 85% of German SMEs that applied for credit in the second half of 2012 received the full amount. However, the average for southern

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<sup>7</sup> EUROPEAN COMMISSION (2011).

<sup>8</sup> Art. 6 of Direttiva del Presidente del Consiglio dei Ministri, May 4, 2010. For the implementation of SBA in Italy see SANGALLI G.C. (2011).

<sup>9</sup> EUROPEAN COMMISSION (2010).

<sup>10</sup> EUROPEAN COMMISSION (2013c).

<sup>11</sup> EUROPEAN COMMISSION (2013d).

<sup>12</sup> EUROPEAN CENTRAL BANK (2013).

European countries was just over 40%. The report also pointed out that, «At the euro area level, on balance, 5% of the SMEs reported an increase in their need (demand) for bank loans and 12% reported an increased need for bank overdrafts. SMEs in Italy contributed most to the net increase in the need for bank loans and bank overdrafts, whereas SMEs in Germany reported, on balance, a decrease in the need for bank loans and a basically unchanged need for bank overdrafts in the period from October 2012 to March 2013».

The Regulation on “European Venture Capital Funds”<sup>13</sup>, which is in force since July 2013, facilitates cross-border fundraising and the creation of a genuine internal market for venture capital funds.

Finally, the Commission Annual Growth Survey 2014<sup>14</sup> states that «such differences in access to credit cannot be explained only by differences in prevailing economic conditions». It further underlines that «with the support of the European Structural and Investment Funds (ESIF), the amount of funding available through leverage-based financial instruments for SMEs should double on average for the period 2014-2020 compared to the period 2007-2013, helping in particular countries where financial conditions remain tight».

In the nomenclature of Structural Funds 2007-2013 Research, Technological Development and Innovation (RTDI) refers to research and technological development (RTD) activities in research centres, RTD infrastructures and centers of competence, technology transfer, assistance to RTD, particularly in SMEs, and investment in firms directly linked to research and innovation. Moreover, RTDI includes the following sectors: RTD activities in research centres; RTD infrastructures and centres of competence; Technology transfer and improvement of cooperation of networks; assistance to RTD; particularly in SMEs (and RTD services in research centres); assistance to SMEs for the promotion of environmentally-friendly products and processes; investment in firms directly linked to research and innovation; other methods to stimulate research and innovation and entrepreneurship in SMEs; developing human potential in the field of research and innovation.

According to the Report Data<sup>15</sup>, 5,451 million euro of structural funds were allocated to RTDI activities in Italy for the period 2007-2013. Furthermore, Ital-

<sup>13</sup> Regulation (EU) no. 345/2013 of the European Parliament and of the Council, of 17 April 2013 on European venture capital funds.

<sup>14</sup> EUROPEAN COMMISSION (2013*b*).

<sup>15</sup> EUROPEAN COMMISSION (2013*d*). *Source*: DG Research and Innovation – Economic Analysis Unit, Innovation Union Competitiveness Report 2013, Data: Eurostat, DG REGIO, Figure I.2.5 Structural Funds 2007-2013 for RTDI (1) – amounts allocated and implementation rate and as % of civil GBAORD.

ian companies received another 3071 million euro<sup>16</sup> for competitive funding in R&D projects from the European Community budget through the Seventh Framework Programme.

Finally, in December 2013, the multiannual framework (MFF) for the years 2014-2020 was adopted<sup>17</sup>. Consequently, 125 billion euro<sup>18</sup> were destined to the field of Competitiveness for growth and jobs<sup>19</sup> and 325 billion euro<sup>20</sup> for Economic, social and territorial cohesion.<sup>21</sup>

However, in order to take into account the particularly difficult situation of Member States suffering from the crisis, the Commission shall in 2016, together with the technical adjustment for the year 2017, review all Member States' total allocations under the "Investment for growth and jobs" goal of cohesion policy for the years 2017 to 2020.<sup>22</sup>

It is hard to predefine how much the SMEs will benefit from these European resources, but we can identify the main funds tied to SMEs and the funds the SMEs could benefit from in the next seven years:

- The Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) (2014-2020)<sup>23</sup> in particular destined to SMEs, as

<sup>15</sup> EUROPEAN COMMISSION (2013*d*). *Source*: DG Research and Innovation – Economic Analysis Unit, Innovation Union Competitiveness Report 2013, Data: Eurostat, DG REGIO, Figure I.2.5 Structural Funds 2007-2013 for RTDI (1) – amounts allocated and implementation rate and as % of civil GBAORD.

<sup>16</sup> EUROPEAN COMMISSION (2013*d*), Figure I.2.6 FP7 funding – EC contribution and success rate of applicants, 2008-2012.

<sup>17</sup> Council Regulation (EU, EURATOM) no. 1311/2013 of 2 December 2013 laying down the multiannual financial framework for the years 2014-2020.

<sup>18</sup> Laid down in 2011 prices.

<sup>19</sup> Chapter 1.a of the multiannual financial framework, equivalent to 13% of the total EU commitment.

<sup>20</sup> Laid down in 2011 prices.

<sup>21</sup> Chapter 1.b of the multiannual financial framework, equivalent to 33.8% of the total EU commitment.

<sup>22</sup> Applying the allocation method defined in the relevant basic act on the basis of the then available most recent statistics and of the comparison, for the capped Member States, between the cumulated national GDP observed for the years 2014 and 2015 and the cumulated national GDP estimated in 2012. It shall adjust those total allocations whenever there is a cumulative divergence of more than +/- 5%. See art. 7 Council Regulation (EU, EURATOM) no. 1311/2013 of 2 December 2013 cit.

<sup>23</sup> Regulation (EU) no. 1287/2013 of the European Parliament and of the Council of 11 December 2013 establishing a Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME) (2014-2020) and repealing Decision no. 1639/2006/EC.



defined in the Commission Recommendation 2003/361/EC. Attention should be given to micro enterprises, enterprises engaged in craft activities, self-employed, liberal professions and social enterprises. Moreover, attention should also be paid to potential, new, young and female entrepreneurs, as well as to other specific target groups, such as senior citizens, migrants and entrepreneurs belonging to socially disadvantaged or vulnerable groups such as persons with disabilities and to the promotion of business transfers, spin-offs, spin-outs and second chances for entrepreneurs.<sup>24</sup> The general objectives of the program are two: (a) strengthening the competitiveness and sustainability of the Union's enterprises, particularly SMEs; and (b) encouraging entrepreneurial culture and promoting the creation and growth of SMEs.<sup>25</sup> The financial envelope for the implementation of the COSME program is set at EUR 2,298 million in current prices, of which no less than 60% allocated to financial instruments.<sup>26</sup> According to art. 7 of Regulation (EU) no. 1287/2013, the financial instruments shall include an equity facility and a loan guarantee facility. The allocation of funds to those facilities shall take into account the demand from financial intermediaries. As previously noted, the total allocation is less than the previous one (representing only 63% of the CIP 2007-2013 program budget). This confirms that, often, European wording does not reflect the concrete policy of Europe.

- SMEs can also apply to Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020).<sup>27</sup> According to art. 22 of such a regulation, particular attention shall be paid to ensuring the adequate participation of, and the research and innovation impact on, micro, small and medium-sized enterprises (SMEs) throughout the implementation of Horizon 2020. Quantitative and qualitative assessments of SME participation shall be undertaken as part of the evaluation and monitoring arrangements. What is more, the Commission should carry out evaluations and monitor the rate of participation by SMEs in Horizon 2020. If the target of 20% of the total combined budget for the specific objective “Leadership in enabling and industrial technologies” and the priority “Societal challenges” destined to SMEs is not

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<sup>24</sup> See par (14) of Regulation (EU) no. 1287/2013 cit.

<sup>25</sup> Art. 3 of Regulation (EU) no. 1287/2013 cit.

<sup>26</sup> Art. 5 of Regulation (EU) no. 1287/2013 cit.

<sup>27</sup> Regulation (EU) no. 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020) and repealing Decision no. 1982/2006/EC.

achieved, the Commission should examine what generated this situation and should propose immediately new measures, adequate for allowing SMEs to increase their participation.

Once again we notice that, the tied funds for SMEs are less than 0.7%; the breakdown of the budget innovation in SMEs is 616.2 million euro on a total budget of more than 77 billion euro.

- The Equity Facility for Growth (EFG) will certainly benefit SMEs since it will support European Union enterprises' growth and research and innovation (R&I) from an early stage, including seed, up to the growth stage. The single EU equity financial instrument shall be supported both by the Horizon 2020 program and by the COSME program. Support from the EFG may be financed on the one hand directly by the European Investment Fund or other entities entrusted with the implementation of the EFG on behalf of the Commission. On the other, by funds-of-funds or investment vehicles investing across borders, established by the European Investment Fund or other entities (including private or public sector managers), entrusted with the implementation of the EFG on behalf of the Commission together with investors from private and/or public financial institutions.
- The Structural and Investment (ESI) Funds were settled by the new Regulation (EU) no. 1303/2013,<sup>28</sup> *i.e.* the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund, the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). In order to ensure that resources allocated to financial instruments in favor of SMEs achieve an effective and efficient critical mass of new SME debt finance, it should be possible for those resources to be allocated within the entire territory of the Member State concerned regardless of the categories of region therein<sup>29</sup>. Among the thematic objectives of ESI, the following three should be considered focused on SMEs:<sup>30</sup> a) En-

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<sup>28</sup> Regulation (EU) no. 1303/2013 of The European Parliament and of The Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) no. 1083/2006.

<sup>29</sup> Par (39) Regulation (EU) no. 1303/2013 cit.

<sup>30</sup> Art. 9 Regulation (EU) no. 1303/2013 cit.

hancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF); *b*) The ESI Funds may be used to support financial instruments under one or more programmes, including when organized through funds-of-funds, in order to contribute to the achievement of specific objectives set out under a priority;<sup>31</sup> *c*) Contribution of ERDF and EAFRD to joint uncapped guarantee and securitization financial instruments in favor of SMEs, implemented by the EIB<sup>32</sup> (the aggregate ERDF and EAFRD contribution by all participating Member States shall be subject to a global ceiling of EUR 8.5 billion euro);<sup>33</sup> *d*) ERDF promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators, and supporting the capacity of SMEs to grow in regional, national and international market, and to engage in innovation processes<sup>34</sup>. The implementation of the new programmes will take into account the forthcoming Industrial Compact, announced by the European Commission vice president Antonio Tajani in December 2013.<sup>35</sup>

### 3. - The EU Funding Impact in Italy

This section illustrates how during the recent Long Recession SMEs in Italy faced a substantial credit constraint. Thus, new sources of funding must be discovered in order to preserve and improve the competitiveness of the Italian industries.

The ability of SMEs to achieve access to credit is crucial for the recovery of the Italian industrial system as a whole. Within the four largest economies in the EU, Italy has the largest share of SMEs, which represent 99.9% of the total number of firms.<sup>36</sup> In Germany and in the UK respectively 99.5% and 99.6% of firms are small or medium-sized. SMEs in France represent 99.8% of the total number of firms, which is the closest value to Italy. Nevertheless, Italy's peculiarity pertains to the total number of firms as well. In Italy, the number of enterprises is 2.3 times

<sup>31</sup> Art. 37 Regulation (EU) no. 1303/2013 cit.

<sup>32</sup> Art. 39 Regulation (EU) no. 1303/2013 cit.

<sup>33</sup> Laid down in 2011 prices.

<sup>34</sup> *Ex ante* investment priorities Regulation (EU) no. 1303/2013 cit., annex XI.

<sup>35</sup> TAJANI A. (2013).

<sup>36</sup> SMEs are defined by a criterion based on the number of employees. In particular, SMEs are firms employing less than 250 people. Data are retrieved from Eurostat online database.

the number of enterprises operating in the UK, 1.8 times the number of German firms and 1.5 times the number of French firms. In particular, the share of Italian firms employing between 0 and 9 employees (*i.e.* the smallest enterprises), is 94.8% of the total number of firms. This value is higher than in the rest of the largest economies. However, while interpreting the data it is crucial to consider that in Italy the number of micro enterprises is double the ones in Germany, 2.4 times the ones in the UK and 1.5 times the ones in France. Consequently, Italy has by far a larger number of firms than in the rest of largest countries of Europe, as well as Europe as a whole. The disproportion between the number of firms in Italy and in other major countries is more evident if level data is considered. Although Italy and France (*i.e.* the apparently most similar countries in terms of SMEs shares of the total) have a similar share of micro enterprises over the total number of firms, in Italy there are at least 1.2 million more firms than in France. Hence, issues related to SMEs, are likely to affect Italy more than other countries. In particular, for a number of historical and operational reasons, as for instance the tight link with local banks or the inability to face complex reporting and operational issues, SMEs typically suffer a poor access to credit funds. Firm-bank issues are beyond the purpose of this paper, as well as managerial questions. Instead, this paper focuses on how structural funds from the EU might alleviate the credit crunch on SMEs, which in turn would affect the competitiveness of the Italian productive system as a whole. In fact, the larger the credit crunch is on SMEs, the less likely it is that Italy will experiment a significant recovery.

From 2009 until 2013, the total amount of loans to resident sectors (excluding MFIs) increased by 5.6%. Nevertheless, the same amount peaked in 2011, and then decreased by 4.6% until 2013. These figures include consumption credit and mortgages, as well as loans to firms. Given the Italian peculiarity of an industrial sector composed essentially by small-sized firms, the most used form of bank funding is represented by loan facilities. Granted margins in loan facilities in 2013 were 62% of total loans. This form of funding is highly flexible and may be based crucially on informal communication between banks and firms, the latter representing significant savings in terms of financial disclosure especially for small-sized firms. Thus, the behavior of loan facilities may be considered as a more suitable variable to describe actual credit conditions for Italian SMEs. From 2009 until 2013, the margin used in Italian loan facilities fell by 17.4%, in the face of a 21.6% decrease of facilities granted. It is reasonable to assume that loan facilities granted to SMEs behaved similarly. In order to assess the actual credit conditions for SMEs only, in Table 1 loan facilities below 1 million euro have

been considered. This threshold is due to the common practice of mutual guarantee unions, which usually grant small or medium-sized unionized enterprise by 1 million euro.

TABLE 1

	LOAN FACILITIES		LOAN FACILITIES	
	Loan facilities to SMEs		Total loan facilities	
	Used margin (mil. €)	% variation ( <i>y-o-y</i> )	Used margin (mil. €)	SMEs' share
2009	407'173	—	877'932	46.4%
2010	420'559	3.3%	871'669	48.2%
2011	402'864	-4.2%	886'382	45.5%
2012	347'203	-13.8%	802'355	43.3%
2013	324'920	-6.4%	752'382	43.2%

Source: BANK OF ITALY.

It may be observed that the amount of credit available to SMEs as loan facilities remarkably decreased during the last three years. Such a decrease more than offset the increase occurred in 2010, such that the total variation from 2009 until 2013 amounts to -20.2%. This figure is consistent with the overall figure concerning total loan facilities. It can also be observed that in 2013 the margin of loan facilities used that are below 1 million euro were 43.2% of total loan facilities. In 2009, this *ratio* was 46.4% implying that credit to SMEs declined more than the total loan facilities, since a larger share of total loan facilities was granted to large entities. The share of loan facilities granted to SMEs has been decreasing since 2010, configuring a negative trend. It can be hypothesized that the negative trend may be initially due to the generalized tightening of credit constraints during the financial crisis (2007-2008) and the European sovereign debt crisis, and subsequently to the tighter banking regulatory framework, the latter tending to increase SMEs' efforts to be compliant for credit.

The credit framework for SMEs has severely deteriorated during the last three years, and the pursuance of the negative trend would imply further deterioration. Moreover, should a recovery take place, as forecasted by IMF, in 2014 and 2015, the tight regulatory framework may induce banks to adopt strategies that put them in the condition to be unable to meet a higher demand for credit from SMEs. This argument implies that a new policy approach must be undertaken in considering the policy strategies to improve SMEs competitiveness, which cannot be based anymore on bank credit only. Since the Italian productive system is

almost totally made up of SMEs (and especially by small and micro-sized enterprises), granting SMEs access to funding should lie on several pillars, including bank credit as well as public subsidy. Indeed, the correct assessment of SMEs' riskiness may constitute a significant cost for both the banks and the firms, such that a market failure may consequently arise.

Structural funds from the European Union's budget constitute a precious opportunity for Italian firms. According to *Opencoesione*<sup>37</sup>, the programmed funding to Italian National, Regional and Interregional Operational Programs (respectively NOP, ROP and INOP) for the period 2007-2013 amounts to € 47.7 billion. It is worthwhile to remark that, the 7-yearly EU program of structural-funding usage ended at the end of 2013, although it will definitely close in 2015. In fact, firms will have the possibility to certify their expenses until the end of December 2015. Nevertheless, the end date of the program still is significant, since it is the deadline for presenting projects.

In December 2013, 52.7% of that figure was paid by firms (as already certified by EU), and actually refunded by the EU itself. The aim and the nature of these programs (and of their respective funds), were described in the previous section. Such funds represent a powerful set of instruments to foster development for firms operating in underdeveloped areas, where credit conditions and requirements may be harsher than in more developed areas. Structural funds may be used in many ways. As previously mentioned, not all the allocated structural funds are destined directly to SMEs. A large part of them (56.3%), are used for improvements of infrastructure endowments, which typically consist in big projects involving large firms or groups of firms. In particular, almost 30% of the total allocated funds concern transportation and energy sectors. Among all the potential fund utilizations, the most representative in terms of credit subsidization for SMEs is the total expenditure addressed to firms' competitiveness. As previously mentioned, firms don't use all the allocated funds. Granted funds for firms' competitiveness amount to € 2 billion. Monitored payments with the same destination (*i.e.* costs actually paid and refunded using structural funds) amount to € 1.3 billion (65% of granted funds). In particular, within this class of funds, the most relevant for the purposes of this study is expenditure providing incentives to firms.

The total amount of incentives to firms, within the funds focused on firms' competitiveness, is equal to € 1.1 billion. While approaching this raw data, some

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<sup>37</sup> *Opencoesione* is an open data project implemented by Italian Ministry for Territorial Cohesion, Department for Development and Economic Cohesion.

specifications are required. Namely, large firms have been excluded from the relevant data. Incentives to large firms (within funds for competitiveness) are about 5%. The remaining 95% is theoretically available to SMEs. Nevertheless, a significant part of it (about 40% of the total incentive) relates to revolving and guarantee funds.<sup>38</sup>

Despite the fact that this particular class of funds represents a current incentive for firms, problems arise when interpreting the data. In fact, these funds must always be fully and nominally allotted. This seems to be a critical issue because the average usage of granted funds is far below 100%, and close to 50%. Moreover, revolving and guarantee funds are allocated and fully granted on the same day, which is quite unusual because these funds are granted on the basis of current costs. Such costs have to be certified by EU and this procedure usually takes time. More plausibly, we believe that these funds are transferred from national or regional governments to in-house financial entities, *i.e.* financial firms controlled by national or regional governments themselves. After this allotment, firms receive these funds to for real projects upon request and selection. This phenomenon determines a bias while interpreting raw data, since including these in-house bodies, one tends to overestimate the actual usage of allocated funds to final beneficiaries.

TABLE 2

INCENTIVES TO SMES COMPETITIVENESS (€)				
	Private financing	Public allocated financing	Funds actually granted	Funds granted (% of public financing)
Total funds	431'966'882	1'059'321'110	772'568'805	72.9%
Total funds minus revolving funds	431'966'882	610'455'110	323'702'805	53.0%

Source: Authors' calculation upon data from [www.opencoesione.it](http://www.opencoesione.it)

As it can be observed in the last column of Table 2, percentage of granted funds over the total public financing including revolving and guarantee funds is 72.9%, while is shrinks to 53% if these funds are excluded. A further argument supporting the separation between revolving and guarantee funds and other funds comes from a closer inspection of the former's nature. In fact, rotation and guarantee funds are not a grant. Resources from these funds are used for temporary participations in firms' equity, low-interest loans or guarantees. By means of this

<sup>38</sup> Translation for the Italian expression "Fondi di rotazione e garanzia".

particular instrument, returns from investments are reinvested in firms, implying that the funds can be used several times, reusing public funds, leveraging capital and increasing the sustainability and the effectiveness of public resources allocated to SMEs. Although supporting access to credit, this instrument is not connected to specific projects. Hence, looking at data related to funding of real projects (for instance development of business plans, quality and safety standard achievement, etc.) the remaining available funds shrink to € 610 million, representing only 0.19% of loan facilities to SMEs in 2013.<sup>39</sup>

In Table 3 and in Table 4 it is possible to observe the regional distribution of incentives to firms' competitiveness, the latter excluding revolving and guarantee funds. At present, the most effective usage of this policy instrument pertains to Calabria, Piemonte and a group of regions including Calabria, Puglia, Campania and Sicilia, with a share of 100% of used funds. Nevertheless, this data is biased by the presence of revolving and guarantee funds, which are only fully allotted nominally. In Table 4, this particular fund has been left out. After filtering the biasing funds, the most efficient regions are Lombardia, Abruzzo and Trentino-Alto Adige, which use respectively 99.5%, 94.6% and 88.1% of available resources for competitiveness of local SMEs. The worst three regions are Lazio, Campania and Molise, with respectively 25%, 29% and 35% of available funds used by local SMEs. The regions with the highest potential in level terms are Puglia, Sicilia, Abruzzo, Campania and Basilicata, which represent 70% of total allocated funds for SMEs' competitiveness. It is worth underlining the good performance in terms of destination of these particular funds to depressed areas. In spite of this good result, it emerges that, apart from Abruzzo (using 95% of available resources), the three other regions seem to be unable to use more than 57% of funds potentially addressed to local SMEs competitiveness.

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<sup>39</sup> See Table 1.



TABLE 3

## INCENTIVES TO SMES COMPETITIVENESS BY REGIONS (€)

	Private financing	Public allocated financing	Funds actually granted	Funds granted (% of public financing)
Abruzzo	0	62'648'071	59'261'371	94.6%
Basilicata	0	38'774'140	22'014'498	56.8%
Calabria	0	70'000'000	70'000'000	100.0%
Campania	54'742'695	129'792'792	101'580'432	78.3%
Emilia-Romagna	8'284'425	10'578'567	5'132'832	48.5%
Lazio	13'265'272	19'951'548	4'991'956	25.0%
Liguria	0	32'777'515	14'180'870	43.3%
Lombardia	4'100	766'453	762'353	99.5%
Marche	32'924'676	14'221'675	10'531'731	74.1%
Molise	0	100'000	35'000	35.0%
Piemonte	0	55'000'000	55'000'000	100.0%
Puglia	109'821'671	158'188'679	67'823'918	42.9%
Puglia, Sicilia, Calabria, Campania	0	233'866'000	233'866'000	100.0%
Sardegna	0	10'559'443	4'231'725	40.1%
Sicilia	119'440'474	128'299'270	67'753'751	52.8%
Toscana	27'172'997	35'322'092	25'810'782	73.1%
Trentino-Alto Adige	0	1'105'358	974'004	88.1%
Umbria	17'690'130	19'810'453	13'687'521	69.1%
Veneto	48'620'443	37'559'053	14'930'061	39.8%
<i>ITALIA</i>	<i>431'966'882</i>	<i>1'059'321'110</i>	<i>772'568'805</i>	<i>72.9%</i>

Source: Authors' calculation upon data from *www.opencoesione.it*

TABLE 4

## INCENTIVES TO SMES COMPETITIVENESS BY REGIONS EXCLUDING ROTATION AND GUARANTEES FUNDS (€)

	Private financing	Public allocated financing	Funds actually granted	Funds granted (% of public financing)
Abruzzo	0	62'648'071	59'261'371	94.6%
Basilicata	0	38'774'140	22'014'498	56.8%
Campania	54'742'695	39'792'792	11'580'432	29.1%
Emilia-Romagna	8'284'425	10'578'567	5'132'832	48.5%
Lazio	13'265'272	19'951'548	4'991'956	25.0%
Liguria	0	32'777'515	14'180'870	43.3%
Lombardia	4'100	766'453	762'353	99.5%
Marche	32'924'676	14'221'675	10'531'731	74.1%
Molise	0	100'000	35'000	35.0%
Puglia	109'821'671	158'188'679	67'823'918	42.9%
Sardegna	0	10'559'443	4'231'725	40.1%
Sicilia	119'440'474	128'299'270	67'753'751	52.8%
Toscana	27'172'997	35'322'092	25'810'782	73.1%
Trentino-Alto Adige	0	1'105'358	974'004	88.1%
Umbria	17'690'130	19'810'453	13'687'521	69.1%
Veneto	48'620'443	37'559'053	14'930'061	39.8%
<i>ITALIA</i>	<i>431'966'882</i>	<i>610'455'110</i>	<i>323'702'805</i>	<i>53.0%</i>

Source: Authors' calculation upon data from *www.opencoesione.it*

From the analysis of available data at the end of the seven-yearly EU program for structural funding-usage, the overall rate of utilization is 52.7%. With respect to the most urgent needs of Italian SMEs, the policy instrument constituted by funding projects by means of structural funds appears strongly under-utilized<sup>40</sup>. If only the resources available to improve competitiveness are considered, it can be observed that most of the regions address less than 70% of the available resources to local SMEs. In a framework characterized by tightening credit constraints for SMEs (as well as for the whole economy), a stronger effort should be made to put SMEs in the conditions to successfully apply to the EU-funded programmes.

<sup>40</sup> See for comments on the southern Regions impact of Structural funds ROSA G. and SABATINI M. (2013).

#### 4. - Concluding Remarks

It is widely recognized that SMEs are more exposed to business cycle fluctuations, essentially because of less innovation and a tighter dependence on bank loans than large enterprises. As a result, the recent Long Recession affected negatively SMEs' cash flows, which in turn made credit markets tighter and interest rate and collateral requirements higher. As a consequence, the number of bankruptcies increased since 2008. Since SMEs are relatively more important in Italy than in other major European countries, a decline in SME loans may be significantly worrisome for the Italian competitiveness. Italian SMEs represent 99.9% of the total number of firms, whereas in Germany and in the UK they represent respectively 99.5% and 99.6% of firms are small or medium-sized. In France, the percentage of SMEs is closer to the Italian value (99.8% of the total number of firms). Nevertheless, in Italy, the number of enterprises is 1.5 times the number of French firms, 2.3 times the number of enterprises operating in the UK and 1.8 times the number of German firms. In particular, the share of Italian firms employing up to 9 workers (*i.e.* the so called micro enterprises) is 94.8% of the total number of firms, a value higher than in the rest of the EU. Moreover, Italy has by far a larger number of firms than in the rest of Europe. The policy response of the Italian government has been modest, and based essentially on guarantees and deferments. Due to this reason, structural funds from the European Union should act as an opportunity for SMEs to alleviate financial constraints and to improve competitiveness. Unfortunately, this paper illustrates how EU's structural funds are largely insufficient to pursue the final goal of supporting SMEs' competitiveness and innovation. The total amount of EU's structural funds represents less than 1% of the EU's GDP. Funds directly managed by the European Commission and addressed to SMEs (CIP in 2007-2013 programme, COSME in 2014-2020 Horizon) have declined in absolute terms. Furthermore, a closer inspection of the decentralized funds shows that the resources allocated at present to improve SMEs competitiveness do not seem to be particularly relevant. The total amount of available funds for firms' competitiveness is 0.34% of the total loan facilities in 2013. By refining this data excluding funds addressed to large firms, as well as revolving funds, it emerges that resources available to SMEs represent only 0.19% of 2013 SMEs loan facilities.

Not only are available resources scarce, but they are also allocated in an inefficient way. Two main objections arise. The first one concerns the financial performance data including revolving funds. These funds are fully allotted to in

house bodies, which could use them for policy purposes at a regional level. On the one hand, in house bodies proved to be very useful in accelerating allotment procedures, which would likely be much slower under bureaucratic control of local government. On the other hand, the in house mechanism could be improved since it sheds light on a lack of transparency about how allotted resources are actually used to finance projects. In fact, information on this matter is often unavailable. The second main objection concerns the financial performance of structural funds for firms' competitiveness. Once we excluded rolling funds from the analysis, the total amount of the former is 610 million Euro, of which only 53% has been utilized by firms. Thus, it emerges that fund-allocating procedures are slow and inefficient. This is probably due to high compliance costs, often requiring collateral or bank guarantees in order to apply for structural funds, making them less attractive for SMEs.

To sum up, although the 2014-2020 structural funds will not significantly increase the financial endowments to support SMEs, it would be useful to address some features to improve their efficiency. In particular, in house bodies should provide more information regarding the utilization of funds through to the new opencoesione website. Adopting simpler procedures, reducing compliance costs and not requiring the application of banking guarantees could help to achieve this goal.

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# Regulatory Impacts from the Financial Crisis on German Banks

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*The changes in Europe's financial regulatory framework implemented since the 2007-2009 financial crisis have had a major impact on many aspects of the banking industry. The implementation from the regulatory guidelines is facing the banking sector with cost increasing challenges. I observe approximately 35 regulatory guidelines that will be in force from 2012 until 2019.*

*Commercial banks and private banks are the worst prepared for regulation implementation. These banks have high costs that have been increasing since 2009, when regulation started. I show that the cooperative banks and the savings banks are better prepared for the implementation of the multiplicity legislations.*

[JEL Classification: G18; G20; G28].

**Keywords:** financial crisis; regulation; business models; EMIR; OTC business.

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## 1. - Introduction

In 2014, many of the primary new banking regulations are taking effect. Beginning in January 2014, the Third Basel Committee on Banking Supervision (Basel III) Capital Requirements Directive IV goes into effect. In the first quarter of 2014, the European Central Bank will begin examining the performances of the largest European banks. In January 2014, the law to protect banks from risk and planning for reorganization/settlement goes into effect, in advance of the European commission law taking effect in July 2015, whose primary goal is to effect an institutional separation between commercial and investment banking functions.

In section one, I address approximately 34 new laws, rules and guidelines that German Banks must implement. Several of these rules are amendments to acts such as the Markets in Financial Instruments Directive (MiFID) II and Basel III, but others are new major rules that go into effect between 2012 and 2015. I cluster the regulations into European Union (EU) and German legislation. I begin with the extensive EU legislation; then, I move to less extensive EU legislation and finally address German laws. The columns show the years from 2010 to 2015 and show the information regarding the development of the legislation from 2010 to 2015. Most legislation (twelve laws) go into effect in 2014. Seven laws went into effect in 2013, and the remaining laws go into effect in 2015.

I investigate the effects of regulation on the three-pillar system in Germany. These observations show that the cooperative banking sector is good prepared to implement and comply with the new legislation: it has the lowest project, administrative and personnel costs for establishing structures to satisfy the regulation. The savings bank pillar has the same advantages. Conversely, commercial/private banks are poorly prepared to implement regulation. These banks have substantial costs that have been increasing since new regulations began to be implemented following 2009. They have a high cost-income *ratio* (CIR) compared with the other pillars; in the years from 2008 to 2010, these banks had negative net income. By contrast, savings banks and cooperative banks managed well during the crisis, and they were a stable factor in the German banking system, given their weight. The results show that these groups were also well positioned to implement the regulation requirements after the crisis.

In section three, I investigate in detail the European Market Infrastructure Regulation (EMIR) (which resembles the Dodd Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) in the US) because it is a wide-rang-

ing regulatory scheme with multiple steps and different effective dates. It involves a completely new regulatory structure for OTC derivatives and repositories and has exemptions for savings banks and cooperative banks in Germany. In the banking literature, the related questions of whether and how regulations impact banks' business are also investigated from an academic perspective. Subsections 1.2 and 1.3 provide an overview of this literature.

In section four, I use the discussion about regulation as a burden for financial institutions. With major regulations taking effect in 2014 (such as Basel III), more and better quality capital will be required. The new liquidity rules will require banks to have sufficient liquidity and will result in increased refinancing costs (Lautenschlaeger, 2012).

High burdens on the supply side confront decreasing revenues. The longer the low interest rate policy persists, the longer that all banking institutions are impacted by the revenue squeeze.

Whether a piece of regulation has an influence on structural policies must be analyzed.

Savings banks and cooperative banks are independent and self-sufficient institutions. (Fahrenschon, 2013) It follows that all the supervisory requirements must be met and then processed internally. The necessity of implementing these requirements causes fixed costs to increase. A problem occurs when the regulation requirements imposed by European politicians are not adapted to the business model of individual banks. In particular, small- and medium-sized institution – such as savings banks and cooperative bank – suffer from the additional costs, which leads to increased consolidation that is only partially offset by financial savings from combining institutions.

In fact, it becomes clear at this point that regulation has an influence on structural policies. It is not known whether this recognition occurs unconsciously or simply by accepting consequences. However, change in structural policies occurs at the expense of the stability of the financial system. By establishing supervisory regulations, politicians create larger institutions that become increasingly important to financial stability, which is counter to the intention of such regulations because politicians originally aimed to avoid creating large institutions that are “too big to fail”.

From the socio-political and economic perspectives, there is sufficient evidence that local banking has many benefits for the market and the banking structure. However, small and medium-sized institutions would not be economically viable if they acted individually as independent and self-sufficient institutions. Most of



the benefits of local banking actually stem from the fact that these smaller institutions are part of a combined structure. Among others, those lasting structures of local banks are created by connecting the back office tasks of the institutions while not affecting their local autonomy.

These challenges and changes have led to debates regarding how these regulations will impact business models and the future role and institutional forms of these banks. (Bülbul *et al.*, 2013) Schmidt (2013) characterizes the form and current role of savings banks and cooperative banks and speculates about their future prospects. (Schmidt, 2009).

## 2. - Overview of Regulations

### 2.1 *Essential Regulations*

Since the financial crisis, questions and hypotheses have been raised and discussed regarding banking regulation and its continuing impact on the banking business, particularly the OTC derivatives business. The EU is similar to a federal system in many ways: the European Commission represents the executive branch, the European Parliament and the European Council represent the legislative branch, and the European Court of Justice represents the judicative branch.

The European Commission is the executive body of the EU and represents and preserves the interests of the EU as a whole. Its primary tasks are to organize the day-to-day business of the EU by managing the EU's budget and allocating funding, enforcing laws and representing the EU internationally. In addition, the European Commission has legislative tasks that oblige it to draft proposals for new European laws (regulations, directives and rules). In fact, it is the only institution that has legislative authority (although it is an executive arm) inside the EU.

The members of the European Council include the heads of the governments of the member states of the EU, the President of the European Council and the President of the European Commission. Its task is to define "the general political directions and priorities" of the EU (under the Treaty of Lisbon) by adopting laws and by coordinating policies. However, it has no directly authorized legislative power.

Together with the European Council, the European Parliament decides on the laws of the EU. In contrast to the European Council, the European Parliament has the right to pass laws that are enforceable in member states. Therefore, it represents the legislative body of the EU. A regulation of the EU is a legal act

that is immediately enforceable in each EU member state. In contrast to a directive, it need not be transposed into national law. Therefore, there is no national flexibility because changes or amendments to the regulation are not typically permitted. In fact, regulations are part of the secondary law of the Union. If a regulation is considered a legislative act, it has been brought into force by the European Commission, the European Council and the European Parliament. Directives can be directed toward the EU itself, to all member states or to all citizens of the EU.

Directives have general application, and they are binding on the member states to which they are addressed and must be implemented during a specific time period. Similar to regulations, directives are part of the secondary law of the EU. However, they differ from regulations because they typically do not dictate the means of achieving particular results; instead, they leave implementation to the discretion of the member states. Thus, member states can choose which legislative procedures they should implement to achieve the intended outcome. Typically, the European Commission proposes a new directive that is approved or rejected by the European Parliament and the European Council.

Implementing provisions are regulations that accompany laws, regulations and directives and clarify how a law is to be administered. They typically enter into force by means of executive bodies, such as ministries that have been authorized by the legislative body. The European Commission plays a central role in implementing provisions. Because of the complexity of many regulations, EU member states are dependent on the specific knowledge of the European Commission and its advice. Thus, the process of implementing provisions typically occurs via cooperation.

In the column labeled “concern”, I investigate which pillars of the German banking sector are concerned with the legislation. The abbreviation labels are “P” for private/commercial banks, “C” for cooperative banks and “S” for savings banks. The stars on certain abbreviations indicate whether there are exceptions for pillars in the legislation. The exceptions are described in the following section.

TABLE 1

## OVERVIEW REGULATION PART 1

No.	Regulation	Legislation	2010	2011	2012	2013	2014	2015	concern				
1	Basel III / CRD IV	EU	Proposal		Implementation		in force		P	C*	S*		
2	CRR / Solvency Regulation (LCR, NSFR)	EU		Proposal		Implementation	In force	in force	P	C	S		
3	Large value credit	EU				Draft Basler Commission	Guidelines from EBA	Plan 2016	P	C	S		
4	MIFID II	EU	Draft			final Constitution		Implementation	P	C	S		
5	Financial Transaction Tax	EU	Draft			Guidelines	in force		P	C	S		
6	EMIR	EU	Draft	Implementation	in force	in force	in force	TX-Register	Clearing	in force	P	C*	S*
7	Banking Union	EU		Foundation: EBA, EIOPA, ESMA		ECB takes over supervision					P	C	S
8	SEPA	EU		Regulation		Implementation		in force			P	C	S
9	FATCA	US/EU	in force US	Implementation		in force EU					P	C	S
10	MaSan	EU		Proposal	EBA Consultation	Implementation		in force	P	C	S		
11	Separate banking system	EU				Draft	Implementation		In force	P	C	S	

## Description of the main prio 1 regulations:

- (1) Basel III-CRD IV: Basel III CRD IV: Basel III is a voluntary global regulatory standard for bank capital adequacy, stress testing and market liquidity risk. Basel III was agreed upon by the members of the Basel Committee on Banking Supervision in 2010-2011 and was scheduled to be introduced between 2013 and 2015. However, changes in April 2013 extended its implementation until March 31, 2018. (Basel Committee Banking Supervision, 2010). The third instalment of the Basel Accords (see Basel I and Basel II) was developed in response to the deficiencies in financial regulation revealed by the financial crisis. Basel III is meant to strengthen bank capital requirements by increasing bank liquidity and decreasing bank leverage. (European Commission, 2006); (European Commission, 2013).
- (2) CRR/LCR: CRR/LCR: The Capital Requirements Regulation (CRR) is part of the Basel III Framework and transfers the liquidity figures of the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) into applicable law. The CRR takes over 95% of the Solvency Regulation. Savings banks and cooperative banks have an intragroup exemption (§ 113

passage 7 CRR). LCR positions must be reported to national supervision monthly beginning on March 31, 2014. Beginning on January 1, 2015, banks must fulfill and cover 60% of a liquidity buffer. By January 2019, the degree of fulfillment will be 100%. Beginning March 31, 2014, positions in a stable refunding must report to national supervision quarterly.

- (3) Large value credit: Large value credit: Regarding the large exposures regime, the German regulation on recording, measuring, prioritizing and reporting of loans (GroMiKV) will contain supplementary provisions on decision-making requirements, reporting issues and regulations on implementing the remaining national options and exemptions for certain loans. The reporting system for loans of 1.5 million Euros or more does not stem from European legal requirements. Changes to the reporting system for loans of 1.5 million Euros required by the GroMiKV are the result of the general overhaul of the reporting system, and these changes affect how loan amounts are calculated and the content of reporting on loans of 1.5 million Euros or more. (BaFin, 2013).
- (4) MiFID II-MIFIR: MiFID 2004/39/EC, as subsequently amended, is an EU law that provides harmonized regulation for investment services across the 31 member states of the European Economic Area (the 28 Member States of the EU plus Iceland, Norway and Liechtenstein). The primary objectives of the Directive are to encourage competition and increase consumer protection in investment services. As of its effective date, November 1, 2007, it replaced the Investment Services Directive. (European Union, 2004). The MiFID is the cornerstone of the European Commission's Financial Services Action Plan, and its 42 measures will significantly change how the EU financial service markets operate. The MiFID retained the principles of the EU "passport" which was introduced by the Investment Services Directive (ISD), but added the concept of "maximum harmonization", which places greater emphasis on home state supervision. This addition is a change from prior EU financial service legislation, which featured a "minimum harmonization and mutual recognition" concept. "Maximum harmonization" does not allow states to be "super equivalent" or to "gold-plate" the EU requirements if doing so harms the "level playing field". (European Union, 2008).
- (5) Financial transaction tax: A financial transaction tax is a levy placed on a specific type of monetary transaction for a particular purpose. The concept

has been most commonly associated with the financial sector; it is not typically considered to include consumption taxes paid by consumers. (European Parliament, 2012). A transaction tax is not a levy on financial institutions per se; instead, it is charged only on specific transactions that are designated as taxable. Thus, an institution with no taxable transactions is not subject to the transaction tax. (European Commission, 2011).

- (6) EMIR (European Market Infrastructure Regulation): EMIR: EU Regulation no. 648 - 2012 of the European Parliament and of the Council of July 4, 2012 on OTC derivatives, central counterparties (CCPs) and trade repositories (TRs) entered into force on August 16, 2012. The following are the primary obligations under the EMIR: central clearing for particular classes of OTC derivatives; the application of risk mitigation techniques for non-centrally cleared OTC derivatives; reporting to trade repositories; the application of organizational, business conduct and prudential requirements for CCPs; and the application of requirements for trade repositories, including the duty to make certain data available to the public and relevant authorities. The following entities are covered by various provisions of the EMIR: financial counterparties and non-financial counterparties above the clearing threshold, non-financial counterparties below the clearing threshold, CCPs and trade repositories. (EMIR). (European Parliament, ESMA, 2012).

The Dodd-Frank Act contains similar legislation aimed at improving the stability of the US financial market. (US Government, 2010).

- (7) The banking union contains proposals from the EU regarding financial supervision, deposit insurance, stabilization and settlement from banks inside the EU. (Council European Union, 2013).
- (8) SEPA (Single Euro Payments Area) The Single Euro Payments Area (SEPA) represents a migration of depository transfers and debit advice to the new European standards. (European Payments Council - EPC, 2012).
- (9) FATCA (Foreign Account Tax Compliance Act) The Foreign Account Tax Compliance Act (FATCA) is a US law consisting of US tax reporting rules for foreign financial institutions. (Internal Revenue Service - IRS, 2012).

- (10) **MaSan** (Guideline from the European Commission for the rehabilitation and settlement of banks): Guidelines from the European Commission for the rehabilitation and settlement of banks (MaSan): On March 11, 2013, the European Banking Authority (EBA) launched a consultation on the Draft Regulatory Technical Standard (RTS) for the content of recovery plans. In so doing, the EBA began preparatory work to implement the Recovery and Resolution Directive (RRD), which is currently being discussed by the EU legislators. The consultation runs until June 11, 2013. The RTS will contribute to the European Single Rulebook in banking and aims to enhance financial stability and to minimize the probability of bank failure. (European Banking Authority, 2012).
- (11) **Separate banking system**: These laws shield credit institutions and financial groups from risk and plan their recovery. The resolution serves to stabilize the European banking system during a crisis. The German law takes three regulatory areas into account. First, it provides a simplified reorganization of credit institutions and financial groups. Credit institutions must devise plans for their own recovery and resolution in case of a market drop. Second, they should separate the riskier areas defined by the deposits. Third, the act introduces clear rules regarding criminal liability for the business lines of banks and insurance companies when they do not fulfill their duties. (Deutscher Bundestag/Bundesrat, 2013).
- (12) **EU Deposit Insurance**: The EU Deposit Insurance aims to protect deposits by depositors and to ensure the stability of the banking system in the European market. (European Commission, 2010*b*).
- (13) **The Revision of the EU Guidelines** amends regulations regarding public offers for securities and approvals for trading securities. (European Union, 2010).
- (14) **Shadow Banking**: The European Financial Stability Board developed arrangements and sanctions for better and more transparent regulation of shadow banks. (European Commission, 2013*b*).

TABLE 2

## OVERVIEW REGULATION PART 2

No.	Regulation	Legislation	2010	2011	2012	2013	2014	2015	concern		
12	EU Deposit Insurance	EU	EU Guideline		Discussion		Conclusion Trilog	in force	P	C	S
13	Revision EU Guidelines	EU	Review		in force	Review	in force		P	C	S
14	Shadow Banking	EU		Green Book		Draft	Implementation	in force	P	C	S
15	Fee based consulting	EU			Proposal	Draft	in force		P	C	S
16	EURIBOR/LIBOR Manipulation	EU			Investigation on banks				P	C*	S*
17	OGAW	EU	Draft	in force					P	C	S
18	European Green Book	EU			Submission long term finance on EU economy				P	C	S
19	Legal Entity Identifier	US/EU			Application		in force		P	C	S
20	Tax on financial transactions EU countries and the U.S.	EU			France	Spain	Italy	US	P	C	S
21	Taxation of Public Float	EU			Approved law				P	C	S
22	Regulation of Rating Agencies	EU		Proposal	Regulation	in force					

- (15) Fee-based consulting is subject to new rules from the EU that require greater transparency and registration in this sector. (Bundeskabinett, 2012).
- (16) Euro Interbank Offered Rate (EURIBOR)/London Interbank Offered Rate (LIBOR): The national supervisory investigations will extend to all the included banks. (BaFin, 2013); (BaFin, 2013).
- (17) OGAW Undertaking for Collective Investment in Transferable Securities Directives (UCITS; OGAW in German): Legal and administrative guidelines from the EU regarding investments in securities. (European Parliament, 2009).
- (18) European Greenbook: Rules and implementations regarding how to manage the salaries of board members of listed companies and the long term finance of the European economy. (European Commission, 2010a).
- (19) Legal Entity Identifier: The decision from the G20 through the Financial Stability Board that each financial counterpart in Europe must receive an explicit legal identifier to provide better transparency in the OTC derivative business. (BaFin, 2014)

- (20) Tax on financial transactions for other EU countries and the US: This new regulation provides for a tax from foreign governments on the purchase of the stock of listed companies. (European Commission, 2013a)
- (21) Taxation of Public Float Dividend: This law establishes taxation of future earnings from the dividends of capital companies received from small corporate investments. (Bundestag, 2012b)
- (22) Regulation of rating agencies: These regulations consist of new and tightened rules for rating agencies. (European Commission, 2013c).
- (23) IFRS 9 Credit Losses: The main objective in developing these proposals is to provide the users of financial statements with more useful information about an entity's expected credit losses on its financial assets and its commitments to extend credit. All entities that hold financial assets or commitments to extend credit that are not accounted for at fair value through profit or loss would be affected by these proposals, including financial assets measured at amortized cost or that are mandatorily measured at fair value through other comprehensive income, trade and lease receivables, loan commitments and financial guarantee contracts.
- (24) FINREP Reporting: Financial reporting, or FINREP, is a European regulation that applies to "credit institutions" (e.g., banking organizations) that will significantly increase the level of reporting of financial information to regulators. The regulation was developed by the EBA and is to be implemented by local country regulators.
- (25) MaComp II: In August and December of 2012, the German Federal Financial Supervisory Authority (BaFin) published further new versions of its Minimum Requirements for the Compliance Function and Additional Requirements Governing Rules of Conduct, Organisation and Transparency pursuant to Sections 31 ff. of the WpHG, which addressed the increasing importance of multilateral trading facilities.



TABLE 3

## OVERVIEW REGULATION PART 3

No.	Regulation	Legislation	2010	2011	2012	2013	2014	2015	concern		
									P	C	S
23	IFRS 9: Credit Losses	EU				Draft IASB	Discussion	in force?	P	C	S
24	FINREP Reporting	EU				Proposal EBA	in force		P	C	S
25	MaComp II	EU		Guidelines ESMA		in force			P*	C*	S*
26	Guideline Money Laundering	EU		Recommendations Financial Action Task		Draft	Discussion, no time table				
27	Performance Fee	G				in force			P	C	S
28	Investment fund regulation (KAGB) AIFM-Implementation law	G		Implementation		in force			P*	C*	S*
29	Investor Protection Improvement Pact	G		in force					P*	C*	S*
30	Withholding Tax	G		in force					P	C	S
31	Grey Capital Market	G		Law announcement	in force						
32	Share Law Amendment	G		Draft	Update		In force		P	C	S
33	Redesign Investment Tax	G				Draft			P*	C*	S*
34	Tax Treaty Switzerland Germany	G		Agreement	Discussion	rejected					

(26) **Guideline Money Laundering:** All companies in the financial sector are expected to have formal business policies to prevent transactions with individuals with criminal backgrounds and to work toward detecting and combating such transactions. This requirement is of particular relevance to transactions that support money laundering or terrorist financing and other criminal offenses that may imperil the assets of an institution. Such criminal activities not only threaten the reputation and financial strength of an institution that is abused for these purposes but also endanger the integrity and stability of the entire financial market.

(27) **Performance Fee:** Performance Fee: A performance fee is a payment made to a fund manager for generating positive returns. Performance fees are generally calculated as a percentage of investment profits, frequently both realized and unrealized. It is typically a feature of the hedge fund industry in which performance fees have made many hedge fund managers among the wealthiest people in the world. BaFin has sent a sample module for performance fee arrangements to the representative of the German investment fund and asset management community, the BVI. The sample module from the

- BaFin ignores the compromise proposals of the BVI and contains an extensive catalogue of new requirements on performance fees. (BaFin, 2011).
- (28) Investor Protection and Improvement Pact: New regulations to improve the efficiency of the capital markets and strengthen investor protection. (Bundestag, 2011)
  - (29) Withholding Tax: Revisions in German tax law that provide new rules, including a 25% taxation on all financial earnings. (Bundesfinanzministerium, 2009).
  - (30) Regulation in grey capital markets: A regulation providing new rules for depositors to minimize damage from grey financial markets, including tax offers, gambling offers, property investments, and forward dealing. (Bundesministerium für Finanzen, 2012).
  - (31) Share law amendment 2013: A revision of and new rules for the stock corporation act. (Bundestag, 2012*a*)
  - (32) Redesign of the investment tax: This amendment provides greater transparency and other improvements to the current investment tax law. (Bundestag, 2013).
  - (33) Tax treaty between Switzerland and the Federal Republic of Germany: This tax treaty was rejected by the federal government of Germany. (Bundesrat, 2012).
  - (34) Annual Tax Act 2013 and 2014: New and tightened regulations within the annual tax act for banks in Germany. (Bundesrat, 2013).

## *2.2 The Literature on Regulation*

In the banking literature, the related questions of whether and how regulations impact the banking business have also been investigated from an academic perspective. Using employment data for 3,000 banks from 86 countries, Demirgüç-Kunt and Detragiache (2011) do not find support for the hypothesis that better regulation and supervision result in sounder banks. These authors use adherence to the Core Principles for Effective Bank Supervision as issued by the Basel Committee on Banking Supervision (BCPs) as indicators of bank regulation and supervision. (Demirgüç-Kunt and Detragiache, 2011).

Klomp and de Haan find that banking regulation and supervision have an effect on the risks of high-risk banks. However, most measures for bank regulation and supervision do not have a significant effect on low-risk banks. (Klomp and de Haan, 2011). Some investigations employ the World Bank survey on financial institution supervision to construct measures of bank regulation and supervision. Barth *et al.* (2004) analyze the effects of various dimensions of bank regulation and supervision on bank stability using an earlier version of the survey dataset and suggest that policies that induce accurate information disclosure and (incentives for) private sector corporate control of banks work best to promote banking sector stability. (Barth *et al.*, 2004).

Pasiouras *et al.* (2006) use this survey to construct indicators of bank regulation and supervision. Employing bank level data from 71 countries and 857 banks, they find that certain dimensions of bank regulation and supervision have a significant impact on bank ratings. (Pasiouras *et al.*, 2006).

By the end of 2008, many banks throughout the world had seen most of their equity destroyed by the crisis that began in the US subprime mortgage sector in 2007. However, not all banks across the world performed equally poorly. Beltratti and Stulz (2012) examine how firm-level and country-level factors (e.g., bank characteristics, governance indices, bank regulation, and macroeconomic factors) relate to bank performance and investigate, in particular, how banks that performed better during the crisis differed from other banks before the crisis by measuring performance using stock returns. (Beltratti and Stulz, 2012).

### 2.3 *The Literature on Counterparty/Systemic Risk and OTC Derivatives*

Darby (1994) investigated the concept of systemic risk, which holds that the failure of one firm can lead to the failure of a large number of other firms and the collapse of the international financial system. Alternative proposed definitions are considered and integrated, and the effects of OTC derivatives on these risks are discussed. The key conclusion is that systemic risk has been reduced by the development of the OTC derivatives market due to shifting economic risks to those better able to either bear the risk or, in many cases, cancel it against offsetting risks. The implications of the Basel II capital proposals for systemic risk are analyzed and shown to increase this risk because some of these proposals encouraged transactions that increase dealer portfolio risk and discouraged transactions that decrease such portfolio risk. (Darby, 1994).

Singh and Aitken (2009) address the role of central counterparties and estimate that the adverse impact of counterparty risk on high-grade collateral flows

and global liquidity caused by a decrease in rehypothecation, reduced securities lending and hoarding of cash by major banks is at least 5 trillion USD. To mitigate counterparty risk, there have been regulatory initiatives to establish CCPs. From a policy perspective, counterparty risk currently remains large, and recent experience has shown that OTC derivative positions are not supported by sufficient capital, which constitutes a major risk for participants in this market. (Aitken and Singh, 2009).

Koepl and Monnet (2012) focus on the role of insurance in markets for OTC derivatives. Applying the latter view to the market for OTC derivatives, they argue that the risk transfer that characterizes CCP clearing leads to incentives for individual risk-taking and a collective failure of participants to account for the fact that the OTC derivatives market concentrates system-wide aggregate risk. This systemic risk externality worsens with central clearing because CCPs concentrate this risk further and become “too big to fail”. To correct this problem, I propose establishing systemic risk insurance as a necessary component of CCP clearing in OTC derivatives markets. (Koepl and Monnet, 2012).

Wellink (2010) observes that the risk management systems of Central Counterparties (CCPs) are not necessarily equipped to clear all types of derivative contracts. In addition, central clearing concentrates risk and may actually increase systemic risk. Thus, it is crucial that CCPs have robust risk management systems in place. Furthermore, enhancing the safety and transparency of bilateral clearing also merits attention because a certain share of OTC derivative trades will continue to be cleared bilaterally. Given the international character of the OTC derivative markets, coordination between national supervisors and regulators is crucial for any initiative to succeed. (Wellink, 2010).

### **3. - Effects of Regulations on German Banks**

#### *3.1 Banking Structure*

In Germany, there is a clear classification of banking groups defined in the German law Kreditwesengesetz KWG. According to this law, there are three pillars: private banks, banks governed by public law (savings banks) and cooperative banks. Based on the number of institutions, these three sectors represent 87% of German banks; the remaining 13% are distributed among special bank categories. Hackethal and Schmidt (2004).

There is one central bank, the Deutsche Bundesbank, and three clearing institutes: Eurex, Swiss Euro Clearing Bank GmbH - SECB and Clearstream Banking AG Frankfurt. The Federal Financial Supervisory Authority supervises banks, credit institutions and financial service companies and must explicitly approve the practice of a financial business.

Commercial banks belong to private proprietary groups, to which earnings are disbursed. With a listed bank, shareholders are liable for their share. As opposed to private banks, the business models of cooperative and savings banks do not emphasize profit maximization.

Cooperative banks are the property of their members. Earnings are paid in the form of a dividend, which is a limited amount given to members. The cooperative sector targets the economic advancement of its members.

The unique characteristic of German savings banks is their public service remittance. This remittance constitutes supplying a full range of financial services to all sections of society, particularly small and medium-sized businesses. (Brämer *et al.*, 2010). Above all, this remittance implies material access to credit: on the one hand, regional access through providing a nationwide network of branches, and on the other hand, sectoral access for all industries and structural access for SMEs and economically weaker sections of the population. (Brämer *et al.*, 2010). Savings banks have the most extensive branch networks and the most balanced regional distribution of branches in Germany. (Bundesbank, 2009); (Bülbül *et al.*, 2013).

### 3.2 *Data and Descriptive Analyses*

The balance sheet data in this study are based on a dataset from Bankscope (2013) from Bureau van Dijk and represent a sample of all financial banks and institutions from 2003 to 2011. I separate the Landesbanken (the central institutions of the savings bank sector) and the central banks from the cooperative sector.

In the descriptive analyses, I focus on the three pillars: savings banks, cooperative banks and commercial banks.

The first examination focuses on operating expenses. Project costs and implementation costs attributed to the voluminous regulation requirements are booked in the income statement operating expenses.

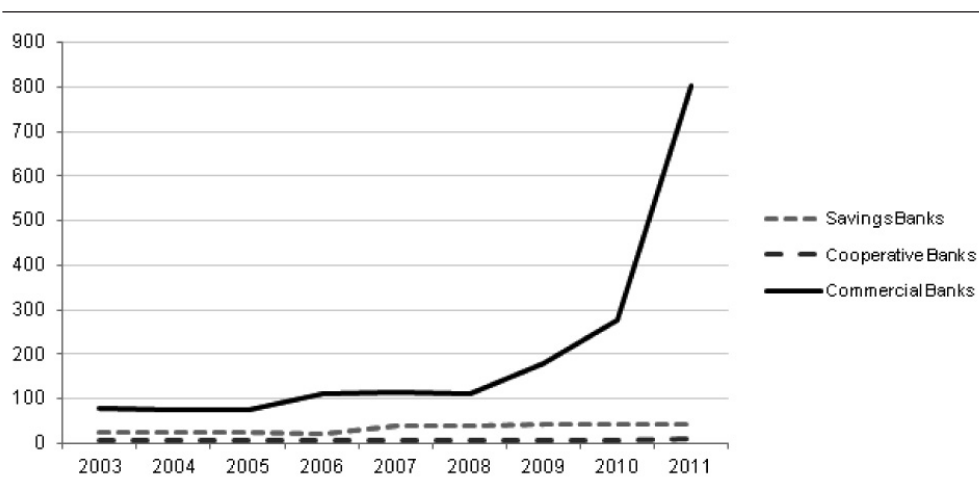
TABLE 4

## DATA ANALYSIS

Overview German Banks	2003	2004	2005	2006	2007	2008	2009	2010	2011
Savings Banks	405	405	413	415	418	416	416	416	416
Cooperative Banks	661	671	927	947	949	951	946	947	942
Commercial Banks	84	88	92	99	106	106	108	113	111
Bank Holding and Holding Companies	6	8	8	9	10	11	11	11	11
Central Banks	1	1	1	1	1	1	1	1	1
Clearing Institutions Custodies	2	3	3	4	4	4	4	4	4
Finance Companies	24	26	31	36	39	41	41	46	40
Investment and Trust Corporations	2	2	3	4	4	4	2	2	2
Investment Banks	12	15	20	21	24	21	24	24	25
Micro-Financing Institutions	0	1	1	1	1	1	1	1	1
Other Non Banking Credit Institutions	2	3	4	8	11	9	10	9	9
Private Banking and Asset management Companies	25	24	30	29	30	30	29	28	29
Real Estate and Mortgage Bank	34	34	34	36	35	38	39	39	39
Specialized Governmental Credit Institution	13	12	12	15	15	16	16	16	16
Securities Firm	5	6	7	9	11	12	12	12	12
CB Cooperative Bank	2	2	2	2	2	2	2	2	2
Landesbanken	11	11	11	11	11	11	10	9	8
Total	1,277	1,302	1,591	1,646	1,670	1,673	1,672	1,681	1,670

GRAPH 1

## OPERATING EXPENSES



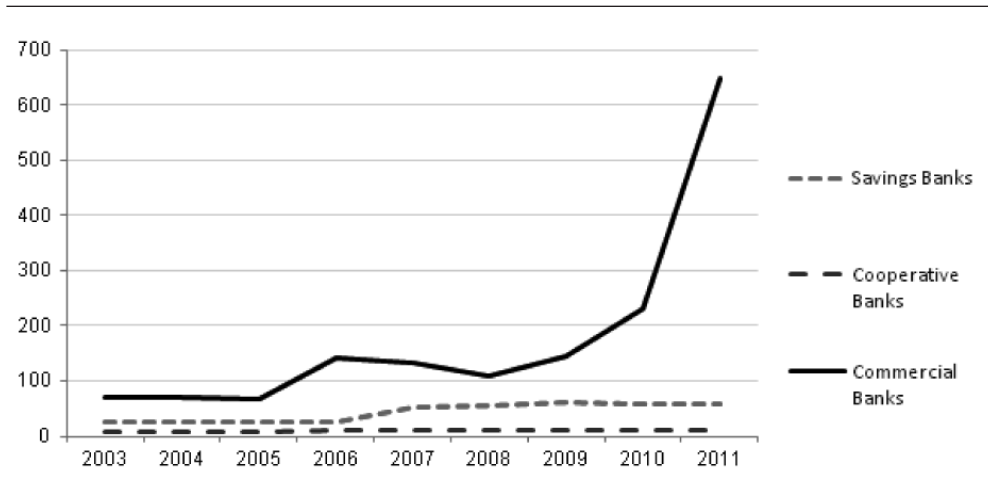
Operating expenses are an expenditure category that a business incurs as a result of performing its normal business operations. One of the typical responsibilities that management must address with is determining how low operating expenses can be reduced without significantly affecting the firm’s ability to compete in the market. (Dugmore and Lacy, 2006).

Such operating expenses have increased from an average of 110 billion Euro in 2008 to 800 billion Euro in 2011. Savings banks and cooperative banks have constant costs that average under 50 billion Euro per year.

Personnel expenses include wages, benefits, training, and payroll taxes incurred by the organization during the reporting period. Personnel expenses increased in a manner similar to operating expenses. (Standards, 2013).

GRAPH 2

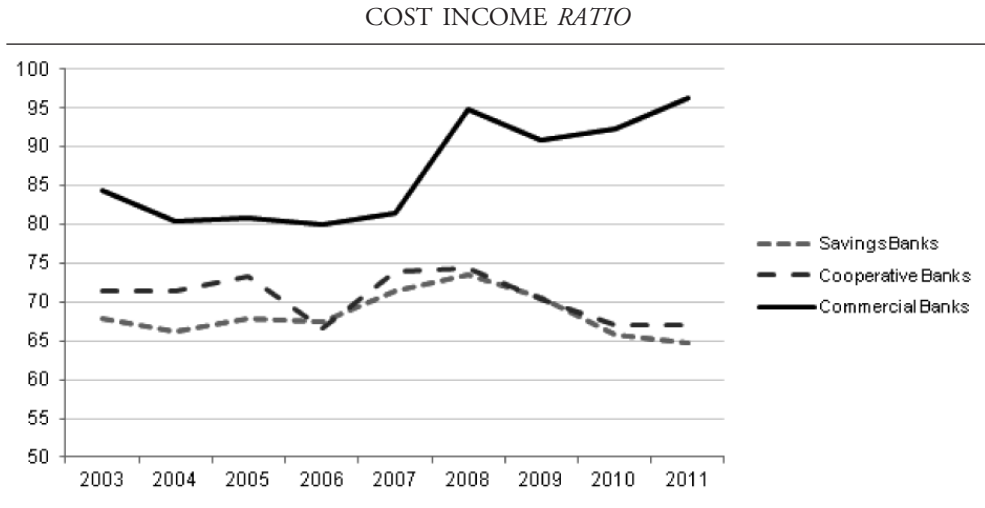
PERSONNEL COSTS



Considering the cost-income *ratio* of the three pillars (see Graph 2), it can be observed that commercial banks have a high cost-income *ratio* that has increased since 2007 from a mean of 80% to 95% in 2011.

In the opposite direction, since the financial crisis, savings banks and cooperative banks have worked to reduce the cost-income *ratio*, particularly during the years with a low interest margin. These banks have reduced the mean cost-income *ratio* since 2008 from 75% to 65% in 2011. This strategy has augmented the strength of both pillars compared with commercial banks.

GRAPH 3



Cooperative and savings banks have the lowest costs as a result of consolidation and optimization in the processes and workflows of these sectors. Both sectors have a central association. Cooperative banks have a further advantage in that they have only one large central institution and their back-office functions are handled by a settlement bank, dwp bank (Deutsche Wertpapier Service Bank AG). This well-structured and efficient formation is a substantial advantage in implementing the several regulations for the following reasons:

- (1) **Uniform IT:** There is consistent central management for developing the IT platform and systems used by all cooperative bank branches. Technical implementation and development occur only once and then are rolled out to the entire sector. This centralized management saves money, time and resources.
- (2) **Straight-Through-Processes:** Based on the IT environment, the process workflows are also standardized and have a high number of straight-through processes, which lead to low fixed costs.
- (3) **Central Management:** The third advantage is that there is one central institution and one association that bundle know-how and a uniform presetting for all branches. Only the high number of branches, which stems from the historical growth of cooperative banks, will be a challenge in the coming years,



particularly in the rural areas of Germany. Increased online banking and changes in demography will likely lead to further mergers and consolidations.

- (4) Exemptions for members of the same group: Exemptions for members of the same group: Another advantage for cooperative banks is that members are exempt from certain regulations. These exemptions lower the costs and effort required for implementation. As an example, here is the original text from the EMIR:

“Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories. Article 3 about exemptions: Intergroup transactions. In relation to a non-financial counterparty, an intergroup transaction is an OTC derivative contract entered into with another counterparty which is part of the same group provided that both counterparties are included in the same consolidation on a full basis and they are subject to an appropriate centralized risk evaluation, measurement and control procedures and that counterparty is established in the Union or, if it is established in a third country, the Commission has adopted an implementing act under Article 13(2) in respect of that third country”.

#### **4. - Impacts from European Market Infrastructure Regulation (EMIR) on German Banks**

##### *4.1 Definition of the EMIR*

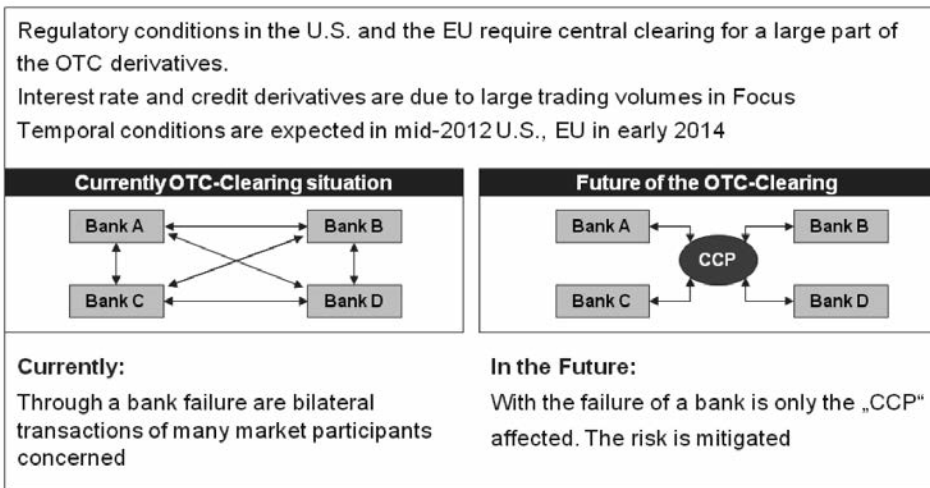
As discussed above, one significant advantage for savings and cooperative banks is their exemption from certain regulations by members of the same group. These exemptions result in lower implementation costs and effort. The original text from the EMIR offers one example of these exemptions: The EMIR entered into force on August 16, 2012.

The primary obligations under the EMIR are as follows: central clearing for particular classes of OTC derivatives; the application of risk mitigation techniques for non-centrally cleared OTC derivatives; reporting to trade repositories; the application of organizational, business conduct and prudential requirements for CCPs; and the application of requirements for trade repositories, including the duty to make certain data available to the public and the relevant authorities.

The following entities are covered by various provisions of the EMIR: financial counterparties and non-financial counterparties above the clearing threshold, non-financial counterparties below the clearing threshold, CCPs and trade repositories. (European Parliament, ESMA, 2012).

GRAPH 4

OTC-BUSINESS BEFORE AND AFTER REGULATION



The aim of the EMIR is to reduce and mitigate systemic risk and to create transparency in business relationships in the OTC market, which allows participants to identify clot risk. Before this regulation, the OTC derivative business was characterized by business among the counterparts, but mostly without any bilateral collateralization.

Collateralization was voluntary and resided in each institution as a financial precaution. A default by one business participant affected and meant implications for all participants that had a business relationship with this counterparty.

Through the regulation, the duty defined asset classes through the European Securities and Marketing Authority (ESMA) to clear a central counterparty called the “CCP”. When a bank fails, only the CCP is affected.

The barriers to becoming a member of a CCP are high; institutions must establish sufficient proprietary capital and a functional IT department that is able to work under pressure with high OTC volumes. Twice yearly, the CCP uses a stress test to confirm the health of the direct members.

The CCP model provides multiple security mechanisms: the members must pay a default fund contribution; the OTC business is covered by the initial margin (at the portfolio level); and the daily market fluctuations are covered by a variation margin. In addition to these three requirements, the Basel III regulation CRD IV requires various levels of deposit equity capital.

4.2 EMIR Content and its Impacts on the Three Pillar System}

Before I investigate the advantages and disadvantages of the EMIR, I must examine its three core parts to deduce the advantages and disadvantages for the three pillars.

The gray-colored boxes indicate those aspects that are exempt for companies in the same financial group. These exemptions are considered an advantage for the public and governmental sectors because they reduce costs without concurrently increasing costs or effort for the group and its branches.

TABLE 5

EMIR-CONTENTS

Transactions Register	Clearing obligation	Risk mitigation techniques					
All derivatives etd /otc of Financials and Non Financials incl. joint liability transactions	Clearing obligation for OTC-Derivatives loss-sharing agreement	Bilateral Collateralization	Daily review	Prompt possible electronic confirmation	Regular portfolio balance	Battle settlement	Portfolio Compression
Applying for Legal Entity Identifier at WMDaten-Service for Financials and Non Financials (customers)	Requirement: Markt Wire Access Clearing Access Provider	loss-sharing agreement	All OTC Derivatives Contracts Daily Market to-Market Review. For HFC's below the clearing threshold, is this requisite not applicable.	Prompt possible electronic confirmation	EMIR-Addition by expanding the framework agreements	The counter-parties have to check two times a year whether the portfolio can be reduced, after having reached a number of 500 trades or more.	
New fields of financial Since 23.08.11.2013 computer Science in SimCorp Dimension. LEI must be Recognized in master data	New fields of financial Since 23.08.11.2013 computer Science in IT-Systems	Applies to new contracts will be out for a 4-year-period		Market Wire Standard System Onboarding is being actively accompanied by Deka	Portfolios Data Transmitter Done by OTC Clearing in spec. Dates (15th each month and quarterly). Banks balances with contracts in their IT-System. Discrepancies are reported and clarified.		
Contract with DTCC necessary. Banks can report for costumers	Clearing obligation ESMA take decision about Licensing CCP and clearing asset classes						
12.2.2014	Q42014 / Q1 2015	July 2015	15.03.2013	15.03.2013	15.09.2013	15.09.2013	

Compared to the commercial sector, the public and governmental sectors meet the transaction report requirement through a technical and legal group solution to the DTCC, which is the largest transaction register in the world. In the clearing segment, the public sector has six clearing providers (Landesbanken and Deka-Bank) that act as clearing providers for their branches. In the governmental sector, the DZ Bank acts as a clearing provider for the Volks- and Raiffeisenbanken in Germany. To participate, the clearing clients require the web-based front end MarkitWire. On the one hand, MarkitWire offers a new confirmation platform. On the other hand, it offers the only accepted clearing platform from the LCH. The central institutions cover and support their branches in the on-boarding process with MarkitWire.

In the credit risk mitigation areas, I observe exemptions for the members of the same group in bilateral collateralization. As I have shown, public and governmental institutions have the following advantages in terms of regulation.

They have the support of and free service for their branches from the central institutions, particularly IT management in their core systems, *i.e.*, WVS for the governmental sector and Simcorp Dimension for the public sector.

There is know-how from within the group (legal, IT, regulatory and process-design), which comes in the form of training, documentation, working groups and special task forces.

These matters help to reduce costs and effort in these pillars.

There are no such listed advantages in the private sector of German Banks. The private sector is characterized by heterogeneity in the IT landscape and the individual histories of the businesses, clients and products. For the EMIR, the private banks must discuss whether they are large enough to become a direct member of a CCP or to connect with a clearing provider. If the latter is the case, they must search for and research possible providers. Apart from clearing, the private sector has no exceptions from the regulations.

To handle these flows of new regulations, banks have established project teams, obtained external consulting support for their reporting efforts and established new infrastructure in a short time for implementation. Furthermore, banks face new challenges to their businesses. In particular, with the introduction of Basel III, all banks not only must hold more available capital but also must hold higher quality capital.

With an average core capital *ratio* of approximately 10.5%, savings banks are well-capitalized. They are also less affected by other Basel III-induced capital effects because the trading business only plays a minor role for these savings banks. Moreover, savings banks have significant reserves that can be reclassified and used when

needed to meet Basel III capital requirements. (Basel Committee Banking Supervision Board of the International Organization of Securities Commissions, 2013).

Nevertheless, some savings banks must increase their capital resources because the current core capital components frequently do not fulfill the requirements under Basel III. This increase in capital could become a greater challenge if risk factors appear that affect savings banks in particular.

In their study, the BCBC and IOSCO indicate that the liquidity impact of margin requirements cannot be considered in isolation. Instead, it is important to recognize that ongoing and parallel regulatory initiatives will have significant effects on liquidity.

Consequently, one option for many smaller institutions is to avoid particular transactions or business areas. For example, some savings banks may decide to refrain from executing OTC derivatives to avoid being subject to the new regulations for these businesses. Restricting business activities by curtailing or halting transaction executions may result in a decline in income.

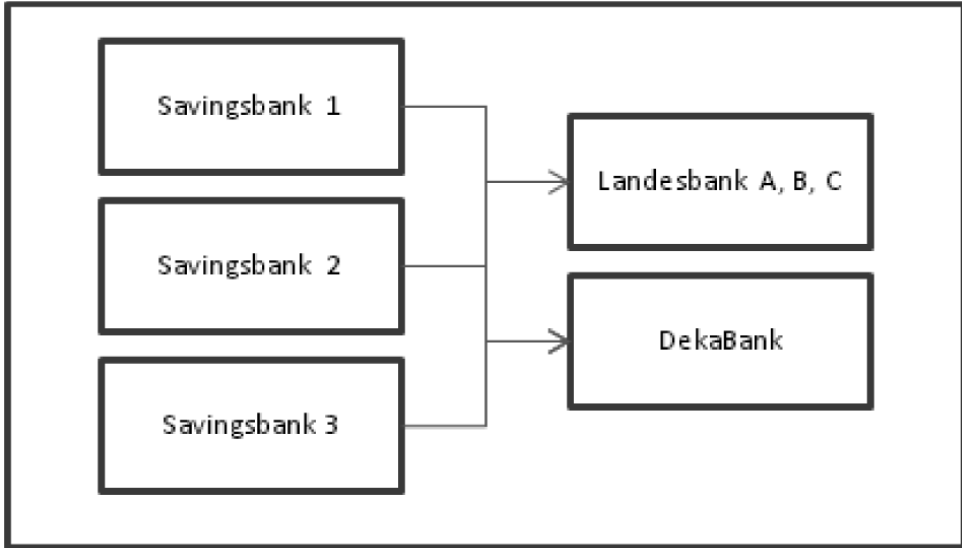
#### *4.3 EMIR Exemption for Members of the same Group*

The relevant regulations, the EMIR and CRD IV, include an exemption from the clearing obligation within the joint liability scheme of the banking group. For instance, if savings banks conduct OTC business within the German Savings Finance Group, there will be no obligation to meet the clearing requirements because they will be exempt from the EMIR. Thus, they have no margins to pay. The risk between the trading partners is not secured; there will also be no obligation for bilateral collateralization. Table 5 shows that these banks conduct business through their central institutions (e.g., Landesbanks) within the banking group.

Another possibility is that savings banks continue to conduct OTC business with counterparties outside the banking group. In that case, savings banks are obligated to clear the trade through a central counterparty (a CCP, e.g., Eurex or London Clearing House) if the asset class is clearing binding. These banks must become a member of these central counterparties. However, the membership criteria for the CCPs are too stringent for most German savings banks. Therefore, these banks must choose a General Clearing Member, which can be a large bank, such as UBS or Deutsche Bank.

GRAPH 5

## OTC-BUSINESS INSIDE THE BANKING GROUP



Some Landesbanks and DekaBanks offer clearing provider functionality for savings banks. Therefore, the banks can also choose to collaborate with these institutions within their banking group. Savings banks must pay margins (initial and variation margin) for the business and a fee for the trade.

Therefore, the effort in terms of cost and the process is higher than the business generated within the group. However, the advantages of better swap spreads from commercial banks may reduce costs.

#### 4.4 EMIR Process Workflow

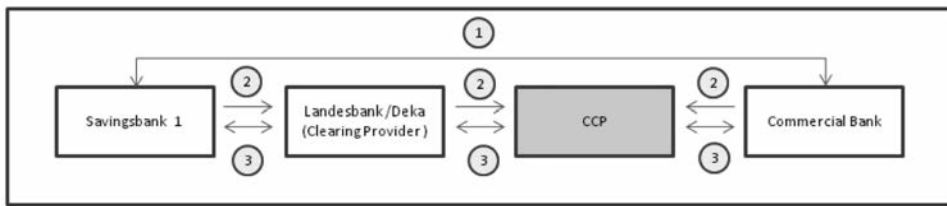
An EMIR process workflow on the example of the savings banks group is described in Table 6.

- (1) Savings banks conduct trades over the counter with market partners (banking institution) outside of the banking group. These trades are mandatory for clearing according to the new regulations. The counterparty risk exists between the original counterparties of the trade as long as the CCP has not accepted this trade for clearing. Once the CCP has accepted this trade and a provider is integrated into the process, the counterparty risk shifts to the clearing provider (the General Clearing Member of the CCP).

- (2) The savings bank’s trade will be transferred through the clearing provider (General Clearing Member) to the CCP for clearing.
- (3) Once the trade is cleared, initial margins are paid and variation margins will be settled daily between the CCP, the clearing provider and the original counterpart (the savings bank).

GRAPH 6

OTC-BUSINESS OUTSIDE THE BANKING GROUP



Thus, in light of the recent regulatory changes, banks face several alternatives. They can continue engaging in OTC-Derivatives to the same extent as they have been. In exchange for this right, they must make sure that they fulfill the new regulatory requirements for participating in the derivatives market.

Alternatively, they could decide instead to conduct business within the banking group and thus bypass the new regulatory requirements to a large extent.

Finally, they could decide not to conduct OTC-business any longer and avoid the obligation to fulfill the new regulatory requirements.

**5. - Discussion**

The changes in the regulatory framework have a major impact on all the financial institutions in Germany. Furthermore, the banking industry is confronting cost-increasing challenges. The federal association of German banks conducted a survey in December 2013 with the aim of determining the major challenges confronting banks. (Bundesverband Öffentlicher Banken Deutschlands, 2013). The graph shows that 60% of the interviewed institutions believed that the regulatory impacts would be the greatest challenge, which was followed

by 25% of the institutions that indicated that the policy of low interest rates was the greatest challenge. Modified customer behavior to multi-channel use and new competitors were also mentioned as additional challenges.

TABLE 6

CHALLENGES ON BANKS

N° Challenge	Description	Impact on banks
<b>1 Regulation</b>		
Implementation of new regulations	Increasing number of regulations (e.g. MIFID II, Basel III)	<p>Increasing costs of financial regulation, impact on profitability as a result of higher equity requirements, reduction in return on equity</p>
Challenges in business policy because of changes in financial regulatory framework		
<b>2 Market</b>		
Market environment	Policy of low interest rates and a flat yield curve as structural challenge; declining securities business	<p>Decreasing interest and commission income</p>
Margin pressure		
<b>3 Changing customer behavior and technical progress</b>		
Improvement of IT support	Because of digitisation changes in customer behavior (multi-channel offering), differentiated customer requirements demand adjustments in the branch network and differentiation of branch formats, high expectations of customers on fairness, transparency and prices, increasing information advantage of customers	<p>Multi-channel offering while maintaining personal customer relationships</p>
Changing customer behavior		
<b>4 New competitors</b>		
Availability of qualified staff	Predatory competition in stagnating retail banking market, increased competition (e.g. direct banks, captives, non-banks), new providers for innovative banking services	<p>Losses of market share in particular of deposits, securities and loans</p>
Intensified competition		

With the major regulations becoming effective in 2014 (for instance Basel III), more capital and higher quality capital will be required. The new liquidity rules will require banks to have sufficient liquidity and result in increased refinancing costs. (Lautenschlaeger, 2012).

High burdens on the cost side are countered with decreasing revenues. (Fahrenschon, 2013). The quantity of difficulty on the policy of low interest rates for savings banks is 500 million Euros. All banking institutions will be affected by the squeeze on revenues as long as the low interest rate policy persists.

Customer deposits with good solvency will exacerbate competition among banks. New providers will enter the banking market due to the shift in the relevance of distribution channels. (Weill, 2009).



These challenges and changes have led to discussions regarding the business models and the future role and institutional forms of these banks. (Schmidt, 2013) Schmidt characterizes the form and current role of savings banks and cooperative banks and speculates about their future prospects. (Schmidt, 2009).

There are also discussions revolving around whether the evidence regarding the German banking market supports the belief that savings banks and cooperative banks are not so efficient like private banks. In this regard, in two cross-country studies of regional banks in Europe for the periods of 2000 to 2008 and 1996 to 2006, (Ayadi *et al.*, 2009a). Adain investigated whether banking groups with various institutional features also differ in efficiency and did not find any systematic differences. (Ayadi *et al.*, 2010).

Whether regulation influences structural policies must be analyzed.

Savings banks and cooperative banks are independent and self-sufficient institutions. Thus, all supervisory requirements need to be met and processed internally. The necessity to implement these requirements results in fixed costs. A problem occurs when the regulation requirements imposed by European politicians are not adapted to the business model of individual banks. Small and medium-sized institutions, such as savings banks and cooperative banks, in particular, suffer as a result of these additional costs, which leads to increased consolidation that is only partially offset by financial aid from combined institutions.

In fact, this point is where it becomes clear that regulation has an influence on structural policies. It is unknown whether this recognition occurs unconsciously or simply by accepting consequences. However, the change in structural policies occurs at the expense of the stability of the financial system. By establishing supervisory regulations, politicians have created larger institutions that are becoming increasingly important for financial stability, which is counter to the intention of such regulations because politicians originally aimed to avoid creating large institutions that are “too big to fail”.

From the socio-political and economic perspectives, there is sufficient evidence that local banking has many benefits for the market and the banking structure. However, small and medium-sized institutions would not be economically viable if they acted individually as independent and self-sufficient institutions. Most of the benefits of local banking actually stem from the fact that those institutions are part of a combined structure. Among other benefits, those lasting structures of local banking are created by connecting the back office functions of the institutions while not affecting their local autonomy.

From my perspective, the combined institutions might represent an intermediate organizational structure between the group of companies and the fully independent market participants. Furthermore, it would be interesting to analyze why some attempts to implement structures similar to those of savings banks in Germany have failed, such as in Spain and Great Britain.

## 6. - Conclusion

The changes in Europe's financial regulatory framework that have been implemented since the financial crisis continue to have a major impact on many aspects of the banking industry. Many more regulations go into effect in 2014, as described in section one. All financial institutions must adhere to the time limits found in the regulatory guidelines and adapt to the changes in business processes and IT environments required by these new regulations.

Cooperative banks and savings banks have the lowest average project and personnel costs among bank types. As shown above, the costs for commercial banks rose abruptly from 110 million Euro in 2008 to 800 million Euro in 2011. The average costs of savings banks and cooperative banks are below 50 million Euros per year. Advantages for both pillars (savings banks and cooperative banks) result from the following features affecting commercial banks.

Uniform IT: For years, both pillars have had a consistent, centralized management to develop their IT platform and systems. Technical implementation and development occur only once and then are rolled out to the entire sector. Thus, centralization saves money, time and resources.

Straight-Through Processes: Based on the IT environment, process workflows are also standardized and have a high number of straight-through processes, which lead to low fixed costs, as shown by CIR. Commercial banks have a high cost-income *ratio* that has increased from a mean of 80% in 2007 to 95% in 2011. In the opposite direction, since the financial crisis, savings banks and cooperative banks have worked to reduce their CIR, particularly during the years with low interest margins. Since 2008, these banks have reduced their mean CIR from 75% to 65% in 2011. This strategy has augmented the strength of both pillars compared with that of commercial banks.

The third advantage is that savings and cooperative banks have one central institution and one association that bundle know-how and a uniform presetting for all their branches. Only the high number of branches, which stem from the

historical growth of cooperative banks, will be a challenge in the coming years, particularly in the rural areas of Germany. Increased online banking and changes in demography will also lead to further mergers and consolidations.

The last advantage for cooperative banks and savings banks are the exemptions in some regulations for members of the same group and for intragroup transactions.

In contrast to the large banks that experienced large losses due to overly risky investments and off-balance sheet activities of a precarious nature in the years preceding the financial crisis, local German savings and cooperative banks weathered the storm largely unharmed. Almost all these banks managed to remain stable and profitable during the crisis years.

The financial crisis has strengthened the positions of the savings and cooperative banks. The results of this investigation show that they have strengthened their position by implementing the regulatory framework after the crisis.

Savings banks and cooperative banks have been shown to be a stabilizing factor for the German financial system and economy. In so doing, they have also stabilized the traditional three-pillar structure of the German banking system.

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# Corporate Savings and the 2007-2009 Financial Crisis: A Warning for the European Banking Union

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*The final step of the European banking union process should be the single deposit guarantee mechanism (SDM) able to allow for bail-in of the banks while the saving system is rescued. If the effectiveness of bank deposit insurance depends on the nature of the financial crisis and the corporate savings glut does in fact play an important role in such crises, then it could be worth looking into the structural, cyclical or transitory nature of the latter. This paper constitutes a preliminary reconnaissance of the phenomenon, seeking to understand its relevance in defining the nature of a financial crisis.*

[JEL Classification: E21; E22; E32; E58; G01].

**Keywords:** corporate savings; corporate savings glut; corporate net lending; capital investment; cash balances; liquidity holding; financial crises.

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## 1. - Introduction

One of the principal reasons to push for a European Banking Union is creating a regulatory system to avoid in future what happened after the financial crisis of 2007-2009: transformation of private debt into public debt by bailing out banks. The third and final step of the banking union process should be an insurance system for private bank deposits allowing for bail-in of the banks which invest badly, while the saving system is rescued.

But this kind of regulatory response to the problems highlighted by the last financial crisis could be unsuited if the risk of bankruptcy were systemic and not idiosyncratic. The insurance system for private deposits would have the same problems shown up by the system of insurance of trash bonds by means of derivatives created by the financial system before the crisis.

Thus, the effectiveness of European Banking Union in avoiding the problem of bailing out banks depends on the nature of their bankruptcy and, consequently, on the nature of the crisis that generates it. If the financial crisis is the consequence of the individual faults of some insatiable and fraudulent financiers and bankers, then an idiosyncratic distribution of probability will be suitable to insure private saving. But if the crisis has structural causes, this kind of insurance will be unsuited. So what lessons might we be able to learn from the recent crisis about this kind of problem?

Many reasons have been found to account for the financial crisis of 2007-2009. One of the most interesting is certainly that of the *global saving glut*, which would be the principal cause of the international imbalances that set off the crisis (Greenspan, 2010). But some empirical analyses have pointed out that the global saving glut is strictly connected to the corporate savings glut, a phenomenon little considered by traditional economic theory but actually decisive in the process of aggregate saving formation.

If the effectiveness of the insurance of bank deposits depends on the nature of the financial crisis and the corporate savings glut does play an important role in this kind of crises, then it could be worthwhile looking into the structural, cyclical or transitory nature of the latter.

This paper constitutes a preliminary reconnaissance of the phenomenon, seeking to understand its relevance in defining the nature of a financial crisis. It is structured as follows. Section two gives an overview of the phenomenon of corporate savings glut, as it emerges from the reports by some important research institutes. In section three, some theoretical explanations of the phenomenon are

dealt with. Section four draws from these explanations some provisional warnings for European monetary policy.

## 2. - The Corporate Savings Glut

The notion of *global saving glut* was first created by Ben Bernanke in March 2005, before the crisis, to denote the excess of saving over investment in the world economy, which was reducing interest rates and encouraging risky financial investment (Bernanke, 2005). But in reality the trend of the global saving rate has been going downward since the late 70s, when it had reached its peak, declining in long-period cycles. It declined from 23% in 1970 to 19.6% in 2002. When Bernanke stressed the phenomenon of the global saving glut, the global saving rate was temporarily above the average of the previous decades, but with trend unchanged. Thus the saving glut cannot be attributed to an increase of the global saving rate above its long-term average (Jauch, 2012).

In 2010 the McKinsey Global Institute, in decomposing savings of the world economy in their institutional components (households, corporations and governments), stressed the increasing importance of the corporate sector in the global supply of capital. While household saving has been declining in the developed world, the corporate sector has increased its share in total saving worldwide, raising its own saving rate. Today about 2/3 of the supply of capital in the developed countries comes from the corporate sector. Indeed, in 2005 *The Economist* was already arguing that Bernanke's phenomenon was, rather, generated by an excess of corporate savings, namely the difference between undistributed profits (corporate gross saving) and capital spending, which turned into "net lending" by the corporate sector (The Economist, 2005).

Since 2002 the excess of gross saving over fixed investment in the OECD corporate sector has been unusually large. Over the period 2001-2005, it rose more than the aggregate external surplus of the emerging market economies (2% as against 1.5% of OECD GDP), driving the run-up in net lending and contributing to low global interest rates (OECD, 2007; André *et al.*, 2007). Around two thirds of the increase in undistributed profits was generated by the financial sector (JP Morgan Research, 2005), but this sector contributed to the increase in net lending less than the non-financial sector (only 0.5% of OECD GDP over the period 2001-2005).

This excess of corporate savings during the early 2000s was also pointed out before the financial crisis by many other research institutes and authors. In 2005

JP Morgan noted that in the global rise in savings the increase in G6 corporate saving was about five times that of the emerging countries (see Table 1).

TABLE 1

CHANGES IN NET SAVING (GROSS SAVING MINUS GROSS INVESTMENT)  
(\$ BILLIONS)

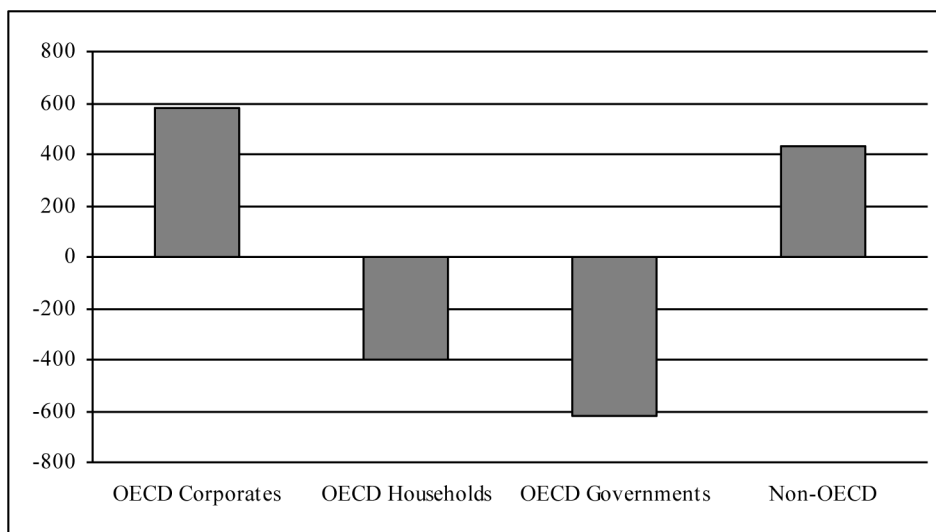
	1996 - 2000	2000 - 2004
<b>G6 countries</b>	-371	-137
<i>Corporate</i>	-730	1,091
<i>Household</i>	-323	-246
<i>Government</i>	681	-982
<b>Emerging countries</b>	217	208

Source: based on data in JP MORGAN RESEARCH (2005).

On the basis of the previous historical trends of the major economies, such as the United States and Japan, this level of saving by corporations was immediately recognized as unprecedented, and indeed as producing an unnatural economic result, the corporations becoming net lenders while the households were becoming net borrowers (see Graph 1).

GRAPH 1

CHANGE IN NET LENDING BETWEEN 2001 AND 2005 (\$ BILLION)



Source: OECD (2007).

In the United States most of the increase of corporate savings in the early 2000s was initially utilised to repay debt, but subsequently it was also utilised to buy back shares.

The European corporations showed a similar behaviour, but on a more limited scale than in the United States, with the exception of the United Kingdom, where corporate saving was indeed comparable with that of the US. In Europe, however, the increase in corporate savings in the early 2000s did not fully offset its decline in the second half of the 1990s, while in the same period the household saving rate was rising, probably for demographic reasons and fears about structural reforms (JP Morgan Research, 2005).

Between 2003 and 2006 Chinese corporations saw their profits rise markedly in all the productive sectors, but most of these increased profits were held as retained earnings, with very low dividend payout *ratios*.

The financial sector seems to have contributed for about one-fifth of the overall increase in corporate net lending over the period 2001-2005, even though it accounts for less than 10% of the value added.

Before the financial crisis, in many countries the increase in corporate net lending was significantly fed also by construction, real estate and the housing sectors (about 0.3% of OECD GDP), but these drivers vanished with the burst of the real estate bubble.

Thus the phenomenon of increasing corporate savings before the financial crisis of 2007-2009 was largely spread over the world and sectors.

This change in the corporate savings rate was initially explained as a short-term response to the previous excess of investment of the 1990s, in the context of the equity market bubbles in the developed countries and the excessive capital inflows in the emerging countries before the Asian financial crisis (JP Morgan Research, 2005). Thus the corporate savings glut, despite early warnings, was initially dealt with only as a short-term phenomenon, due to the adjustments produced by previous exogenous shocks, doomed rapidly to disappear (JP Morgan Research, 2005; International Monetary Fund, 2006; André *et al.*, 2007).

### **3. - Some Theoretical and Empirical Explanations**

Usually economists do not deal separately with the corporate savings rate because they assume that households, owning corporations, include corporate savings decisions in their own saving decision (Jauch, 2012). But corporations might

also be viewed as particular institutional decision-makers, with their own specific objective functions. If the household sector does not fully “pierce the corporate veil” (OECD, 2007), then the corporations can be decision-makers that remain outside the schemes of intertemporal choice between present and future consumption. So, lower investment decisions do not necessarily become higher consumption decisions, but they can also imply liquidity holding.

In this case, it becomes very important to understand the reasons that can drive such decision-makers to reduce dividend payout *ratios* without increasing investment spending, because theoretically the principal drivers of corporate gross savings are the undistributed profits and need for internal capital (Jauch, 2012).

In 2007 the OECD tried to distinguish cyclical, transitory and trend influences on corporate net lending, separating the phenomena which appeared common across most OECD countries from those which appeared country specific (OECD, 2007). It emerged from its analysis that the large-scale expansion of corporate net lending was in part the transitory effect of the sum of two different phenomena that occurred simultaneously in the financial and non-financial sector. In the financial sector net lending was clearly accounted for with short term financial variables, such as money growth and real house prices driven by the real estate bubble. In the non-financial sector, instead, net lending was interpreted as partly due to the cyclical downturn since 2001. Cross-country differences in gross corporate savings were reflecting differences of the gross operating surplus, due to changing profitability within sectors and not to a change of sectoral composition.

The growing excess of corporate savings eventually proved remarkably widespread, occurring both in the countries that had previously experienced intense economic growth and in countries showing a very weak growth process. But at the time most of these economies had been affected by the consequences of the burst in the equity bubble of the late 1990s, which had produced high debt levels for corporations (IMF, 2006).

Panel regressions suggest a significant influence of the business cycle on the corporate savings glut. A decrease in the output gap by 1 percent point generates an increase in corporate net lending by 0.5 per cent of GDP. On the basis of this estimation, more than one quarter of the increase in aggregate OECD corporate net lending between 2001 and 2005 could be due to the downturn of the cycle (André *et al.*, 2007).

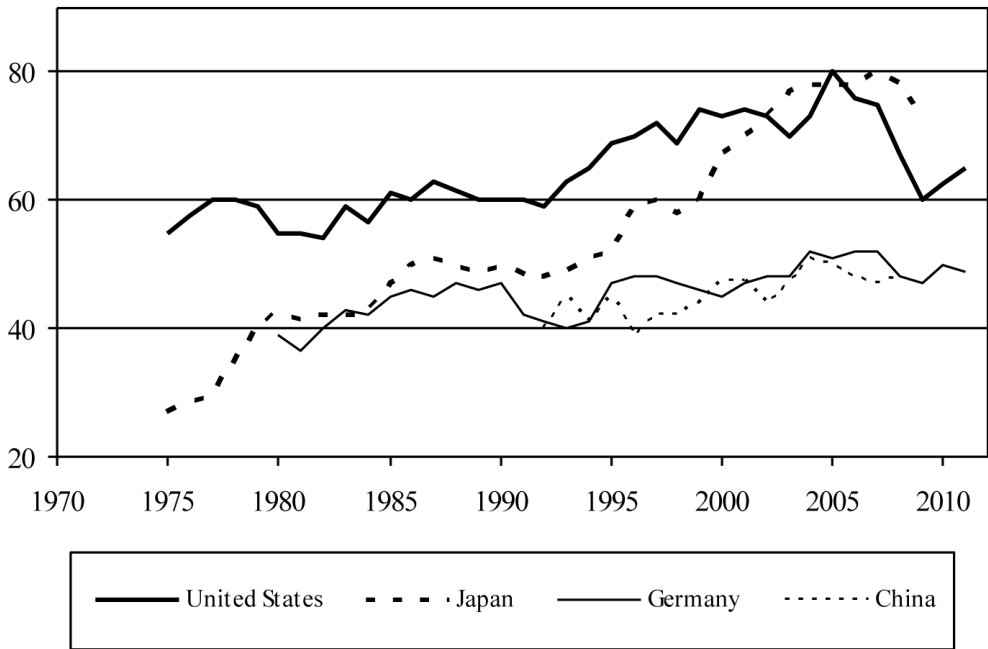
In fact, the rise in net lending is the result of two different tendencies: falling corporate investment and increasing corporate savings share. The weakness in

corporate investment, compared with GDP, can usually be largely the consequence of the business cycle, but other causes, more structural in nature and thus longer-lasting, have been found in the progressive decline of the relative price of capital goods, in lower depreciation rates, in lower growth trends and increasing net foreign investment abroad.

Increasing corporate gross saving is a longer-period phenomenon, showing a trend as share of GDP that began to rise in late 1970s (see Graph 2).

GRAPH 2

CORPORATE SAVINGS AS A PROPORTION OF TOTAL PRIVATE SAVINGS



Source: based on data in KARABARBOUNIS L. and NEIMAN B. (2012).

Gross corporate savings rose from 10% of global GDP in 1980 to 13% in 2008, coming to account for around 70% of gross national saving, against 54% in 1995. In some developed countries, such as Germany, Japan and the UK, it has overtaken corporate investment, with the consequence that corporations have started to become net lenders for the rest of the economy.

In most countries, however, the increasing corporate savings in the early 2000s was largely correlated with increasing profit shares, related to wage moderation

and lower interest rates (Karabarbounis, Neiman, 2013; Karabarbounis, Neiman, 2014). Over the period 2001-2005 corporate gross operating surplus rose, as a proportion of GDP, as did corporate savings: global phenomena, such as globalisation and technological change, which had enabled wage moderation, can account for much of this increase. The fall in net interest payments, resulting from lower interest rates and the de-leveraging of corporate balance sheets, together with higher property income, deriving from an increase in profits from abroad, contributed in turn to increasing corporate gross saving (OECD, 2007).

Dividends were not rising with profits, and in some cases fell relative to them. Corporate profits were sometime transferred to shareholders by means of share repurchasing, but they generally became excess of liquidity (OECD, 2007). If increasing profits due to wage moderation are a cause of the excess of saving, it could obviously prove long-lasting. The remaining problem is to understand why profits are not transformed into dividends.

In the United States and Europe, over the period 1989-2003 fewer companies paid dividends but those which paid some, paid more (Von Eije, Megginson, 2008).

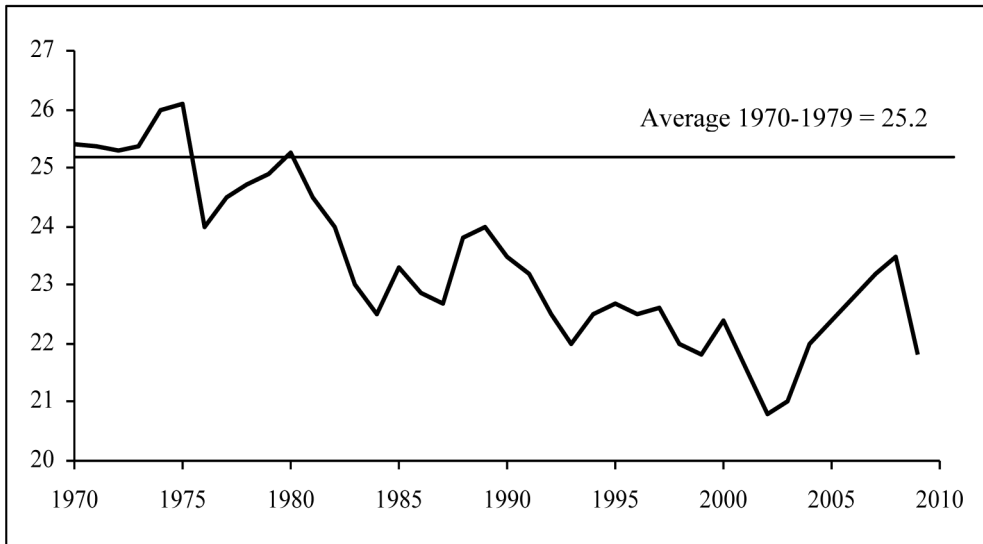
In some cases share buybacks were utilised to transfer dividends to shareholders indirectly. This kind of operation, involving an exchange of cash against equity, does not affect gross saving in national accounts and appears statistically as a use of corporate savings rather than a way of revealing it. On the basis of some private datasets, share buybacks increased as fast as dividends in the United States over the period 2001-2005 (OECD, 2007). Also in the United Kingdom some data suggest that share buybacks played an important part. One good reason for increasing share buybacks could be of a cyclical nature, because they are a way to transfer extra funds to shareholders when profits are rising, avoiding cuts in dividends when profits subsequently drop.

Decreasing corporate investment as a proportion of GDP accounts for half of the increase in OECD aggregate corporate net lending over the period 2001-2005. This trend in corporate investment can be the consequence of a fall in the relative price of investment goods, but it can also be due to a reaction to previous over-accumulation of capital during the bubble of the late 1990s. This investment pattern in domestic assets may also be the counterpart of foreign direct investment, especially in the United States.

Real interest rates have been decreasing around the world since the early 1980s. One of the major causes, often overlooked, has been the continuous decline in the investment rate for three decades (see Graph 3).

GRAPH 3

## CAPITAL INVESTMENT AS PROPORTION OF GLOBAL GDP (%)



Source: based on data in MCKINSEY GLOBAL INSTITUTE (2010).

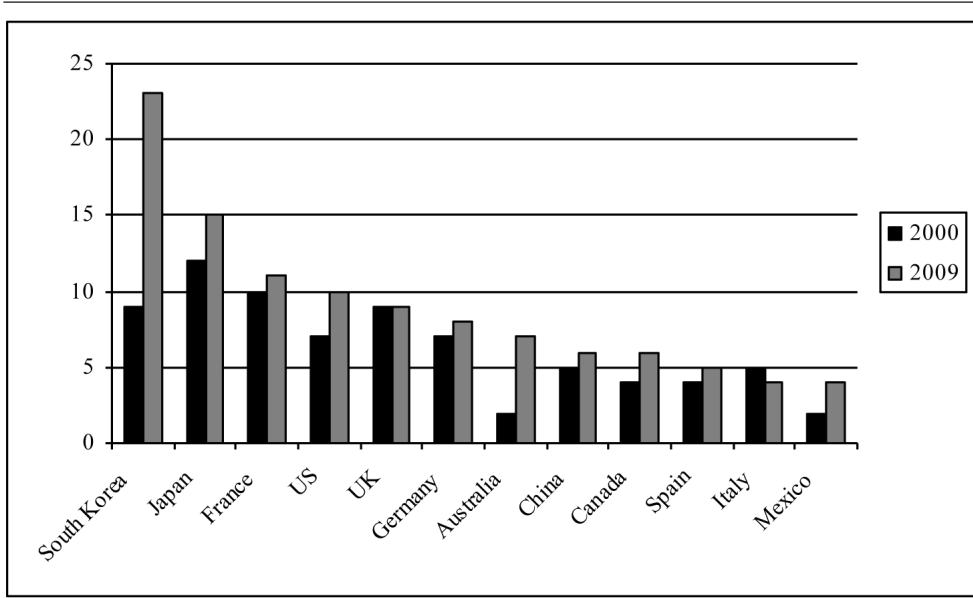
This long-term decline depends on many reasons, such as the end of the post-World War II reconstruction, a fall in the prices of capital goods and other trends typical of mature economies. Today some hold it will be soon reversed with a great new wave of infrastructural investments in the emerging economies, which will end the age of cheap capital (McKinsey Global Institute, 2010), but at the moment it is a long term-empirical fact. Although the global saving rate has been declining in the same period, the global investment rate has been falling even faster.

The growing corporate savings glut has coincided with a growing corporate cash balance, even though they are obviously not the same thing. In the major developed countries, since 2000, the corporate cash balance has increased by \$1.9 trillion, reaching \$3.9 trillion in 2009 (see Graph 4). If this phenomenon might seem relatively trivial after the financial crisis of 2007-2009, the beginning, seven years before, was an interesting and warning signal, to the extent that in 2012 *the Economist* used terms like “hoard instinct” and “dead money” (The Economist, 2012).



GRAPH 4

CORPORATE CASH BALANCES AS SHARE OF GDP (%)



Source: based on data in MCKINSEY GLOBAL INSTITUTE (2010).

Corporations can hold liquid balances for precautionary, speculative and transactional reasons. The precautionary motive obviously prevails when they fear unforeseen fluctuations.

Companies usually utilize their gross saving for depreciation, new investment, acquisitions, paying off debts, and share repurchases. The change in the cash balance should normally be the residual after spending.

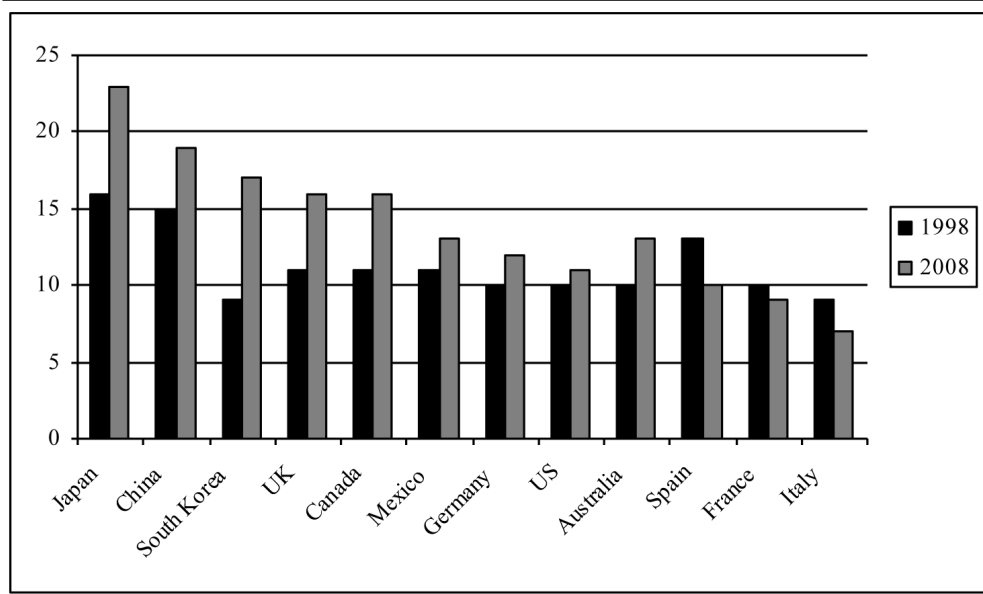
After the financial crisis, companies were certainly keen to accumulate more substantial cash balances to face up to the credit crunch. For US companies there were tax liabilities for repatriating cash from foreign subsidiaries. But most of companies were waiting to invest and make acquisitions because of uncertainty following the crisis. The beginning of the phenomenon, as from the early 2000s, suggests that uncertainty in the non-financial sectors really came to dominate the global economic scene as from the burst of the 90s bubble.

But the corporate savings glut exceeded the increase in cash balances and took the way of risky financial investment, helping to create the preconditions for the financial crisis of 2007-2009.

The corporate savings rate and its trend show marked differences across countries, with rates rising sharply in Japan, China, South Korea, Canada and the UK, while falling in France, Spain and Italy (See Graph 5).

GRAPH 5

## CORPORATE SAVINGS RATES (% GDP)



Source: based on data in MCKINSEY GLOBAL INSTITUTE (2010).

The differences can reflect many different factors, such as different weights and profitability of the various economic sectors, different tax treatment of corporate profits, different dividend policies or depreciation allowances. In Japan the growing corporate savings, for example, has been explained as the consequence of a large depreciation allowance after many years of very intensive investment in capital goods (McKinsey Global Institute, 2010) and a long term process of recovery in corporate balance sheets as from the financial crisis of the early 1990s (OECD, 2007). In China, analysts attribute importance to growing profitability, low dividend payments and corporate taxes (McKinsey Global Institute, 2010). The United Kingdom seems to be a particular case since its increased corporate savings derives solely from the increasing profits in its financial sector. In the United States the growth of corporate savings is driven by a widespread tendency of corporations to repurchase their shares, and depends strictly on how this repurchase is accounted. In Germany, the development in corporate savings has

been accounted for with sustained improvement in competitiveness, enhancing profitability. In France and Italy, instead, deterioration in competitiveness is deemed to have symmetrically reduced corporate savings.

In a world system of open economies and global financial markets the excess of saving in one country can be freely invested abroad, transforming the country into a net capital exporter, while a country that invests more than it saves becomes a net borrower. Thus the different trends in corporate savings of the different countries can contribute to account for a part of the global imbalances that were complained about as principal causes of the financial crisis of 2007-2009.

#### **4. - Conclusions**

Corporate saving is indeed a conspicuous phenomenon, determining a very considerable share of global private savings. Its role has been increasing over the last few decades and, if corporate decisions are not simply a veil over the households' decisions, it can raise very interesting theoretical questions about social intertemporal choices.

The excess of corporate savings recorded since 2001 is evidently a phenomenon with many transitory and exceptional causes, but undoubtedly also with some evident cyclical components. Indeed, as we have seen, more than 25% of the increase in aggregate OECD corporate net lending between 2001 and 2005 was statistically accounted for by the downturn of the cycle.

If financial crises can snowball on savings glut and corporate savings is a major cause of the latter, then it is possible to identify a new kind of mechanism which can connect business cycles and financial crises. Indeed, if the corporate savings glut is the consequence of corporate uncertainties deriving from a lasting downturn of the cycle, then a financial crisis can be a sudden manifestation of the tensions long accumulated during this cyclical phase.

This possible ingredient of financial crises – like the 2007-2009 crisis, for example – suggests new scenarios in the prevention of bank crises and bankruptcy waves, which could compromise the simple deposit insurance strategy delineated by the European banking union programme. If the dynamics of corporate savings are fundamental in determining and timing financial crises, then it becomes key to understand their structural drivers and identify the right fiscal policy instruments to control them.

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## SECTION II - NEW TOOLS FOR THE FINANCING OF SMES



# The European Central Bank and the Financing Conditions of Small and Medium-Sized Enterprises in Europe

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*Small and medium-sized enterprises (SMEs) play a crucial role in innovation, economic growth and job creation. Generally, SMEs face special problems when trying to access funding. Their situation is further complicated by the European economic crisis and a fragmentation of financial markets in the euro area. Funding conditions differ between the countries of the euro area. Claims have emerged that the ECB should more explicitly address the financing problems of SMEs. In this contribution we provide an overview of the current situation of SMEs and evaluate whether it should be the central bank that helps to overcome their funding difficulties.*

[JEL Classification: E44; E51; E52].

**Keywords:** credit crunch; small and medium-sized enterprises; ECB; access to finance.

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## 1. - Introduction

Small and medium-sized enterprises (SMEs) are usually defined as companies employing fewer than 250 workers and having a turnover below €50 million, or total assets not larger than €43 million. Although small in size, these enterprises account for about 99.8 % of companies in the 27 countries of the European Union and employ two thirds of all workers (European Commission, 2013). These numbers alone show the tremendous importance of SMEs for prosperity, job creation and, finally, the growth of an economy. In order to fulfill this obligation, funding conditions are, of course, an important prerequisite.

Accordingly, during the recent financial and economic crisis, the issue of financial access to finance of SMEs has gained interest among the public and academia.<sup>1</sup> SMEs are typically seen to be relatively dependent on bank funding as compared to larger enterprises, as they do not have access to other sources of credit or capital markets (ECB, 2013*a*). This is all the more true, as the European financial system is more bank-based than the Anglo-Saxon version. Thus, credit conditions can here heavily affect the financing conditions of SMEs. Moreover, disruptions in the monetary transmission mechanism may add further complications to this situation. Such a malfunctioning has been repeatedly stressed by the ECB president, Mario Draghi, to justify his bank's conventional and unconventional policy measures.

Financing conditions also differ remarkably across the EMU (Draghi, 2013). In this context, it is generally a question of whether weak credit growth has its origins on the supply or the demand side of the economy. Recent research indicates that especially small firms and those with a lower turnover face problems in receiving credit (Holton *et al.*, 2013). However, according to the ECB's bank lending survey (2013*b*; 2014), loan demand in the euro area also remains weak.

The main aim of our contribution is to shed light on the *status quo* of SMEs' financing conditions and to sketch some possibilities for the alleviation of these problems. We focus in particular on the role of monetary policy and discuss which measures the ECB could or should take to help SMEs receive funding. To this end, our analysis proceeds in the following way: while the following section provides some general considerations regarding SME financing, Section 3 delivers an assessment of recent developments in the SME funding environment. Section 4 elaborates on the measures that the ECB might take to enhance access to finance for SMEs; then, Section 5 sketches other options. The final section concludes.

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<sup>1</sup> See, for example, DE NEDERLANDSCHE BANK (2013) or the MONETARY DIALOGUE (2013).

## 2. - SME Funding: Some General Considerations

The difficulties of financial access that SMEs encounter are a well-known problem in economics. Especially young companies, which are typically small, are often restricted by financial constraints. Schneider and Veugelers (2010) document this phenomenon with a sample of German enterprises. As they limit firms' innovativeness, financial restrictions can be seen as an argument in favor of Government intervention and policy action to help firms to develop.

In general, various explanations for the difficult funding situation of small firms' in particular can be found in the literature. Firstly, market failures prevent SMEs from accessing credit under fair conditions (Ecorys, 2012), which is very important, especially in the early stages of a business, when revenues and cash flows are low and, thus, external funding is needed. Unfortunately, it is particularly at this early stage of development that the following, second argument is considerably important: lending relationships typically incorporate problems of asymmetric information (Berger and Udell, 2006; Columba *et al.*, 2010). Asymmetric information arises simply by virtue of the fact that a company knows more about its projects and financial and economic situation than a potential creditor does.<sup>2</sup> So a creditor will charge a so-called external finance premium, which is subject to the imperfections of credit markets (Bernanke and Gertler, 1995). In fact, there is evidence that such premiums have increased recently in the EMU. While bank lending rates tend to fall, many SMEs report an increase in interest rates (ECB, 2013*c*).

To mitigate the consequences of asymmetric information, several solutions have been proposed. For example, robust customer relationships should alleviate information asymmetries, as they build up trust between creditors and borrowers. However, the financial crisis has led to serious disruptions in credibility and increased insecurity about solvency and the economic outlook of borrowers. Furthermore, new companies usually lack credit reputation and are short of collateral. Therefore, bank funding remains a problem for many SMEs.

All in all, information problems and the importance of SMEs for economic growth and innovation argue for market intervention and some kind of public support. For example, Columba *et al.* (2010) document that small firms can benefit from joining so-called mutual guarantee institutions (MGIs). Belonging to

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<sup>2</sup> Asymmetric information usually declines with the stage of development of a firm. Maturing firms are able to provide more collateral and can build up a track record.

an MGI considerably reduces the interest rates charged on credits to an SME. Colombo and Delmastro (2002) argue that governmental support is particularly necessary for new-technology SMEs, as they provide positive externalities to the economy.

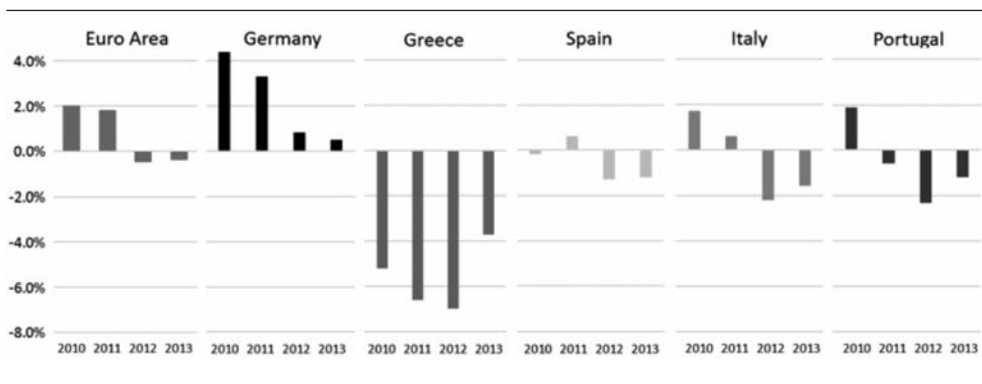
In the following, we will look more closely at specific circumstances that are relevant to the EMU in its current situation. Fundamental differences between economic and firm-specific conditions across Europe aggravate the funding situation of SMEs, which complicates potential policy reactions.

Credit risk is, of course, linked to a firm’s economic outlook and, more generally, to the prevailing macroeconomic circumstances. Thus, broadly speaking, for the euro area the fundamental determinants differ between the North and the South.<sup>3</sup> For example, productivity is lower in the South than in the North, and it is even falling. As a consequence, banks claim an additional premium when lending to these companies (Steen, 2013). Accordingly, SMEs in all member countries of the EMU except Belgium and Germany have reported increasing interest expenses (ECB, 2013c).

Furthermore, countries such as Greece, Portugal and Spain have only recently begun to recover from recession, and severe structural reforms backed by credits granted by the Troika (comprising the EU Commission, the ECB and the IMF) are still under way (see Graph 1). Thus, the prospects for these economies remain uncertain.

GRAPH 1

ANNUAL GROWTH RATES OF REAL GDP IN THE EURO AREA



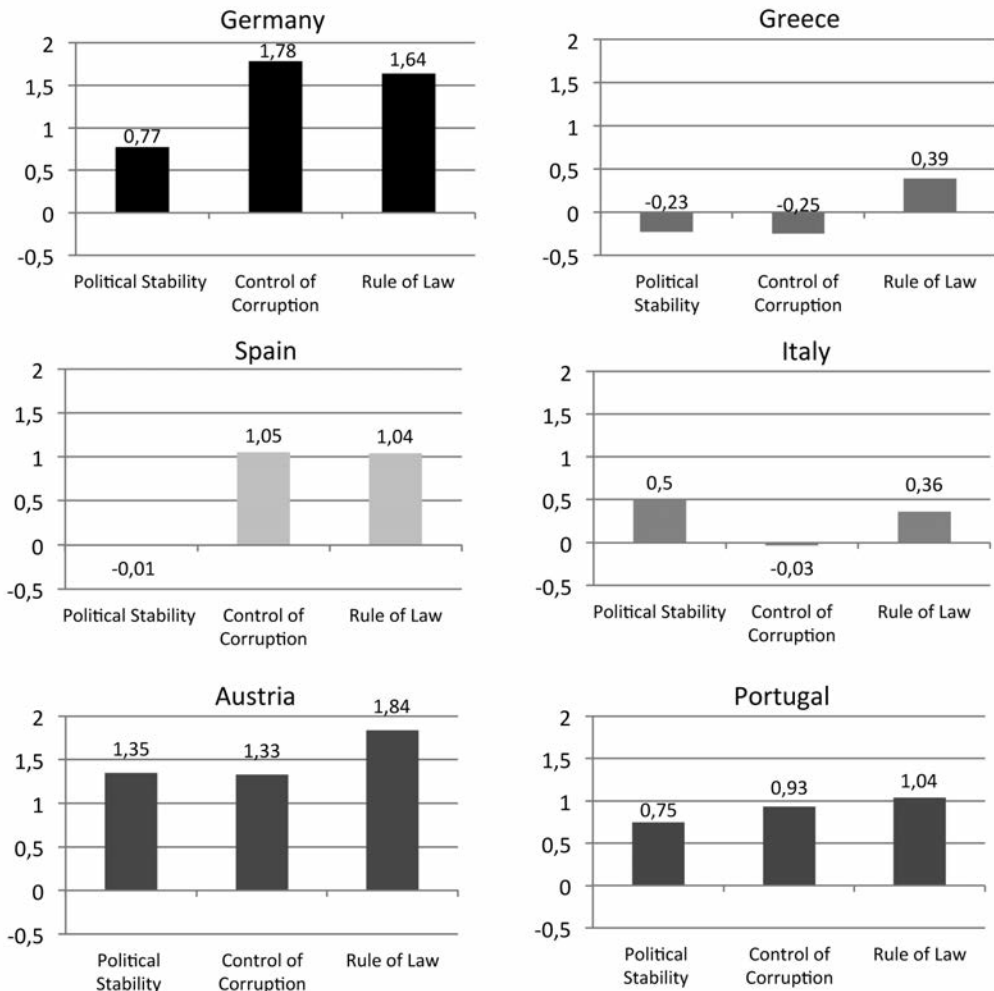
Source: EUROSTAT.

<sup>3</sup> However, this clear distinction no longer strictly applies. Even countries of the North seem to be hit by the crisis and SMEs in these countries report funding problems (ECB 2013c; 2014).

These facts and further structural differences regarding the overall business environment have finally led to different interest rate levels being applied by banks across the EMU. Consider, for example, the World Bank Governance Indicators,

GRAPH 2

WORLD BANK GOVERNANCE INDICATORS OF EURO AREA COUNTRIES IN 2012



Source: WORLD BANK.

which measure political stability, the rule of law and the control of corruption. These exhibit considerable heterogeneity across EMU countries (see Graph 2) (Gros, 2011). It cannot, therefore, come as a surprise that interest rate levels (still) differ across the EMU. In fact, this can lead to a situation in which two SMEs located not far away from each other but on different sides of a border, for example in Italy and Austria,<sup>4</sup> face quite different funding costs. This somehow puzzling situation is nevertheless by and large a result of simple market forces which generally should not be abandoned. But it might be reasonable to consider mitigating them.

However, especially in the current situation where an end to the recession in the euro zone seems possible, sources of funding for SMEs are necessary. While at the beginning of a recovery firms usually rely on internal funding sources, this might be difficult today, especially in the southern part of the currency union, because structural reforms and the deep recession might have dried up internal financial means owing to shrinking profits and low turnover (ECB, 2013c). Thus, for an upturn to become self-sustaining, bank lending will play a crucial role in the economy (ECB, 2013a).

We will now turn to more specific issues of the current SME financing conditions and elaborate on the most pressing problems.

### 3. - *The Status Quo of SME Financing in the Euro Area*

The ECB provides several publications analyzing the funding situation of SMEs. For example, in its bank lending survey it presents the results of a questionnaire pertaining to credit supply and demand characteristics which was distributed among more than 130 banks of the euro zone. Additionally, in a publication called «Survey on the access to finance of small and medium-sized enterprises in the euro area» (SAFE), it focuses more explicitly on the access to finance of SMEs.

Generally, the weak growth rate of loans to non-financial corporations is a consequence of demand- as well as supply-side factors (see Graph 3). With respect to the demand side, subdued economic activity and high levels of debt suppress loan demand. The supply side then faces constraints as well (ECB, 2013a).

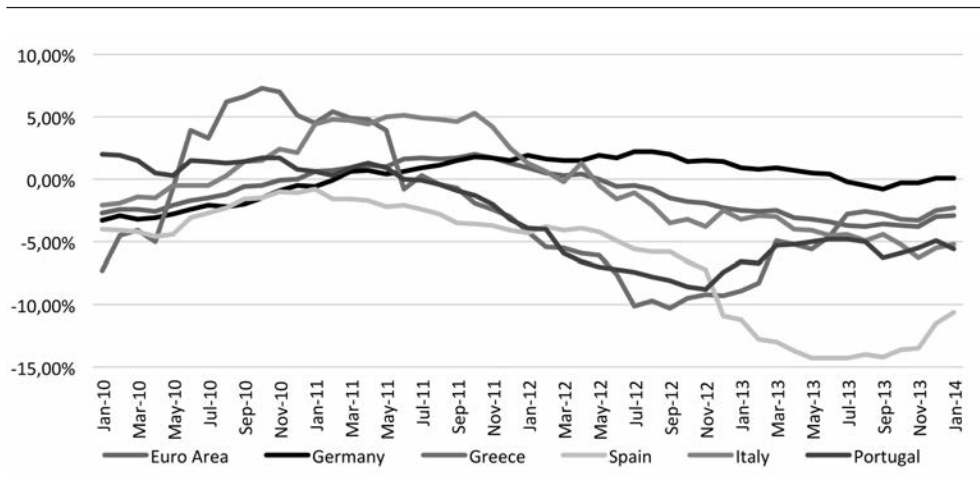
Admittedly, in its recent bank lending survey, conducted in December 2013, the ECB (2014) attributes stabilization in credit conditions to the euro area, while

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<sup>4</sup> This example has been frequently used by ECB President Mario Draghi at the ECB's monthly press conferences.

GRAPH 3

GROWTH RATES OF LOANS TO NON-FINANCIAL CORPORATIONS  
IN THE EURO AREA



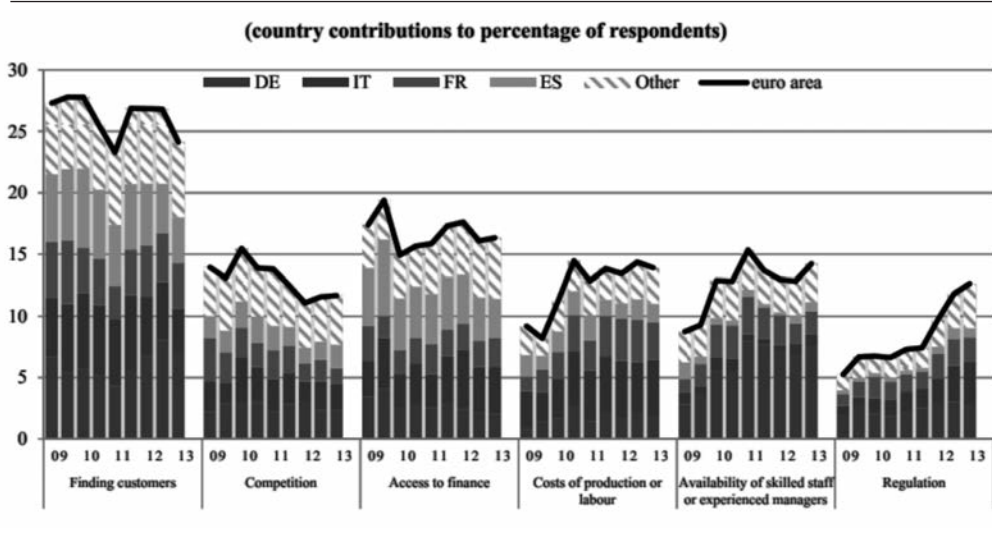
Source: ECB.

loan demand still remains weak. However, stabilization does not mean that credit conditions improve but that the pace of deterioration slows down (for example, fewer banks report a tightening of credit standards, or the net decline in loan demand slows down further). Moreover, banks expect rising credit demand for the first quarter of 2014 across all loan categories, and that tensions stemming from regulatory action or the debt crisis will diminish. To be more explicit with regard to the situation of SMEs, the net tightening of credit standards was more severe for SMEs than for larger firms, which supports our remarks in the introduction to this paper that SMEs in particular face considerable funding problems because of their dependence on bank funding and their lack of access to capital markets.

Results from the ECB's (2013c) SAFE study generally confirm the belief that financing conditions are worse for SMEs than for larger enterprises. While generally the most important concern for SMEs is to find customers, the second (and most important threat) is access to finance (see Graph 4). But there is considerable heterogeneity regarding these most pressing concerns. While in Austria or Germany access to finance does not seem to be a relevant issue, in Greece, Spain and Ireland one third to one fifth of SMEs declare this as their most important problem (ECB, 2013c, page 4). In contrast, in Austria and Germany problems relate more to the real economy. Access to finance is also less of a problem for larger firms.

GRAPH 4

COUNTRY CONTRIBUTIONS TO THE MOST PRESSING PROBLEM FACED BY EURO AREA SMEs



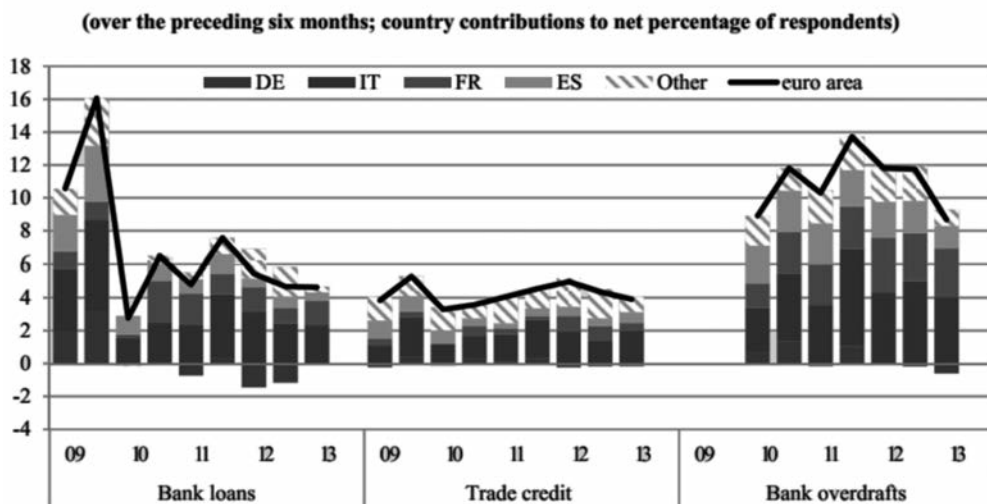
Source: ECB (2013c, page 5).

With respect to external funding, SMEs report an increasing need for bank loans and overdrafts (see Graph 5), those in Greece and Italy in particular declaring a greater need for bank loans for fixed investment and as working capital. Again, for large firms, the situation is the opposite: large firms report a decline in the need for bank loans.

On the supply side, the availability of bank loans improved only in Germany. If we put together information from the demand and supply sides, the so-called funding gap (the difference between demand for and availability of funds) shows mixed evidence across EMU countries (see Graph 6). In Germany, for example, this differences declines, whereas it increases in countries such as Italy and Ireland. One main explanation for the shortfall of supply, according to the SMEs, is the poor general economic outlook, while firm-specific outlook is another important factor that contributes to the funding gap. Furthermore, in Greece the number of loan applications that were successful was very low compared with those in the other EMU countries. This reflects the fact that in Greece the fear of rejection is considerably high.

GRAPH 5

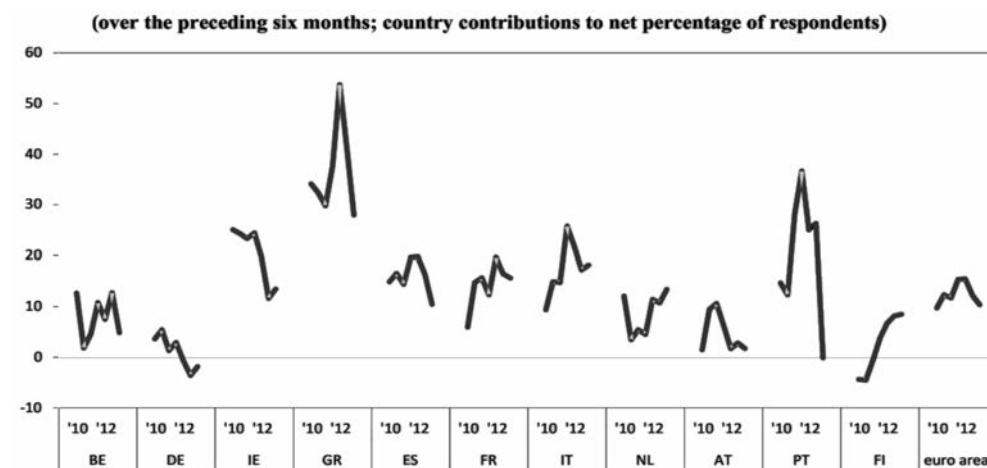
COUNTRY CONTRIBUTIONS TO CHANGE IN THE EXTERNAL FINANCING NEEDS OF EURO AREA SMEs



Source: ECB (2013c, page 7).

GRAPH 6

CHANGES IN THE EXTERNAL FINANCIAL GAP PERCEIVED BY SMES ACROSS EURO AREA COUNTRIES



Source: ECB (2013c, page 12).

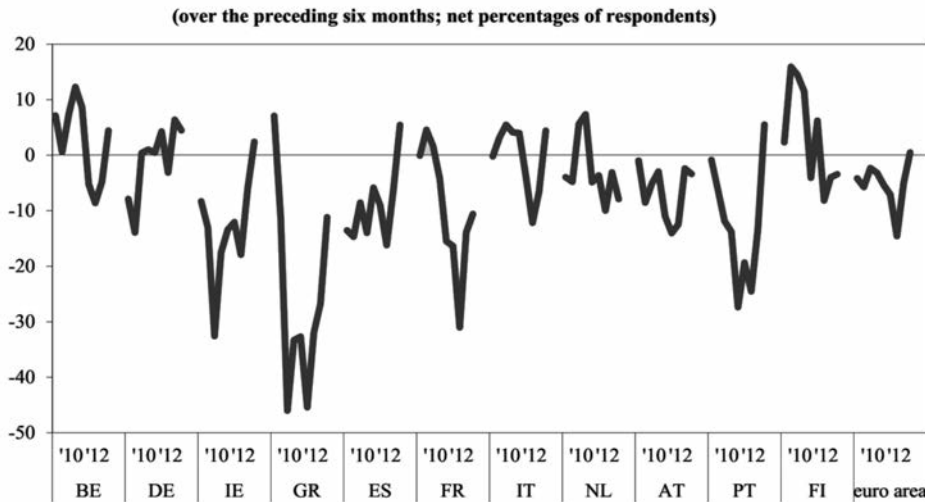


All in all, the results point to a considerable fragmentation of lending conditions in Europe. On the one hand there are German SMEs, who report improving financing conditions, and on the other there are Greek SMEs, which still face the whole set of problems, namely higher interest rates, stronger collateral requirements and less availability of bank loans. Moreover, expectations for the upcoming months are again the least optimistic in Greece (see Graph 7).

To sum up, we have shown that there is ample evidence that SMEs are indeed affected more severely by credit constraints than larger enterprises. Further problems arise owing to the considerable heterogeneity across EMU. This can be described roughly as a north-south divide which is to some extent a result of different economic fundamentals across the monetary union. Whether these circumstances demand policy action will be elaborated in the following section.

GRAPH 7

SME's EXPECTATIONS REGARDING THE AVAILABILITY OF BANK LOANS ACROSS EURO AREA COUNTRIES



Source: ECB (2013c, page 23).

#### **4. - ECB Measures for the Enhancement of Funding Conditions**

Until now, the ECB has not directly addressed the issue of SME funding conditions in its policy measures. It has primarily lowered interest rates and changed its allocation procedures from variable- to fixed-rate tenders with full allotment. In addition, lending periods have been extended considerably upward to three years. However, the ECB has repeatedly stressed in its press conferences that the monetary transmission mechanism is not working efficiently and that interest rate cuts are not passed through to lending rates. This shows that the governing council is well aware of the difficult funding conditions for many SMEs in the euro area. This assessment, together with the fragmentation of credit markets as outlined in the previous section, has led to a debate about whether the ECB should more actively pursue the goal of facilitating financial access for SMEs. Several possibilities seem to present themselves.

One proposal is that the ECB could extend its collateral requirements to allow commercial banks to increase their access to ECB funding through the use of SME loans. If this does not help, the ECB could even buy SME loans directly (Steen, 2013). However, such a proceeding would be hard to justify because it would be in conflict with the ECB's mandate of maintaining price stability. Cleaning up the balance sheets of distressed SMEs does certainly not belong to the tasks of a central bank.

In fact, the ECB is currently discussing, together with the European Investment Bank (EIB) and the EU Commission, methods for enhancing financial access for SMEs. This could be done, for example, by reviving the market for asset-backed securities (EIB, 2013; Irish Examiner, 2013).

Relieving banks' balance sheets would allow them to extend lending. The risk of a credit crunch would be reduced, and securitization could become an option. However, banks would have to carefully monitor their balance sheets before increasing credit to SMEs. Moreover, they might be reluctant to add potential risk to their balance sheets in the light of the asset quality review (AQR) of the ECB which is being conducted throughout the current year. While securing the capitalization of banks might alleviate some of the problems, it would certainly not wipe away all the funding difficulties of European SMEs. SMEs borrow especially from smaller banks, which are less affected by the ECB's capital requirements. Accordingly, the AQR might be only a small step in the right direction but nevertheless fail to solve the main problems. Moreover, as the AQR will take time to complete, it is certainly no option to provide immediate support to SMEs, although it is urgently needed (Financial Times, 2013).

One option that aims to give support to SMEs more directly might be a program similar to the funding-for-lending scheme (FLS) introduced by the Bank of England (BoE) in August 2012. This program offers banks funds at favorable conditions which they in turn are expected to pass on to consumers and enterprises. However, it is not clear whether the FLS has really improved the situation. While mortgage lending has increased, there is no such development in business lending (Osborne, 2013). Nevertheless, the FLS is being extended until 2015 and several corrections have yet again been made to try for success. Unfortunately, even officials from the BoE do not expect that the FLS will solve the problems of SME financing (Jones, 2013). And, in fact, it seems that they are being proven right, as lending to SMEs in Britain continues to fall (Inman, 2014).

An even more drastic step for a central bank would be to directly purchase SME loans. While the monetary financing of public debt is forbidden to the ECB, this is not so in the case of buying corporate debt. In fact, loans are already eligible for ECB refinancing operations. Although these loans are priced with an adequate discount, this, of course, translates into further risks for the ECB. These risks are ultimately backed by the governments of the EMU member states. Obviously, the larger the collateral the better this is for banks for improving lending capacities. However, in the case of borrower default, considerable amounts would have to be written off. Fatalists would say that such an arrangement would be just another step in the sequence of unconventional monetary policy measures and thus there should be no reason to hesitate. However, this would alleviate funding problems only on the supply side of the economy. As was laid out in the previous section, loan demand is considerably weak in many countries of the euro zone owing to an unfavorable growth perspective in many parts of the euro area. Accordingly, relaxing austerity measures might also be a relevant issue (Financial Times, 2013). This highlights a severe dilemma that the euro zone now faces. Banks are unable or unwilling to execute their core functions, namely to lend to customers and firms, and SMEs are heavily dependent on bank credits.

Thus, to resolve this dilemma it will be important to stabilize the banking sector. Establishing a market for asset-backed securities (ABS) for SME loans requires well capitalized banks, but the ECB is skeptical about ABS purchases because of moral hazard (Irish Examiner, 2013). Finally, the question once again arises as to whether the ECB should step in and take over the responsibilities of fiscal policy (Barwell, 2013), which it has already done in the past when purchasing government bonds in its securities markets program (SMP) and in the announcement that it would follow the outright monetary transactions program. If more and

more tasks are transferred to the ECB, this might at some point hinder the pursuit of the main goal of maintaining price stability. This is simply because one might ask too much of an institution which should be concerned solely with safeguarding the purchasing power of money. Moreover, ECB action would become ever more opaque, which might finally lead to a destabilization of inflation expectations.

Generally, it seems that fixing the fragmentation of SME financial access in the euro zone is not an ECB task. As was laid out in the previous sections, there are good reasons why accessibility to credit differs considerably between EMU countries. Interest rates should differ between countries facing an upswing and those plagued by recession. Neither does each variation in funding costs call for policy action. Additionally, the recapitalization of banks should be seen as a government task as it will probably involve some cross-border transfers (Belke, 2013*b*). Involvement in monetary policy and the suspension of market forces could jeopardize market functioning and result in misallocation in credit markets. Furthermore, limiting market forces would reduce the pressure for structural reforms. SMEs would not have to search for innovative and sustainable business models.

Additionally, if loans are to be bought by the ECB it is not clear which loans or how they should be selected. As was the case with the SMP purchases, criticism regarding transparency might emerge. If only certain loans are to be purchased, this might lead to competitive distortions. Unprofitable firms might be subsidized.

Undoubtedly, the recovery of SME financial access will be an important step in overcoming the European economic crisis, but this task should be handed over to the European Commission and the EIB rather than abusing the Central Bank.

## **5. - Other Means of Enhancing SMEs' Financing Conditions**

As the central role in improving financing conditions for SMEs should not be given to the ECB, governments' public programs may help to overcome some of the problems. Public financing programs with a volume of more than €50 billion exist which can help SMEs find adequate funding (Centre for Strategy & Evaluation Service - CSES, 2013). According to the CSES (2013), there are a wide range of programs. Usually, several schemes are available in each country which try to help enterprises at several stages of their development. However, especially smaller member states tend to have only few programs. To capture the variety of possible designs, the report covers an in-depth analysis of the programs in France, Germany, Poland, Sweden and the UK. A general conclusion seems to be that

no magic bullet exists and that each program has to be highly targeted and should address certain market failures. The study concludes with a list of twelve points covering design, operation and monitoring and evaluation that a successful program should fulfill. However, comparing and judging whether one scheme is better or worse than another is difficult because funds are granted to very different companies at very different stages of their development and of course the sizes of allotment vary considerably.

The finding that there does not seem to be a 'one size fits all' program further strengthens the argument that burdening the ECB with the task of overcoming SME funding problems might head in the wrong direction. Area-wide programs which would possibly be easier and faster to implement than specifically designed ones might finally suffer from ineffectiveness.

Empirical evidence shows that belonging to an MGI can facilitate access to finance. Columba *et al.* (2010) show that an affiliation with an MGI considerably lowers credit costs. Bartoli *et al.* (2013) stress that MGIs play an important role, especially during a crisis. Thereby, MGIs help to overcome information problems and thus their support relates to more than just collateral provision.

Further financial support can be expected from the EIB. During the years 2013-2015 the bank will provide €15 billion to SMEs, whereby it will try to increase the number of supported companies (EIB, 2013).

## 6. - Conclusion

In the previous sections we outlined that especially SMEs generally face financing obstacles owing to, for example, asymmetric information. Today, their situation is further complicated by the poor economic situation in Europe, with many countries being plagued by recession, structural reforms and austerity measures. Nevertheless, SMEs are important drivers of innovation and contribute considerably to economic growth and job creation. Accordingly, their situation is usually closely traced and always of concern to policy makers.

Recently, claims have emerged that the fragmentation of financial markets and the large heterogeneity of funding conditions across the euro zone call for additional policy measures to improve financial access for SMEs. As governments are restricted by large deficits, debt brakes or structural adjustment measures, it is again the ECB that is asked to take the lead. However, it is neither obvious nor clear whether the ECB should explicitly address these issues at all or how it should act.

Possible ECB measures for enhancing financial access for SMEs generally tackle the supply side. Setting up programs like that which the BoE has recently established, or directly buying SME loans, aims at increasing the lending capacity of banks or their willingness to lend. Such measures transfer additional risks to the central bank, whereby their effectiveness is uncertain. For example, the British funding-for-lending scheme only partly revived lending to SMEs.

Furthermore, the problems faced by European SMEs relate to a large degree to weak demand and to finding customers. Here again, it seems that this is not an ECB task. But whether governments are able to foster demand also remains doubtful. To be able to do so, they have to think about relaxing austerity programs. Unfortunately, this would come with the price of a reduction in pressure for structural reforms.

There is obviously no easy way out of this complex crisis. The ECB is already over-involved in crisis management and has taken on tasks for which it is usually not responsible. Governments are also not able to stimulate demand because of budget restrictions. Thus, it is very important that the available financial means offered by the various support programs are retrieved and that SMEs become aware of the funding and support possibilities that are already available. For several reasons, creating a new funding scheme that tries to satisfy the diverse problems of European SMEs does not seem to be an option: firstly, it would probably not be able to give support in a timely manner, as the setup would take time. Secondly, in order to be effective, programs need to be tailored to each SME. Accordingly, this could probably be done better by national and established institutions or programs.

Finally, only a prosaic but realistic conclusion can be drawn. This deep crisis cannot be solved by immediate action. As the problems in Europe have built up over years if not decades, it seems unrealistic to believe that there can be a quick and easy solution. The problem of funding and its heterogeneity are a result of economic fundamentals and thus a solution has to address these key determinants, otherwise the solution will not be sustainable. For SMEs it seems reasonable to pursue a process of deleveraging so they can become less dependent on bank funding. Although this will be a difficult task from within a crisis, this seems to be the best option from a medium- to long-run perspective. While this will be a process of years and will cost jobs, it seems important to ensure that this cyclical unemployment does not turn into structural unemployment.

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# After the Credit Crunch: Long-Term Finance for Economic Growth

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*We stress the role of a more balanced financial structure for the Italian corporate sector. Three sources of funding are seen as complementary: equity, long-term debt, and bank loans. An analysis of the credit crunch shows the emergence of two phases: the first from the Lehman crash (2008) to 2010; the second from the sovereign debt crisis (2011) to today. The supply of bank credit will not recover quickly, since bank behaviour is pro-cyclical and prudential regulation will not help. Italian firms should become less dependent on banks. Specialised intermediaries should channel funds from institutional investors to the corporate sector.*  
[JEL Classification: G20; E50].

**Keywords:** credit crunch; financial crisis; non-bank funding.

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## 1. - Introduction

There is an urgent need to break the “vicious circle”, which has now existed for some years:

- 1) debt, whether private or public sector, is not sustainable unless we start to grow again;
  - 2) growth is not possible without the necessary credit;
  - 3) at the same time the huge debt that has accumulated prevents credit from flowing to the economy.
- How can we escape from this vicious circle and prevent the last six years of crisis from becoming permanent and increasingly more difficult to overcome?
  - In this paper, we look back firstly at the main points that economic theory has long demonstrated on the relationship between finance and growth:
    - 1) growth is explained above all by the accumulation of capital and by innovation, and therefore by spending based on a long-term horizon (and management of the relative business risks). A business must therefore have appropriate equity and long-term loan capital;
    - 2) however, economic growth also requires an adequate increase in final demand, which in turn requires short-term finance (bank loans in particular) in order to provide the necessary support for the demand for stocks by companies and for consumption by households.

We therefore have more *complementarity* than *substitutability* in the economic growth process between the three main sources of funding for businesses: equity; long-term debt; and bank loans.

In the short-term, and partly as a result of a very expansionary monetary policy which increases the substitutability between the three sources of funding, it is possible for bank loans to go beyond their normal role and at least partly finance the accumulation of fixed capital and even the highest risk activity of a company, which is that related to the process of innovation.

In Italy, to return to growth means returning to a more balanced financial structure. The huge growth seen in the 1950s and 1960s did in fact see a proper role played by equity (with injections of public sector capital when private sector capital was judged insufficient) and long-term loans (*Istituti di Credito Speciale, Mediocredito*), alongside short-term lending provided by banks. However, the lack of growth which began in the 1990s – even before the decline over the last six years

– has been accompanied by a growing and excessive dependence on credit from banks. In a certain sense the post-Lehman crisis and then – two years later – the *post-Greece* crisis has only demonstrated how serious the imbalance which had accumulated was and how it is therefore indispensable to find a remedy for it.

In what follows, we look more closely at this thesis with reference above all to two aspects. On the one hand there is the importance assumed by the financial system in the presence of global shocks like that of the Lehman Brothers bankruptcy on 15<sup>th</sup> September 2008. The comment made by the BIS (2009, page 3) is important here: «The financial system is the economy's plumbing». In other words, the structure of the financial system (more specifically, the different roles played by banks and the market) is irrelevant if the shock is global and the whole system comes to a halt! We saw the proof of this two years later with the shock (which was asymmetric) constituted by the Greek financial crisis. This is a eurozone crisis, the effects of which are more serious where sovereign debt risk is added to by the risk run by the banks who hold that debt. The credit crunch which resulted hurt Italy more than other eurozone countries!

The second aspect regards the future. How do we return to growth – in the next few years – if our financial system is still suffering from the fallout from the two crises (*post-Lehman* and *post-Greece*) and banks could therefore not fund the necessary investments, even if they wanted to?

This paper is organised as follows. The following section 2 provides an analysis of the different stages of the credit crunch that is affecting the international economy. Section 3 focuses on the outlook for the Italian financial system, showing the need for the corporate sector to become less dependent on bank credit and to attract funds from the institutional investors. Finally, section 4 summarises our findings.

## 2. - Credit Crunch: The Differences between 2008 and 2011

Italy has experienced a credit crunch over the last six years. At first sight it might seem to be a single phenomenon which with differing intensities began in 2008 and is still ongoing. In reality, if you look carefully, two different stages can be identified: the first began with the Lehman bankruptcy and ended in 2010; the second began in 2011 as a consequence of the sovereign debt crisis of peripheral countries in the euro area and this is still in progress. Before examining these two moments in time and in detail it is useful to first try and understand what a

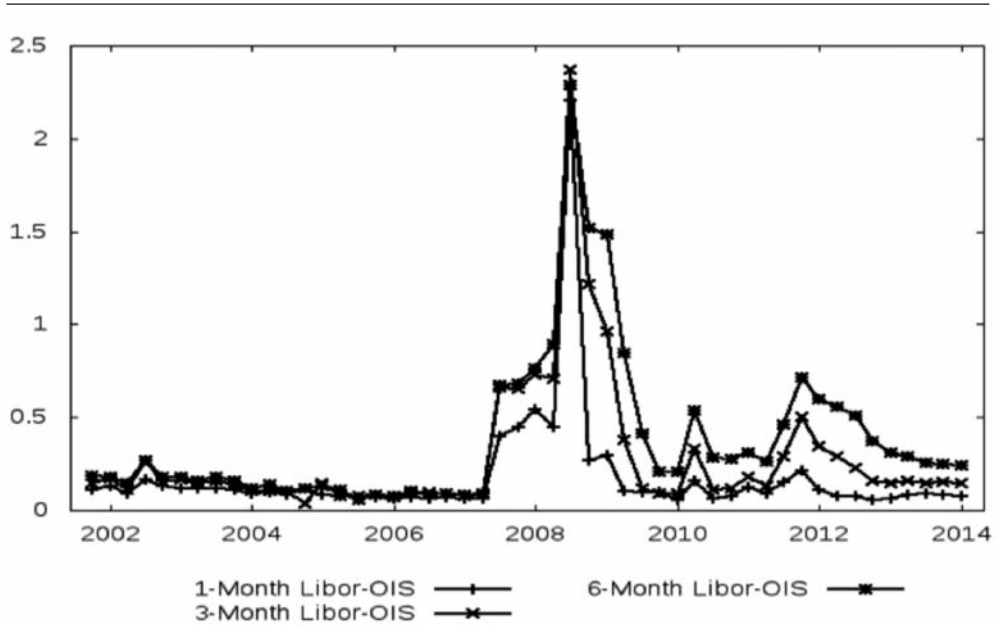
credit crunch is. Clair and Tucker (1993) attributed use of the phrase “credit crunch”, already widely used in the literature, to a decrease in the supply of credit due to two factors: a decrease in the value of the capital held by banks and more stringent rules set by legislation which require banks to hold more capital. The necessary conditions for the first stage of a reduction in the supply of credit arose at the end of the 1990s. This period saw on the one hand extraordinary macroeconomic calm (known as the “great moderation”) and on the other hand an increase in the sophistication of financial products which became increasingly more complex and difficult to measure accurately, in terms of value. An increase in the rate of subprime mortgage defaults in 2007 caused the first turbulence on financial markets. It was the beginning of the return of the risk factor (see the spread in chart 1 between the London interbank offer rate and the overnight index swap -OIS- rate) as a component to be employed in calculating the value of financial assets. The risk premium increased further in September 2008 with the Lehman Brothers collapse, which established the idea on financial markets that in future all banks (large or small) could fail.

In order to understand how financial crises become real, we have to consider two possible explanations: the credit channel and the wealth channel. According to the credit channel explanation, the stress in the US banking system spread to banks worldwide through funding markets, both secured and unsecured. This funding shock to the banking systems of various countries was transmitted through a reduction in credit supply. While, according to the household wealth effects explanation, a stock market crash decreases the value of household wealth, thereby decreasing the lifetime resources of consumers, which causes consumption to fall.

Because the European economy depends structurally on bank loans, the conviction spread that the credit crunch would be severe in Europe, even if it had been generated by causes originated elsewhere.

GRAPH 1

LIBOR OIS SPREAD (BASIS POINTS)

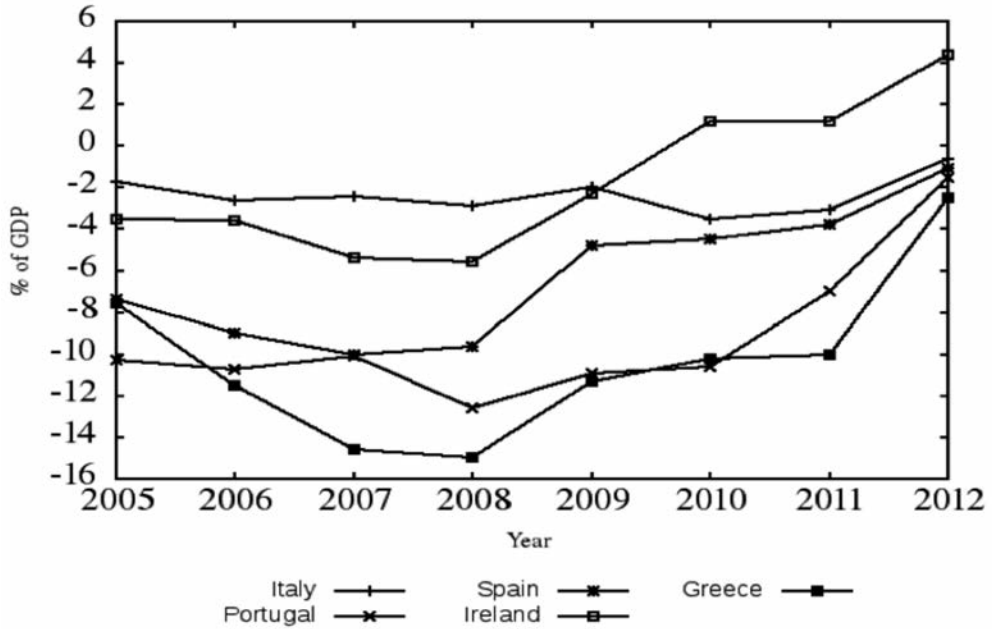


Source: BLOOMBERG.

All this persuaded financial markets to analyse the sovereign debts of countries in the euro area more carefully. Consequently, in 2011 the problem of the “spreads” of euro area peripheral countries erupted (Portugal, Italy, Ireland, Greece and Spain (PIIGS)). Although the macroeconomic fundamentals of these countries were very different, they all had large current account balance of payments deficits (see chart 2, balance of payments as a percentage of GDP for the PIIGS countries in the period 2005-2012, source OECD). In other words, since 2000 they had benefited each year from a substantial flow of savings from Germany to fund their growth.

GRAPH 2

CURRENT ACCOUNT BALANCE OF PAYMENTS AS % GDP, 2005 - 2012

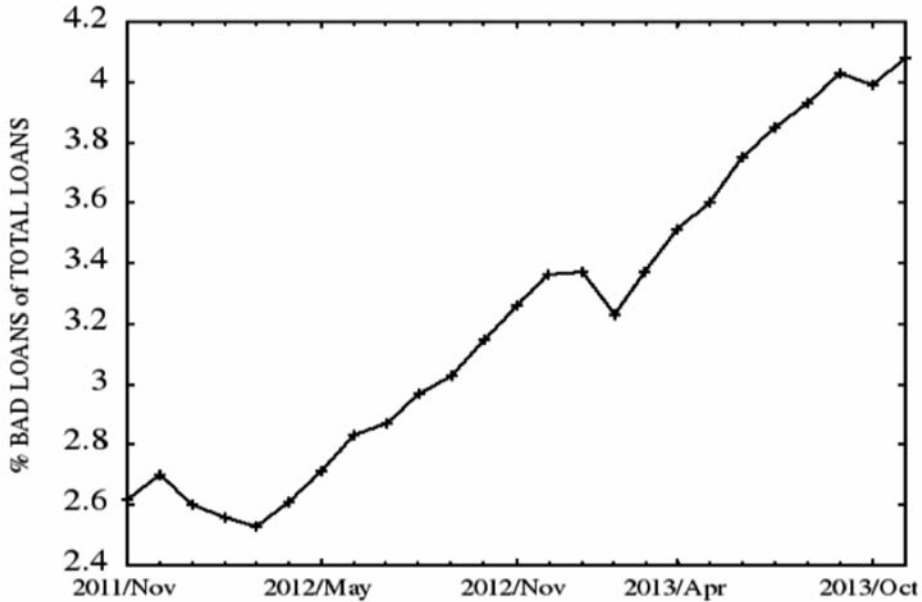


Source: OECD.

When the risk premium increased, the flow of German savings suddenly came to a halt, causing an increase in the yield on government securities in these countries. This rise in interest rates had a very strong impact on the banking systems of PIIGS countries. In fact, as is well known, many banks hold huge quantities of debt securities issued by the governments of their countries. The increase in the yields produced a fall in the value of the securities, thereby creating capitalisation problems for the banking systems in these countries. In some cases true and genuine bankruptcies occurred which obliged governments to intervene thereby increasing public debt, which therefore provided the grounds for a further increase in yields, given the further growth in the stock of debt. Corporate finance in Italy is based on lending from banks. Consequently, there can be no expansion in the economy without an efficient banking system to finance it. On the other hand, as is to be expected, if the supply of credit from banks contracts, then the economy goes rapidly into recession.

GRAPH 3

## BAD LOANS ON LOANS OVER THE PERIOD 2011:11 - 2013:11 IN ITALY



Source: BANK OF ITALY.

Chart 3 shows non-performing bank loans as a percentage of total bank loans in Italy for the period between November 2011, and therefore at the peak of the eurozone sovereign debt crisis, and November 2013. As can be seen, the “spread” crisis (November 2011) produced a large increase in non-performing loans as a percentage of total loans. Italian banks found themselves having to recognise large losses in their accounts on the government securities that they held in portfolio (due to the rise in the yields on those securities). The obvious consequence was a sharp fall in lending.

What then are the differences between the first stage of the credit crunch and the second? Two substantial differences can be identified here.

The difference lies in the fact that the Lehman collapse was a global shock which hit the real economy with a contraction in funding to the economy. All channels of finance for businesses were hit by that shock. On the contrary, the second stage mainly hit banking credit and those economies that are financed most through that channel. It was therefore an asymmetric credit crunch.

The second difference is the lack of uniformity between the “bank-centric” countries. In fact peripheral euro area countries were those hit hardest by the sov-



ereign debt crisis. Therefore it was only these countries (PIIGS) that experienced the severe credit crunch.

Economic policy in the euro area aggravated the problem further. In order to reduce the yields on the government securities of PIIGS countries, European institutions imposed a rapid reduction in balance of payment deficits enabling these countries to refinance their maturing public debt autonomously. This reduction occurred at the cost of a severe recession. As was predictable, the recession produced bankruptcies, which materialised on the balance sheets of banks in the form of further non-performing loans. As a consequence, banks further reduced the supply of credit which deepened the recession even more. In this respect empirical confirmation of this hypothesis would be given by comparing the supply of credit from domestic banks with that from foreign banks in PIIGS countries. It would be expected that only domestic banks have restricted their supply of credit. We will focus on this aspect in a future research project. With a different viewpoint, Del Giovane, Nobili Signoretto (2013) point out that both the weakness in the demand for credit and the increased rigidity of the supply constitute the underlying factors of the two credit crunches in 2008 and 2011-2013. Nevertheless, during the acute phases of the sovereign debt crisis because of capital constraints, the supply schedule becomes price-inelastic and suggestive of credit rationing.

### **3. - In Search of New Funding Sources for the Italian Corporate Sector**

Italian corporations have been affected by a restriction on the supply of bank credit for several years, as we have shown in the previous section. We cannot expect this pattern to reverse in the near future, for several reasons. Banks have become more selective in the extension of credit, due to the high credit risks they face. Corporate insolvencies have produced a remarkable increase in bad loans. In this respect, things are only going to improve if the Italian economy improves, which will take time and there will be a lag before the improvement is seen on bank balance sheets, which will induce them to gradually remove their restrictions on lending criteria. In other words, there is an unavoidable *pro*-cyclicality in the supply of bank credit.

In addition to business cycle-related issues, there are a couple of structural reasons why we cannot expect a significant recovery in the supply of funds from banks. Firstly, Italian banks have accumulated a huge funding gap: the difference between the amount lent to firms and households and the amount of money raised

through retail deposits and bonds. Therefore, Italian banks have become more and more dependent on the international wholesale money market for funding. But this market has become quite fragmented during the sovereign debt crisis, limiting its availability and making this source of funding more costly. Secondly, the supply of bank credit is going to be curbed by the incoming new prudential regulations: the more severe capital *ratios* required by the Basle III framework and the liquidity constraints that will become effective in the near future.

For all those reasons, it is essential for Italian firms to become less dependent on the banking sector as a source of funding. So far, their dependency on banks has been much stronger than in other countries. In 2012, the *ratio* of bank loans to total corporate debt was above 65% in Italy, compared with a *ratio* below 40% in France and 50% in Germany and a *ratio* as low as around 30% in the US and the UK (see Panetta, 2013). This dependency is traditionally due to the high fragmentation of Italian industry, where small firms are largely predominant in comparison with their numbers in other countries. Despite this structural feature of the Italian economy, a policy goal for the near future must be to strengthen alternative channels of funding.

The starting point to achieve this is the role played by institutional investors, such as insurance firms, pension funds and mutual funds. These raise huge sums from the household sector. However, an international comparison shows that there is room to increase their role of financial intermediation in the Italian economy. Table 1 shows that the *ratio* of assets managed by insurance companies and pension funds to total savings by households is much lower in Italy than in some other euro area countries and in the US and the UK. In particular, the pension fund sector seems to be very undersized by international standards

TABLE 1

INSTITUTIONAL INVESTORS: THE *RATIO* OF ASSETS UNDER MANAGEMENT TO HOUSEHOLD SAVINGS (2012)

	Italy	France	Germany	Euro Area	UK	Usa
Mutual funds	7.2	7.0	8.5	7.2	3.0	11.8
Insurance companies and pension funds	14.1	36.9	35.9	31.7	53.4	26.4
of which: pension funds	1.8	4.0	17.9	–	–	18.1
Total	24.1	44.0	44.5	38.9	56.4	38.2

Source: BANK OF ITALY (2013).

Apart from their size, one issue relates to the asset mix employed by institutional investors in Italy (see Table 2). Their assets are highly concentrated in government securities. Insurance companies hold 66% of their reserves in government securities and their overall bond portfolio amounts to 90% of their assets. Greater diversification would not only improve their financial stability (a concern recently taken up by the major rating agencies), but it would also create the opportunity to channel a larger share of household savings into the corporate sector of the Italian economy.

TABLE 2

## ITALIAN INSTITUTIONAL INVESTORS: FINANCIAL ASSET COMPOSITION (2012)

	Mutual funds	Pension funds	Insurance companies
Government securities	50	50	66
Bonds	17	10	24
Equities	21	15	4
Mutual funds	6	14	5
Other assets	7	11	1

Source: BANK OF ITALY (2013).

An important role in channeling savings from institutional investors into the corporate sector, should be played by specialised non-banking financial intermediaries. Institutional investors do not generally specialise in screening prospective borrowers, particularly as far as SMEs are concerned. They typically buy assets – mostly government bonds and securities issued by large corporations – traded in financial markets, acting on the basis of publicly available information. On the other hand, some financial intermediaries do specialise in screening and the valuation of small and new firms: for example, private equity and venture capital funds. This segment of the financial intermediation sector has suffered a severe contraction in the recent years, due to the financial crisis and in Italy it is now much less active than in other European countries. These types of intermediary might grow by acquiring funding from institutional investors and channeling it into innovative firms and new start-ups. Private equity funds might therefore be a useful complement to the stock exchange, by providing a partial remedy to the traditional reluctance of the Italian SMEs to go public.

Credit funds are another type of non-banking financial intermediary. They operate in the same way as mutual funds, but instead of buying publicly traded assets, they make loans to firms, often with long maturities and then hold the as-

sets until maturity. They can either extend new loans or buy existing loans, originated by another financial intermediary; in the latter case they act as buyers in securitisation deals. Similarly to private equity funds, credit funds could grow in Italy by selling their shares to institutional investors.

A central issue when dealing with alternative sources of funding is the chance to create an active market again for the securitisation of corporate loans. This is quite a controversial topic, because of the damage caused by securitised products to the stability of financial markets in recent years, which started with the *sub*-prime crisis in 2007-2008. It is well known that the securitisation process can produce distortions in the screening process, because the incentive for the originator to select borrowers is reduced. In addition, complex products, traded in the over-the-counter market, are difficult to price; their opaqueness increases the likelihood of a liquidity dry-up, where nobody is willing to buy those products because there is no credible way to measure their fair value.

However, an effort should be made to revive the markets for securitised products and, at the same time, avoid the mistakes made in the past. Some rules must be put in place, based on the guidelines introduced by the Financial Stability Board (2012) and the IOSCO (2012). Firstly, the risk retention rule: the originator must retain a significant portion (at least 5%) of the asset backed securities (ABS), possibly those belonging to the junior *tranche*, in order to control for the incentive distortion mentioned above. Secondly, the transparency rule: the issuers of ABS should disclose detailed information on the underlying assets, so that professional investors are able to measure risk independently (this would include stress tests).

In addition to an adequate regulatory framework, if securitisations are to be revived then rules are needed for financial intermediaries to follow. Firstly, ABS should be standardised and traded transparently: this would enable market participants to price these products through an efficient price discovery process. Secondly, the underlying assets should be properly selected. Historical evidence suggests that securitisation deals have quite different default rates, depending on the nature of the underlying asset. AFME (2012) shows that, in Europe, the securitisation of loans to SMEs has a much lower default rate than other products, like mortgage backed securities (MBS) and “squared products” (CDOs of ABS). Some degree of self-regulation is needed for those rules to be followed. An interesting initiative in this area is PCS (“Prime Collateralized Securities”), an industry-led non-profit project to develop a label for high quality ABS.

#### 4. - Concluding Remarks

In this paper we stress the role of a more balanced financial structure for the Italian corporate sector, in order to help the Italian economy to recover from a long period of severe economic downturn. Three sources of funding are seen as complementary: equity, long-term debt, and bank loans.

An analysis of the credit crunch affecting the Italian, as well as the international, economy shows the emergence of two phases: the first from the Lehman crash (2008) to 2010; the second from the sovereign debt crisis (2011) to present. A substantial difference between them can be identified. The Lehman collapse was a global shock which hit the real economy with a contraction of funding to the economy. On the contrary, the second phase mainly hit bank credit and those economies that are financed mostly through that channel. Peripheral euro area countries were those hit hardest by the sovereign debt crisis. Therefore it was only these countries (PIIGS) that experienced the severe credit crunch in the second phase.

We cannot expect the supply of bank credit to recover quickly in the near future: bank behaviour is pro-cyclical, and banks are only going to increase their supply of loans when they perceive a reduction in credit risk, which will happen with a lag after the inversion of the credit cycle. In addition, the incoming new prudential regulation will curb lending by banks.

Therefore, it is essential for Italian firms to become less dependent on bank funding. In this regard, a crucial role should be played by institutional investors: insurance companies, pension funds and mutual funds. They should increase their size and diversify their portfolios of assets to include loans and securities issued by SMEs. Specialised financial intermediaries, like private equity, venture capital and credit funds, should be developed in order to channel funds from institutional investors to the corporate sector. Securitisation could play a positive role, provided adequate prudential and disclosure requirements are implemented.

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# New Finance for Italian Firms. Issues of Mini-Bonds and SME Entering the Stock Exchange are the Most Promising Novelties

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*The difficulties of bank lending to Italian firms create an urgent need for new finance from alternative channels. This is essential to catch the recovery in 2014. More resources should come from private equity and mezzanine finance. Good news arrive from small and medium-sized enterprises (SME) accessing the stock-exchange. A promising novelty are the Mini-Bonds which try to open the corporate bond market to SME. We need to revive the securitization of loans. District and local bonds are little exploited. Positive development was recently seen in network finance. Confidi and Fondo Centrale di Garanzia should be strengthened to support access to credit. [JEL Classification: G10; G32].*

**Keywords:** bond market; stock market; firm financial structure.

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## 1. - More Resources Needed from Alternative Financing Channels

The difficulties of bank credit call for the strengthening of alternative financing channels for Italian firms<sup>1</sup>. This is essential now that loans are declining. But it will be crucial even in coming years, when bank credit will have a structurally smaller role in the financing of companies.

The decline of bank lending to Italian companies so far has been equal to 10.7% from the peak in September 2011, amounting to -98 billion euro. Some analysts estimate that the credit crunch will continue in 2014. Most of them think that in 2015 there will be an increase<sup>2</sup>.

In 2012-2013 bank loans to businesses have fallen more than nominal GDP. Thus, the loans to GDP *ratio* shrank rapidly, and could fall further in the next two years. The degree of bank indebtedness of Italian enterprises is far from the peak.

The decline in loans started from the supply side. To make a forecast for 2014-2015 we should consider what could happen to bank credit risk (now at the highest), ability of banks to generate profits (at the minimum), capital *ratios* and funding. In order for the reversal of credit to occur in 2015 it is crucial that the assessment and tests carried out by the ECB and EBA confirm the soundness of bank balance sheets, so as to instill confidence in Italian banks among investors and lower bank risk aversion. If the ECB in-depth analysis will not have these positive effects, an adverse scenario could materialize, in which loans would heavily drop in 2014 and keep decreasing in 2015.

In any case, in 2014 bank loans will not be able to meet the additional financial needs created by improved economic activity. This makes the development of non-bank financing very urgent.

In order to return to growth, companies have to restart investment, and therefore they need financing: capital, generated by the activity or newly raised, and debt, from banks or from other sources. Assuming a five-year investment growth in line with that of the pre-crisis decade (+5.2% per year at current prices in 1998-2007), firms would need 90 billion euro of additional funding over five years. For 2014-2015, in which there will be a slow recovery of the Italian economy and of investment, firms will need a bit less than 20 billion for two years.

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<sup>1</sup> See CENTRO STUDI CONFINDUSTRIA (2012).

<sup>2</sup> See RAPACCIUOLO C. (2014). According to this study credit to firms decreases by -1.0% (-8 billion euro) in 2014 and increases in 2015 (+2.8%, +22 billion). In a bad scenario, loans fall by 4.9% (-40 billion) in 2014 and by 1.3% (-10 billion) in 2015.

For the two different scenarios for the banking channel we can calculate by how much the other sources will have to expand in order to cover the financial needs of businesses.

In the first scenario, the good one, the credit crunch stops in 2015. Other sources, non-bank and self-financing, will have to provide 15.2 billion of additional resources in 2014 to support new investments and fill the hole left by banks. In 2015 credit will grow and would be enough to support the increase in investment, even if both credit and investment remain far below pre-crisis levels.

In the second scenario, the bad one, the credit crunch continues. Other sources should provide additional 47.2 billion euro in 2014 and 19.8 billion in 2015, in the hypothesis of unchanged investment growth. It would take really a lot of new capital and non-bank debt. Surely too much.

If firms, and the Italian economy as a whole, want to return to growth in the presence of constraints on bank lending, we must rapidly develop alternative sources of finance<sup>3</sup>. This is the situation we are struggling with in 2014. It will not be easy, but the economy cannot grow if it is not funded.

The paper is organized as follows. In Section 2 we briefly look at the recent measures that have been taken in Italy to develop alternative financing channels; in Section 3 to 6 we focus on the traditional narrowness of the equity market for Italian firms, looking at good news coming from the new AIM-MAC market segment for SME; in Section 7 to 10 we look at the problems and prospects of the Italian corporate bond market, with a special attention to the new “mini-bond” market; in Section 11 we analyze efforts being made to revive the securitization market; in Section 12 we look at various forms with which Italian SME can work together to get better financing; in Section 13 and 14 we examine the role of *Confidi* and *Fondo Centrale di Garanzia* in providing guarantees, to facilitate access to bank loans. Section 15 sums up, calculating the expected contribution of the various channels to meet the increasing financing needs of Italian firms during this year and the next one.

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<sup>3</sup> GUIISO L. and TABELLINI G. (2013) highlight that creating in Italy a liquid market for loans and bonds of SME requires the interaction of many actors. This takes time, which can be shortened with the intervention of a large public operator.

## 2. - What Has Been Done to Develop Alternative Finance Channels and Restart Bank Credit?

To develop alternative channels for corporate finance in Italy, it is necessary to move in various directions: increase the capital of enterprises; revive the markets of private equity and mezzanine finance; promote the use of bonds; develop the district, territory and network finance<sup>4</sup>.

To unlock bank credit many measures were strongly needed since the beginning of the crisis: restart the securitization of loans; increase the deductibility of bank provisions for non performing loans<sup>5</sup>; strengthen the *Confidi* system and the intervention of *Fondo Centrale di Garanzia* (FCG) and *Cassa Depositi e Prestiti* (CDP).

Some measures in these fields have been carried out during the last year. First, the ACE (*Aiuto alla Crescita Economica*) measure for the capital of firms has been strengthened. Second, different government decrees are trying to foster the use of mini-bonds by SME. Third, European level measures by ECB and EIB, including public guarantees, are trying to restart the securitization of loans. Fourth, the deductibility of bank provisions for impaired loans and interest expenses has been partially increased<sup>6</sup>. Fifth, the intervention of the FCG has been strengthened. Sixth, a new debt moratoria has been signed. All these measures go in the right direction. In other cases, the market is moving by itself, without explicit measures, as it is happening in the *finanza delle reti di imprese* (network finance). All these developments can help generate new resources for businesses.

However, much remains to be done. Some non-bank channels are still waiting for an intervention. In other cases the recent measures are not enough. For example, the private equity market remains subdued, even if the *Fondo Italiano di Investimento* is strongly increasing its activity. The mezzanine finance market is still not working. The limited diffusion of the district and territory bonds remains disappointing with respect to their potential.

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<sup>4</sup> In May 2013 Confindustria proposed a set of measures with this goal. See BRUNORI F., CARLINI V. and RAPACCIUOLO C. (2013).

<sup>5</sup> The tax treatment exacerbated the difficulty for banks to lend. Provisions for impaired loans can be deducted from tax only to the extent of 0.3% of total loans per year. With the old law, the excess had to be recovered in 18 years. In addition, the interest paid on 4% of deposits are not deductible. See BONAFEDE A. (2013).

<sup>6</sup> The *Legge di Stabilità* for 2014 decided that banks can now deduct provisions for non performing loans in 5 years, much less than the previous 18 years, probably still too much to restart credit to the economy.

Let's now look in more detail at what is happening for each individual non-bank channel.

### 3. - Increase the Capital of Companies

More resources need to come from the equity of companies. We need to restart the path of capital strengthening that was taking place in the pre-crisis decade and which has been discontinued in recent years.

The financial structure of Italian companies in the pre-crisis years had become more solid with respect to the mid-nineties. The capital had risen to 49.9% of liabilities in 2006, from 35.9% in 1995. Loans decreased to 28.8%, from 40.3%.

With the crisis, however, the financial statements of companies have weakened again: capital has fallen to 40.1% in 2011 (Table 1) and loans increased to 35.3%. In 2012, due to the credit crunch, the share of loans decreased to 34.7%, while capital increased to 41.3%.

The share of capital in the financial statements by Italian companies is still 15 points lower than those of the French and British companies, and 3 points lower than that of German firms.

SME have a greater need for capital: on average they have a lower capital base with respect to medium-large businesses. The latter, in fact, are more likely to access the stock market, though in practice only a small number of them actually does<sup>7</sup>.

TABLE 1

ITALIAN FIRMS: GOOD SIGNALS ON CAPITAL AND BONDS, NOT ENOUGH  
(NON FINANCIAL FIRMS, COMPOSITION OF TOTAL LIABILITIES, % SHARES)

		Securities	Loans	Commercial debt and other liabilities	Capital
France	2011	6.2	23.8	14.9	55.1
	2012	6.7	22.5	14.3	56.5
UK	2011	11.6	29.8	5.5	53.1
	2012	12.0	27.5	5.1	55.5
USA	2011	14.0	14.8	17.8	53.4
	2012	14.6	14.2	16.2	55.0
Spain	2011	0.4	42.1	15.2	42.3
	2012	0.5	40.0	14.3	45.2
Germany	2011	2.5	31.1	25.0	41.3
	2012	2.7	29.1	24.2	44.0
Italy	2011	2.6	35.3	21.9	40.1
	2012	3.4	34.7	20.6	41.3

Ordered data by "capital" in 2012.

Source: CSC calculations on Bank of Italy data (Relazione annuale).

TABLE 2

MANUFACTURING: SME WITH LESS CAPITAL THAN BIG FIRMS  
(ITALY, 2011 BALANCE SHEETS, % SHARES ON TOTAL LIABILITIES)

	Small and medium enterprises <sup>1</sup>	Large businesses <sup>2</sup>
Bank loans	22.3	11.2
Other financial debt <sup>3</sup>	3.0	5.9
Commercial debts	23.9	23.0
Other debts <sup>4</sup>	10.0	16.0
Total debts	59.2	56.0
Capital and reserves	40.8	44.0

<sup>1</sup> 1-249 employees; <sup>2</sup> more than 250 employees.

<sup>3</sup> Includes corporate bonds.

<sup>4</sup> Infra-group, tax, social security, other.

Source: CSC calculations on AIDA data.

In manufacturing, in 2011 the capital amounted to 44.0% of liabilities for large companies, compared with 40.8% for SME (including funds and reserves; Table 2)<sup>8</sup>. The SME dependence on bank credit, conversely, was twice that for large firms (22.3% *versus* 11.2%). These data highlight the larger exposure of SME to the crisis, which has predominantly been a banking crisis. But large companies are not entirely immune, since the difficulties have involved the entire financial sector and thus also the bond and equity channels.

#### 4. - A Small Stock Market in Italy

The limited dimension of the stock market is one of the traditional factors which prevent a bigger capital base of Italian companies. The financial system is characterized by a reduced role of the Stock Exchange as compared to other advanced countries (Table 3). In Italy there are only 5 companies listed in the stock market per one million inhabitants, compared with 8 in Germany, 14 in France, 32 in the UK; the number of existing firms per million inhabitants, instead, is higher in Italy. The Italian stock market capitalization is lower (18% of GDP in 2011), compared with 37% in Germany, 65% in France and 127% in the United Kingdom.

<sup>7</sup> In December 2013, the different markets of the Italian Stock Exchange had 285 domestic companies listed (282 at end 2012), for a capitalization of 447 billion euro (365 in 2012), of which 32% in the financial sector.

<sup>8</sup> Also the access to the bond channel has been largely the preserve of big companies: that's why "other financial debt", including bonds, matters more for these firms (5.9% versus 3.0%).

The small average size of firms in Italy, with a greater proportion of SME compared to other advanced economies, partly explains the smaller direct access to the capital markets. A process of growth in size can help.

The low stock prices in Italy, due to the crisis, further reduce the attractiveness of the stock exchange for potential investors. As well as the ability of companies to raise new capital. Share prices in Italy increased by an encouraging +15% in 2013. However, they have never come back to pre-crisis levels, in sharp contrast to what has happened in Germany and the USA. With the level of prices equal to 100 in January 2007, Italy remains nailed to 44 at the end of 2013. The US has increased above the pre-crisis levels, at 127, and Germany has far outstripped them (170).

TABLE 3

ITALY: A SMALL STOCK MARKET, WITH STILL LOW PRICES  
(AS A % OF GDP, FOR 1 MILLION INHABITANTS, % VAR.)

	Stock Market Capitalization		Number of listed companies		Stock prices	
	2006	2011	2006	2011	Jan 07- Dec 13	Dec 12- Dec 13
Italy	49.0	17.5	4.8	4.7	-56.2	14.6
Germany	49.3	37.5	8.0	8.2	69.5	36.1
USA	138.1	110.2	17.2	13.4	27.0	27.2
France	93.4	65.1	11.3	13.7	-25.4	14.7
Japan	106.0	68.6	26.3	31.0	-9.1	59.4
UK	140.5	126.5	48.1	31.9	9.0	13.5
Spain	92.7	76.5	75.7	70.2	-38.5	20.1

Ordered data by listed companies in 2011.

Source: CSC calculations on World Bank, Thomson Reuters data.

There are other factors hampering the use of risk capital, such as a penalizing tax treatment. On this, the decree *Salva Italia* (D.l. no. 201/2011) has intervened in 2012, introducing the ACE measure (*Aiuto alla Crescita Economica*), which aims to rebalance the tax treatment of equity with respect to debt. A further strengthening of this important tool has been strongly requested by many analysts<sup>9</sup>. It was decided by the last *Legge di Stabilità* at end-2013, with a progressive increase of the share of reinvested profits that can be deducted from taxes, starting in 2014. This measure can help foster the search for fresh capital by Italian firms.

<sup>9</sup> See CONFINDUSTRIA (2013).

## 5. - A New Dedicated Stock Listing for Italian SMEs

An important novelty in the Italian stock exchange has been the creation of the Aim-Mac market, explicitly designed to foster the access of small and medium enterprises. Its distinctive characteristics are the low requisites for admission, the easier process of listing, the lower cost. In 2013 the Aim-Mac has seen a price performance in line with that of the main stock exchange.

More importantly, the new market has launched several new listings of SMEs: 15 Ipo (Initial public offering) in the Aim-Mac in 2013, out of 18 in the stock exchange. As a whole, the number of Ipo has tripled compared to the 6 registered in 2012. The number of Ipo has been bigger than in France (13) and Germany (6).

The fresh capital raised in 2013 by SME with their 15 Ipo amounted to 167 million euro. This is a little amount compared to the reduction of credit, but represents a big success by firms trying to bypass the lack of bank money by finding new channels to finance their expansion plans. The prospects for the next years are for a continuation of a positive trend. Many SME are interested in a listing in the stock market: according to *Borsa Italiana*, 13 new Ipo are already being studied.

A problem remains in finding investors ready to buy this kind of equity. Traditionally, institutional investors look at medium-large firms as a preferred target. For small firms, the creation of the dedicated Aim-Mac market is good news, but not enough. They also need specialized investors, domestic or not, prepared to work on the selection of small firms with solid balance sheet and the favorable prospects needed to access the stock market.

Another 1,183 million euro were raised on the main stock market with the 3 Ipo by larger firms. The total in 2013 was 1,350 million euro, the best performance in Italy since 2007. This is more than in France (1,253 million euro), although less than in Germany (2,409 million).

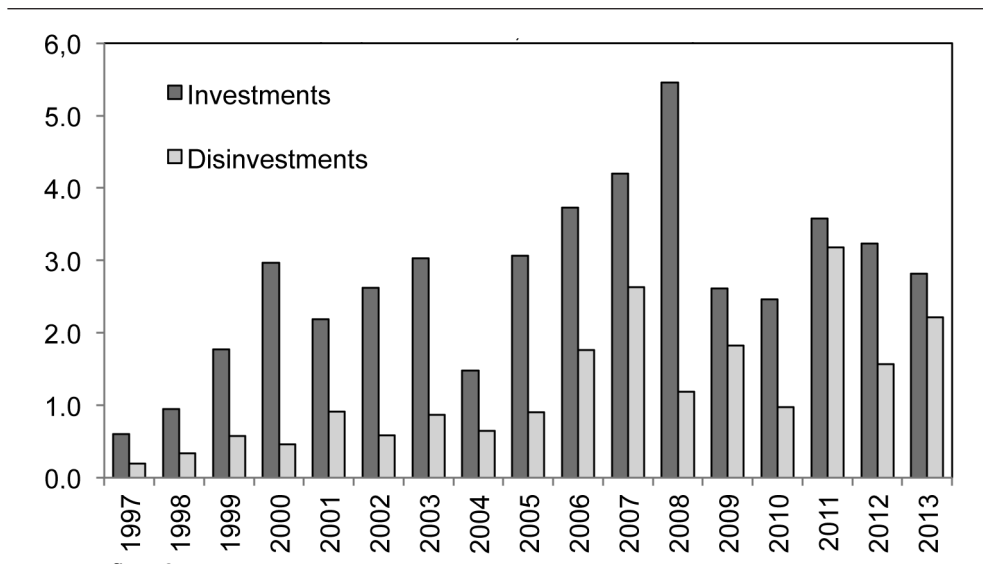
## 6. - Innovative Capital for SMEs

Tools designed to raise capital for SME have existed for years, but they have not had great success in Italy and were then blocked by the crisis. We need to foster the private equity market and hybrid capital instruments such as the mezzanine finance. These instruments can grow rapidly and become very important financing channels for many SME, although their contribution to the increase of equity of the business system as a whole will remain lower than that of ordinary capital.

The crisis has depressed the private equity market in Italy (Graph 1). For a decade there has been a gradual increase of the funds raised and of the amount invested in Italian firms (from 0.6 billion in 1997 to 5.5 in 2008). In 2009-2010 there was a sharp downturn in the market (to 2.5 billion euro), which in 2013 has not yet been recovered (2.8 billion invested, annualized data). At the same time, the disinvestments are growing, reaching 2.2 billion in 2013, from 1.2 in 2008. Thus, net investments amounted to just 0.6 billion in 2013, sharply down from 4.3 in 2008.

GRAPH 1

PRIVATE EQUITY STILL SUBDUED  
(ITALY, BILLION EURO, NEW BUSINESS)



2013: first 6 months, annualized.

Source: CSC calculations on AIFI data.

In 2013, the total private equity portfolio in Italy was composed of 1,335 investments in 1,173 companies, for an amount of 20.6 billion euro (17.6 million per firm, on average).

The funds invested in the Italian private equity market mainly come from international players (47.0%) and Italian closed-end funds (45.3%). Investment companies also have a significant share (5.5%), while Italian banks are marginal in this market (0.6%).



An encouraging aspect of the market is that in 2013 new private equity investments focused for a large portion (89%) on small and medium-sized enterprises, a growing share compared to 2007 (78%). Keeping these shares, with an increase in the flow of resources, is the objective to be pursued.

The private equity market in Italy remains very tiny compared to other advanced economies. In 2012 the buyout deal value in Italy was equal to half than that in France and a fourth than that in Germany. The biggest European private equity market is by large in the UK, almost triple in value than the German market.

To support the private equity market, the Italian Investment Fund was created in 2010. Its goal is to acquire minority participations in medium-large companies, with a turnover between 10 and 250 million euro, to stimulate their growth and gradually generate a strong group of competitive firms with sufficient capital.

The activity of the Fund is increasing fast. At the end of 2013, the Fund had 36 direct participations in Italian firms and 21 participations in other funds, which have shares in 41 firms; thus, the Fund was present in 77 firms. The total value of the direct investments was 358 million euro at end-2013, while the indirect amounted to 425 million, for a total of 783 million euro. This is equal to 65% of the 1.2 billion euro raised by the Fund: 417 million euro are still available for new private equity investments in the next years<sup>10</sup>.

Mezzanine finance is a form of hybrid capital for the growth in size of firms. Its advantage is that it does not require depositing assets as collateral. The downside is that it is more expensive for the company. Before the crisis it had recorded a significant growth in Italy, although remaining small in size compared to other countries (only 5% of the value of the European market, compared to a 17% share in terms of GDP), and other sources of funding. Between 2003 and 2007 the annual value of new business in Italy grew from 0.2 to 0.7 billion euro. With the crisis, the flow suddenly shrank to zero in 2009. The number of operations increased from 4 in 2003 to 20 in 2008, only to vanish in 2009. The re-launch of this tool can help meet the financing needs of many small Italian firms. Up to now, however, no significant initiative has been seen in this field.

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<sup>10</sup> The *Fondo Strategico Italiano*, in which CDP is the largest shareholder, has the task of acquiring participations in healthy companies of national interest. It has resources for 4.4 billion euro, 1.5 of which have been invested in some large companies. This has the effect of supporting the capital of companies, although the intervention is limited to large firms, exactly the companies which less need it. This depends on the objective of the Fund, which is not to let strategic companies to fall into the hands of foreign investors.

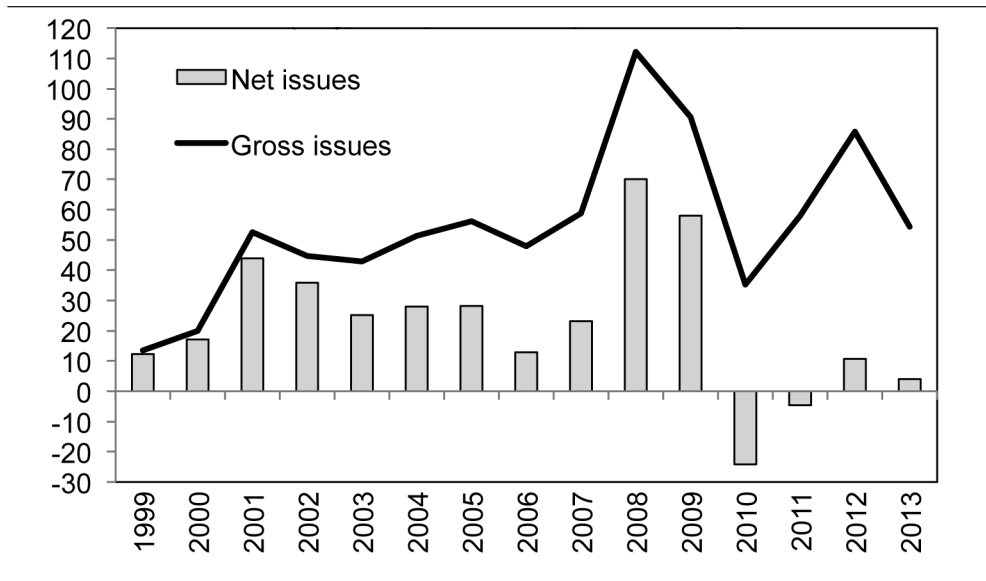
## 7. - Enlarge the Bond Market for Italian Firms

We must increase enterprise bond issues. This is a goal whose achievement has been made more difficult by the crisis. Some of the largest companies have come back to markets in the last two years. But volumes are still very modest and costs are high.

Issues of corporate bonds suffered a clear setback in 2010 and 2011, due to the debt crisis in the Euro-area. In that period the new issues, net of repayments of maturing securities, were negative (-24.0 billion euro in 2010, -4.6 in 2011). The stock has picked up again since the second half of 2012. Net emissions totaled +10.8 billion euro in 2012, but just 4.0 billion in 2013. Gross issues have touched a low of 35.3 billion euro in 2010 and rose to 85.9 billion in 2012 (Graph 2). In 2013, however, they decreased again to 54.4 billion.

GRAPH 2

CORPORATE BONDS: WEAK ISSUES  
(ITALY, FIRMS, BILLION EURO, ANNUAL DATA)



2013: first 11 months.

Source: CSC calculations on Bank of Italy data.

The total value of Italian corporate bonds amounts to 125 billion euro, issued by large firms and some medium-sized companies. The stock of bank bonds is almost eight times greater (922 billion). This shows that there is a potential de-

mand for the securities of private issuers. For firms, however, the demand is still partly inhibited by the effect of a distrust caused by few but significant cases of default in the early 2000s. To revive this tool we need to attract institutional investors (pension funds, insurance companies), including foreign ones.

The cost of this form of financing is still disadvantageous for Italian companies relative to firms in other Euro-area countries. The yields that they must offer are still significantly higher than those by German or French companies, for issues with similar maturities and size. This partly reflects the persistent spread in sovereign yields, although reduced with respect to the peaks reached in recent years. It is very important that this spread in yields is further reduced.

From the supply side, the complicated and burdensome legislation has historically been one of the reasons for the narrowness of the Italian corporate bond market. We have to open up the market to medium and small firms. A greater capital strength, and thus highest ratings, could gradually favor the access of SME to this market.

## 8. - A New Hope: Mini-Bond

The most promising new tool launched in Italy for SME are the so-called “mini-bonds”. In order to facilitate the access of SME to the bond market, in 2012 the Government has reformed the regulations for bonds (and commercial paper) issued by small and medium-sized enterprises with the *Decreto Crescita*. Among the various measures, the decree extended the deductibility of interest expenses, loosened the quantitative limits for emissions of non-listed companies, extended the life of the securities. Further regulatory simplifications and fiscal measures have just been taken with the decree *Destinazione Italia*, which finished the legislative process in February. We think that the two sets of measures are jointly able to gradually encourage the use of mini-bond by the whole audience of firms potentially capable of issuing them.

According to recent estimates by CRIF<sup>11</sup> the potential mini-bond issuers are around 10 thousand, out of around 1 million corporations in Italy (1%). To identify them, CRIF proposed a set of criteria, based on some crucial financial statement variables: turnover, equal at least to 5 million euro; Ebitda, positive and equal at least to 10% of turnover; leverage, measured on the debt/capital *ratio*,

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<sup>11</sup> See CRIF (2013).

smaller than 4. The identified group of firms is composed of 9,166 SME and 1,291 large firms (a total of 10,457). Of course, most of the interest is on the 9 thousand SME, since at least part of the large firms have already access to the ordinary bond market. These potential issuers mainly are in the industrial sector (55%), but also in services (23%) and construction (13%). A big share of them (43%) has no debt, not even with banks, while another large share (38%) has low debt, that is, it needs less than 3 years to repay its debt using its current Ebitda.

Some results of the recent measures can already be seen. Mini-bonds have registered so far a few issues. Until January 2014, the issues of mini-bonds, quoted on the dedicated ExtraMOT-Pro market, were 16. The size of the bonds was comprised in the 0.3-22.0 million euro range. The average size of these issues was 5 million euro; the total amount was 82 million. Still very little compared to the decline in bank lending in 2012-2013. Efforts should be made to popularize this instrument.

On ExtraMOT-Pro are also listed larger bonds, issued by larger firms. So far 11 such bonds have been issued, with a size in the 200-425 million euro range. The total value of these bonds is 2.8 billion euro. Looking at the amount, this is a remarkable achievement, greater than that obtained by mini-bond, because also these medium-large enterprises did not previously emitted bonds. According to Bank of Italy data, between 2007 and 2012 only a small group of large Italian companies have issued bonds. It is important that in the coming months other medium-large firms follow these early examples of success.

For smaller companies, to enlarge the market we also need the creation of specialized funds that can buy individual mini-bonds or portfolios. In the last few months, around 22 private funds were already born in Italy, almost a third of them with the participation of banks. Most of these funds are now raising resources, preparing for the subsequent phase of buying bonds. They have different funding targets, from a minimum of 50 million euro to a maximum of 500 million.

We expect new *ad hoc* funds to be created in the next months and years. If we should count on the 22 existing ones, based on their funding targets, the potential demand for mini-bond would be around 3-4 billion euro, once all of them will be fully operational. This is an upper limit, since at least some of these funds will put part of their money in other assets, to diversify the portfolios.

One problem is that many of the new specialized funds are still struggling with the fund-raising phase. Thus, we should still wait some time to approach the 3-4 billion euro goal. In the next couple of years, the demand for mini-bonds coming from this funds will grow very gradually.

We often forget to mention the yields offered to investors in mini-bonds, that is the cost for SME of this form of financing. On top of that, we have to add any additional charges for revision of the balance sheet, legal assistance, advisor, rating. The coupon offered on mini-bonds already issued is in the order of 6-8% per year. The other costs are around 0.3% per year for the average mini-bond.

Then, on the cost side there is not, on average, an advantage with respect to bank loans (4.5% for those smaller than 1 million euro, in 2013); in many cases the firms pay more. There is, however, a binding constraint on volumes, set by the credit crunch. Thus, the current situation is: better to pay more for a bond than to close the business for lack of finance. Still, we should also take into account the extra-cost of the bond when calculating the total impact of the credit crunch on Italian firms.

TABLE 4

WHO ISSUES MINI-BOND?  
(ITALY, FIRMS, 2012 BALANCE SHEETS, SIMPLE AVERAGES)

		Minibond issuers*	CRIF criteria
Turnover	million euro	36.4	>5
EBITDA	million euro	4.6	>0
EBITDA/Turnover	%	12.7	>10
Debt/Capital	%	2.3	<4
Net Profit	million euro	1.6	
Total assets	million euro	36.9	
Capital	million euro	10.5	
Total debt	million euro	24.4	
Bank loans	million euro	7.7	
Employees	number	127	

\* Sample of 7 firms, out of 16 issuing mini-bond.

Source: CSC calculations on AIDA data.

## 9. - Who Issues Mini-Bonds?

An analysis of the financial statements of the few companies that have already issued mini-bond allows us to obtain useful information. We look at balance sheets extracted from the AIDA database.

First, we can check if the size of the companies is in line with the definition of SME. In fact, a true mini-bond is not only small in size, but also issued by a small or medium company. In the available sample of 9 companies (out of 16 that have issued mini-bonds, due to lack of data), it appears that 2 companies have more than 250 employees and therefore are big firms in accordance with

the Commission definition (4 firms exceed the turnover threshold and the total assets limit). Thus, we are left with a sample of 7 SME issuing mini-bond.

In this sample of firms we can check the compliance with the criteria set out by CRIF to discover potential mini-bond issuers (Table 4). The leverage, measured by the debt/capital *ratio*, is equal to 2.3 on average, in line with the criteria of 4, although half of the companies are over. The sales amount on average to 36.4 million euro, well beyond the criteria of 5, with each firm above it. The Ebitda is positive for all firms, as required, and it is equal to 4.6 million euro on average. As a share of turnover, Ebitda amounts on average to 12.7%, in line with the 10% criteria, although half of the companies do not comply with it. As a whole, we can say that the four criteria used in the CRIF analysis are substantially reflected in the actual issuers. Thus, they represent a very good guide for estimating the number of potential mini-bond issuers.

AIDA data also show that the mini-bond issuers are medium-sized firms, not small firms, with 127 employees on average (in a range of 48-220 employees). They report 7.7 million euro of bank debt, equal to 20.9% of total liabilities, a share in line with that of SME in general. These firms have a capital of 10.5 million euro, equal to 28.6% of liabilities, a low share. However, net profits of 1.6 million euro are equal to as much as 15.0% of capital: this may indicate that the profitability of these firms is high enough to sustain the bond repayment in the next years.

Telling in more details one of these success stories with mini-bond can teach us something useful and may represent a best practice which other firms could follow. Take the case of *Filca*, an Italian SME, with 115 employees, a turnover of 17.5 million euro and a net-capital of 23.4 million. It was able to issue a mini-bond, which has reached a dimension of 12.3 million euro at the end of 2013. The objective of the bond was very precise: finance two specific projects, related with the core business of the co-operative housing association. The yield paid on the bond has been set equal to 6.0% per year, thanks to a good rating (BBB+), just issued by the new Italian rating agency CRIF. The firm also pays a 0.5% of additional costs. A crucial characteristic of this bond is its duration of 6 years, very long as compared to the funds available from banks now, which are at a very short term. So, the cost was maybe a bit higher than that of an hypothetical bank loan, but the longer duration more than compensates for it.

The firm had two winning characteristics. First, it was already used to in-depth financial reporting, so that the cost of preparing a very analytical business plan was not that high for it, and it succeeded in showing the sustainability of the debt

issue. Second, it has a very innovative and dynamic attitude, as shown for example by the fact that it was on its own following all the process of passing the first measures for mini-bond by the Government in 2012, anxious to issue the bond to bypass the severe credit crunch in the sector.

Up to now, 80% of the bond was subscribed by banks, 20% by non-bank investors (including an insurance company). The bond has still to reach the final goal of 20 million euro, since various potential investors (pension funds, newly created *ad hoc* funds) were maybe waiting for the final version of the decree *Destinazione Italia* to decide if to buy the mini-bond: the length of the political process is detrimental in this case.

As a whole, the mini-bond issue by Filca is a success, thanks to the very positive characteristics of the firm. This story teaches us that not all the small-medium sized enterprises, even those selected on the basis of the above criteria, could have issued such a bond that rapidly. Hopefully, in the next six-twelve months the mini-bond market will become more mature to let much more firms access it.

## 10. - Looking for Investors in Corporate Bonds

In the various analyses that are being made on mini-bonds, households are never considered among the potential investors. The decree *Destinazione Italia* considers the demand side of the mini-bond market made of professional and institutional investors. This is perfectly in line with the *status-quo* of the market in Italy.

The financial accounts prepared by the Bank of Italy show the current situation of the bond market. The stock of bonds issued by domestic companies amounts to 125 billion euro (Table 5). Who buys Italian corporate bonds? Banks and foreigners, above all. Other financial intermediaries, pension funds and insurance companies buy small amounts.

Households, instead, hold very little of Italian corporate bonds (less than 2 billion euro), even if so far these bonds have been issued by large companies, generally perceived as less risky. Households are indeed big buyers of bonds (647 billion euro in 2013), but they prefer those issued by banks (347), the public sector (179) and foreign issuers (120). Most analysts do not expect big changes in the composition of the portfolio of Italian households and the decree *Destinazione Italia* seems to agree in keeping it as it is.

TABLE 5

BONDS: LITTLE ROOM FOR THOSE ISSUED BY FIRMS,  
IN A 3,500 BILLION MARKET  
(ITALY, BONDS, BILLION EURO, STOCK AT 2<sup>nd</sup> QUARTER 2013)

Issuers	Total issued	Investors							
		House-holds	Insurance and Pension Funds	Other financial intermediaries	Financial auxiliaries	Banks	Firms	Public sector*	Foreign
<b>Firms</b>	<b>125</b>								
Other financial intermediaries	226	2	13	28	5	151	2	21	138
Insurance and Pension Funds	9								
Banks	922	347	30	0	4	382	3	2	154
Public sector	1,800	179	214	63	53	519	43	10	720
Foreign **	415	120	107	53	0	119	12	4	0
<b>Total bought</b>	<b>3,497</b>	<b>647</b>	<b>365</b>	<b>144</b>	<b>62</b>	<b>1,171</b>	<b>60</b>	<b>36</b>	<b>1,012</b>

For the various investors, data is not available on disaggregation of the securities in portfolio issued by the first 3 issuers.

\* Includes the Pension and Social assistance Institutions, which do not issue bond, but buy them.

\*\* Foreign bonds, by any issuer, in the portfolios of Italian investors.

Source: CSC calculations based on Bank of Italy data (Conti Finanziari).

The potential resources available for corporate bonds lie in other sectors. The value of these bonds issued so far is very low compared to the portfolios of potential investors, even if we just look at the resources already invested in bonds issued by other sectors. A good part of the financial needs of businesses in the next years could be met with a small reallocation of resources by some investors. Mainly pension funds and insurance companies, on which the decree *Destinazione Italia* focuses. Even a reallocation limited to a few percentage points of their portfolios of bonds could be enough.

Insurance companies and pension funds hold 365 billion euro of securities. Of these, less than 13 billion euro are issued by Italian companies (just 3.6% of their portfolio). Foreign bonds, worth 107 billion euro, represent 29.3% of the portfolio. If the share of corporate bonds would just go up to 5.0%, even with an unchanged total, this would generate an additional demand of 5 billion euro.

These figures show that there could be ample non-bank resources in the market to fill the gap left in the firms balance sheets by the fall of bank credit. Achieving this goal, however, is not easy and requires strong efforts. Something has been done, but the road is still very long.



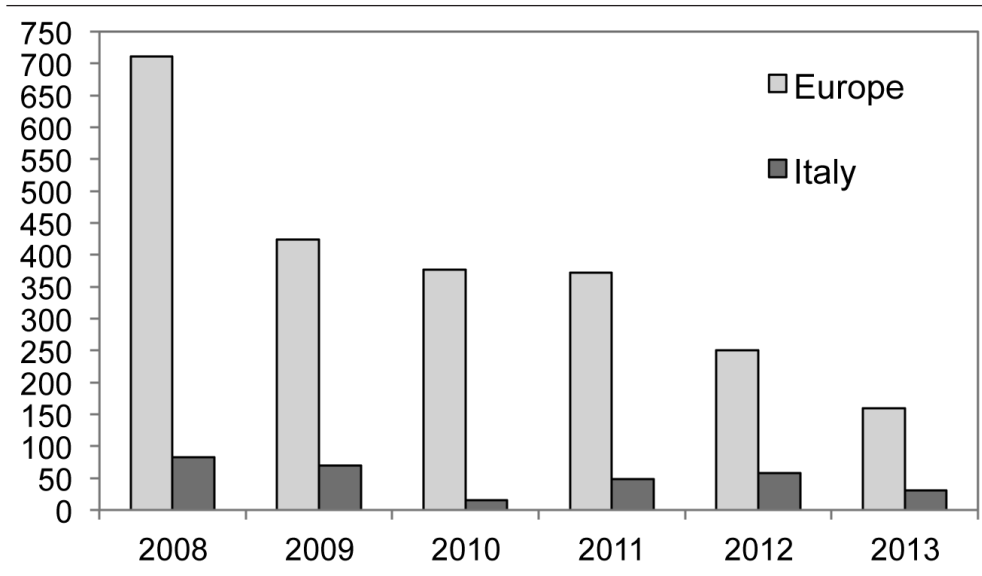
### 11. - Revive the Securitization Market, especially for Loans to SME

It would be very useful to restart the securitization market, focusing on those relating to loans to small and medium-sized enterprises. Before the crisis there was a considerable expansion of the securitization of loans, also in Italy. So far the efforts to stimulate new issues did not have success.

The peak year for securitization issuance in Italy was 2008 (82 billion euro). Then new operations become very small, with a trough in 2010 (16 billion). In 2013 the flow was 30 billion euro, still much below pre-crisis levels (Graph 3).

GRAPH 3

SECURITIZATIONS: NO RESTART AFTER THE CRISIS  
(ISSUANCE, BILLION EURO)



2013: first 9 months, annualized.

Source: CSC calculations on AFME data.

In Italy, the stock of securitized assets in 2013 is equal to 185 billion euro (down from 251 in 2009). The share of SME loans on this stock has remained low (17%). Other ABS count for a bit more (28%), while the larger share goes to RMBS (48%), that is household mortgages.

Before crisis, securitizations had developed in some sectors (real estate loans) and countries (Spain, Greece) at the center of the subsequent problems. This does not cast a good light on them. However, this tool is very useful. The conversion

of a loan into a tradable security before the natural expiration allows banks to expand lending: the transfer on the secondary market of credit risk allows to get liquidity and to free capital to be allocated to new loans. It is important to apply the tool with transparency about the underlying risk. Securitization can be very useful for loans to Italian SME, which lack a liquid secondary market: it would make these bank assets accessible to investors.

Public intervention can help the diffusion of this instrument. In 2009 the then Governor of the Bank of Italy, Mario Draghi, suggested a public guarantee on securitization of loans to SME. An important contribution is about to come from the *Fondo Centrale di Garanzia*: the Decree *Salva Italia* at end-2011 has introduced the possibility for the Fund to guarantee portfolios of SME loans and operational rules have just been defined.

At the European level, the EIB (European Investment Bank) in coordination with ECB (European Central Bank) and the Commission, launched over the summer 2013 a plan to revitalize the market of securitization. EIB will provide guarantees to securitization of SME loans. ECB enlarged in July 2013 the list of ABS (Asset Backed Securities) eligible as collateral for its liquidity operations; in particular for ABS whose underlying asset are SME loans, ECB just asked for the guarantees that now EIB will provide.

The immediate goal of these coordinated actions is to reactivate the emissions of securitization, the final goal is to free resources for new bank credit. The EIB plan is operational since January 2014. According to EIB estimates, it could generate new loans to European SME worth around 9-14 billion euro per year, for seven years starting in 2014. A total of 60-100 billion euro, of which around 1-2 billion per year in Italy.

## 12. - Together SME are Better Financed: District, Territory, Networks

District bonds and network finance are tools with which to take advantage of winning features of the Italian productive system.

The district bonds were born before the crisis, but they have not achieved great success. They are based on the idea that if an individual SME is not able to place bonds on the market, all of the companies in the district (or in the territory) may succeed. The operation is complex and includes a securitization. There are three stages: a bank provides loans to SME of a district; the loan portfolio is transferred to a special purpose vehicle of the bank; bonds are issued that have that portfolio

as the underlying asset<sup>12</sup>. The slowing down of securitization issues, as a result of the crisis, stopped also the diffusion of district bonds.

To facilitate the use of these bonds, a good measure could be to equip each district (or territory) with a rating that takes into account not only the characteristics of individual firms but also of the economic context in which they operate. The recent birth of two Italian rating agencies for firms is very promising.

An important instrument for improving corporate finance are the enterprise networks. A better access to bank credit can be obtained by exploiting the spontaneous linkages between companies. There are already very good examples of what can be achieved in terms of financing by exploiting well the network.

A typical network is vertical and builds on the supply chain: a leader firm can create a network with its small suppliers, so that the latter get lower bank financing costs due to the presence of the big firm, costs which are more in line with those that the leader itself pays. The potential benefits are substantial for small suppliers<sup>13</sup>.

Another usual network is horizontal and arises between firms of similar size belonging to the same sector. These firms typically have the same objective, for example trying to sell abroad, but not the sufficient scale of activity to achieve that. A firm belonging to such a network can be recognized by the bank a better rating, thus a lower cost for the loan, due to the presence of strategic relationships and a common project with the other firms. What counts for credit rating is often that firms in a network have growth prospects that go beyond the capabilities of individual companies.

It is important that existing national associations of firms work together with big individual banks to try to sign general agreements on behalf of potential networks. These agreements could establish principles to give benefits in terms of cost of credit, to which an individual firm in a network could then appeal<sup>14</sup>. To

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<sup>12</sup> In the last years, there have been some significant issues of territory bond: Brianza, Cremona, Mantova. The three year bond designed by Confindustria Monza-Brianza and managed by *Banca Popolare di Bergamo* has collected, in July 2011, 10 million euro from local private investors, resources then provided at low interest rates to SME in the region, with a maximum amount equal to 500 thousand euro per firm.

<sup>13</sup> Some large firms have created their internal financial divisions, supervised by the Bank of Italy, who carry out their activities mainly (or solely) to the group, without the intermediation of banks. An activity of these companies is to finance small suppliers through factoring transactions, that is selling of trade receivables.

<sup>14</sup> See the initiatives for credit by RetImpresa, an association created by Confindustria, on [www.retimpresa.it](http://www.retimpresa.it).

foster the creation of networks and their beneficial role for credit, the public sector has provided in the last years incentives and other fiscal measures.

### 13. - Guarantees: Strengthen the *Confidi* System

The *Confidi* can play a significant role in facilitating SME access to credit. They are a long-lived experience of collaboration between enterprises: consortia of SME, with private resources and the contribution of public institutions, that provide guarantees for bank credit to member companies. The *Confidi* have historically had limited delinquencies rates due to their ability to assess the credit-worthiness: the firms are analyzed by companies operating in the same market.

In the pre-crisis years, the system of *Confidi* has experienced a strong concentration process, due to two factors: the reform of 2003, which provided for the conversion of larger *Confidi* into intermediaries supervised by the Bank of Italy; the new Basel 3 rules<sup>15</sup>. The system in 2013 consists of 282 *Confidi* (from 690 in 2000), of which 61 are supervised. The SME members of *Confidi* are 1.3 million, the value of guarantees is about 22 billion euro, for 47 billion of loans. The capital of the entire *Confidi* system is equal to 2.4 billion euro.

In the crisis years the activity of the *Confidi* has decreased, reversing the upward trend of the previous decade. This was due to two factors: the increase in defaults, that eroded the capital; the requirement for supervised *Confidi* to comply with Basel 3 capital *ratios*. In the extraordinary context of crisis, these operators encounter difficulties in providing guarantees and keep the *ratios* high. They are a good tool to ensure the risk of a single firm, in normal times. But they are vulnerable in the face of systemic credit risk.

The main problems of *Confidi* now are two: capital *ratios* are low in many cases; operational efficiency has to be improved, bringing cost savings. The difficulties are pushing many *Confidi* to engage in further processes of aggregation, by sector or at the regional level; in some cases, the solution could be to create a network of *Confidi*. The last *Legge di Stabilità* has provided 435 million euro (of which 210 should come from Chambers of Commerce) to foster growth in size and capital strengthening of *Confidi* and promote aggregations and creation of

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<sup>15</sup> The mechanisms of Basel 3 have allowed the recognition of guarantees by supervised *Confidi* for the purpose of reducing the bank risk weighting.

*Confidi* networks. Additional resources for these objectives could be provided by Regions and other public institutions, or found in the European Programmes for 2014-2020<sup>16</sup>.

#### 14. - More Interventions by FCG and CDP

The task of providing guarantees is typical of the intervention of public institutions, as happens in other European countries. The *Fondo Centrale di Garanzia* (FCG) provides guarantees to facilitate lending, at the national level. These can be of three types: direct guarantees, counter-guarantees and co-guarantees (in operations involving *Confidi*). Guarantees by the Fund, coming from the public sector, grant the so-called “zero weight” according to Basel 3 rules. Thus, they reduce the absorption of bank capital for loans to SME, freeing up resources for new credit.

The activity of FCG has strongly increased in the last years. In 2013 it accepted 77,234 operations, issuing guarantees worth 6.4 billion euro, for an amount of loans to SME equal to 10.8 billion. Since the start of activities in 2000, FCG has done 325,213 operations, for a total of 28.2 billion euro of guarantees, facilitating 52.3 billion euro of SME loans.

The credit evaluation policies of FCG are about to be loosened in order to take into account the effects of the crisis on corporate balance sheets and encourage the widest possible access to the guarantee for credit. It is important that the National Guarantee System, established by the last *Legge di Stabilità*, starts activities as soon as possible; it includes, in addition to a refinanced FCG, also a special section of the Fund for research and innovation and a Guarantee Fund for house purchase.

The *Cassa Depositi e Prestiti* (CDP) has intervened since 2009 by providing funds to banks, aimed at becoming loans for small firms (SME Plafond). The *Legge di Stabilità* enlarged its scope of activities: the limit on the dimension of firms was canceled for this type of operations, and this may led to the creation of a new “Mid-Cap” Plafond; CDP can now buy securitized SME loans, to foster credit to these firms.

Today the problem is not much the funding of banks, but the credit risk. CDP could work more closely together with the FCG, to provide resources for loans to SME with a guarantee on enterprise risk<sup>17</sup>. A stronger connection between the

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<sup>16</sup> The *Decreto Crescita* allows supervised *Confidi* and those involved in aggregations to count the public resources received over the years as capital.

<sup>17</sup> Institutions comparable to CDP operating in Germany and France (KfW and BpI, respectively) already provide guarantees to support lending to businesses.

use of the SME Plafond and the guarantee by the FCG could be important. This could allow a reduction of interest rates, both for banks and for businesses.

### **15. - Summing Up: Are Financial Resources enough for Firms?**

Let's try to calculate how much financial resources Italian firms will have in 2014 and if they will be enough. We should take into account loans, bonds, capital, but also payments of arrears by the public sector and self-financing. And compare all these with new fixed investments (Table 6).

First, mini-bond issued by small firms could rise to 0.5 billion euro in 2014 (100 issues, each of 5 million euro). Second, bond issued by medium-large firms on ExtraMOT-Pro could rise to 4.0 billion in 2014 (from 2.8 in 2013). Third, this year we can expect around 8 billion euro of traditional bond net issues by large firms (a doubling with respect to 2013). Forth, a doubling in 2014 of capital raised by SME with Ipo in the Aim-Mac could generate 0.4 billion euro. Fifth, we can expect around 2.0 billion euro of capital raised with Ipo by large firms in 2014 (1.2 in 2013). Sixth, net capital obtained with private equity operations could amount to around 1.5 billion in 2014 (from 0.6 in 2013). The total amount of resources expected from this non-bank channels in 2014 would be equal to 16.4 billion euro, up from 8.9 in 2013. These would be good news, but maybe not enough.

TABLE 6

FIRMS: 2014 IS THE CRUCIAL YEAR FOR FINANCIAL ENDURANCE  
(ITALY, BILLION EURO CURRENT PRICES NEW RESOURCES OR NET STOCK  
VARIATIONS)

	2012	2013	2014	2015		
	Minibond - small firms	0.0	0.1	0.5	1.0	
	Minibond - medium firms	0.0	2.8	4.0	6.0	
	Bond - large firms	10.8	4.0	8.0	10.0	
	Ipo - SME	0.0	0.2	0.4	0.6	
	Ipo - large firms	1.0	1.2	2.0	3.0	
	Private equity	1.7	0.6	1.5	2.0	
a	Securities + Capital	13.5	8.9	16.4	22.6	
b	PA commercial debt payment	0.0	19.0	21.0	0.0	
c = a+b	Non-bank resources	13.5	27.9	37.4	22.6	
d	Bank loans *	-29.0	-48.0	-8.0	22.0	good
				-40.0	-10.0	bad
e = c+d	External resources	-15.5	-20.1	29.4	44.6	good
				-2.6	12.6	bad
f	Self-financing	-8.0	-10.1	2.0	3.0	
g = e+f	Total resources	-23.5	-30.2	31.4	47.6	good
				-0.6	15.6	bad
h	Fixed investments *	-20.6	-12.8	7.2	9.8	
i = g-h	Deficit (-) / Surplus (+)	-2.8	-17.4	<b>24.2</b>	<b>37.8</b>	good
				-7.8	5.8	bad

\* 2014-2015: CSC forecasts, December 2013.

Source: CSC calculations on Bank of Italy, MEF, Borsa Italiana, ISTAT data.

Payments of arrears by the Public Sector were 19.0 billion euro in 2013 and we expect another 21.0 billion in 2014. This is by large the single bigger source of liquidity for firms in 2013 and 2014. It is this liquidity that is keeping many firms alive and that could help finance their recovery in 2014.

Bank loans decreased by 48 billion euro in 2013. According to Rapacciuolo (2014), they will keep on falling in 2014, by 8 billion in a good scenario, or by 40 billion in a bad one. In 2015, the good scenario implies a change of sign (+22 billion); in the bad one instead the credit crunch goes on, for the fourth year in a row<sup>18</sup>.

<sup>18</sup> RAPACCIUOLO C. (2014) simulates the effects on loans to firms in 2014-2015 of a series of assumptions on three determinants (capital available for the banks, composition of bank assets, funding), using a simplified aggregate balance sheet of Italian banks. The study outlines two scenarios, which have in common an increase in retail funding in the coming years. The two

Total external resources in 2014 would be equal to +29.4 billion euro in the good scenario, -2.6 in the bad one. Alternative sources, excluding payments of arrears, in 2013 were very low compared to the reduction of credit. In 2014, in turn, they will more than compensate the fall of loans, in the good scenario; summing the payments by the public sector, non-bank resources will almost balance the decrease of loans in the bad case.

Regarding internal funds, in 2012 and 2013 we have seen a significant decrease: -8.0 and -10.1 billion euro. Thanks to some recovery in firm margins, mainly in the service sector, in 2014 there should be a reversal of this trend: +2.0 billion euro. This will rise total resources to +31.4 and -0.6 billion in the two scenarios.

In front of that, Italian firms will restart fixed investments: these will increase, at current prices, by 7.2 billion euro in 2014 and 9.8 in 2015<sup>19</sup>. Thus, 2014 could be a safe year, with resources surpassing needs by 24.2 billion, if things go well on the banking side. The estimate of the surplus could be biased upward, since it does not include the financial needs created by the recovery for the warehouses of raw materials and semi-finished products.

If things go wrong for credit, 2014 will be another year of financial stress for Italian firms, with resources smaller than needs by 7.8 billion euro (-17.4 the shortage in 2013). This year is the crucial one for the financing of firms. Many

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scenarios differ for the assumptions regarding bank capital (dependent on undistributed profits and availability of fresh resources) and assets composition (which depends on the degree of bank risk aversion, measured by the share of government bonds in total assets).

In the good scenario, the change of sign on loans in 2015 stems from two factors. First, banks are able to increase capital and keep leverage constant. The results of the in-depth ECB analysis on bank balance sheets (end 2014) will foster investors' interest towards Italian banks and encourage them to decide new capital increases. Total assets of the banking system rise by 178 billion in two years. Second, the confidence disseminated in the banking system by the ECB assessments reduces, since end 2014, the credit risk aversion and stops the change in asset composition: the share of government bonds rises by half a point in 2014, but is unchanged in 2015, leaving room to increase loans.

In the bad scenario, less likely, the deeper fall in lending in 2014 and the decrease also in 2015 stem from two elements. Banks are not able to replenish capital, eroded by losses on non performing loans. This is due to inadequacy of efforts on the profitability side and scarcity of fresh resources on the market. This implies a reduction of capital and a lift of the leverage, which increases the overall risk of the banking business. Total assets increase by just 62 billion. In addition, credit risk aversion remains high, despite the ECB evaluation. Banks continue to change the asset composition, also to raise the *ratios* eroded by the capital loss: the share of public bonds increases by one point in 2014 and half a point in 2015, leaving no room for loan increases.

<sup>19</sup> According to CENTRO STUDI CONFINDUSTRIA (2013).



of them will have to resist, waiting for better times. In 2015, in fact, resources will exceed financial needs in both scenarios.

What will happen to companies in 2014 in the bad scenario? We have looked at aggregates, which hide different situations. Some very efficient businesses could have sufficient self-financing. Other firms would fail for lack of resources, since they will not have enough liquidity to pay salaries and suppliers. In between, many companies would experience strong financial difficulties, that could force them to reduce their activity: not investing, giving up a potential increase in production or, worse, closing some plants.

Notice that in 2015 the flow of new resources coming from bonds and equity (+22.6 billion) would be equal to the flow coming from the bank channel in the good scenario (and would largely overcome it in the bad one). This would represent a success story, partly due to new instruments like mini-bonds and IPO by medium and small firms. But consider that the pre-crisis yearly increases of loans were much higher (+87 billion in 2006-2007 on average).

The composition of the stock of liabilities of Italian firms would not change dramatically, even in the bad scenario for loans. In this case, while total liabilities must grow to finance new fixed investments, bank loans decrease by 50 billion in two years. As a result, the share of bank loans on total liabilities would fall to 23.8% from 25.4%, a significant decrease. Anyway, this would be still a very high share in an international comparison. Thus, the structure of liabilities would remain characterized by a bias towards bank debt.

Completely rebalancing the structure of Italian firms liabilities in favor of non-bank financing is an important goal, which will require many years and should involve an increase, not a decrease, of loans. This can only be done gradually, as soon as the efforts to develop new non-bank channels (like mini-bonds) give results and new resources become available to finance the growth of firms. In this process, 2015 may represent a good first step.

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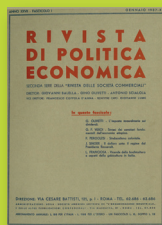


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