

The law on the separation of banking activities: political symbol or new economic paradigm?

By [Céline Antonin](#) and [Vincent Touzé](#)

Imprudence, moral hazard and systemic gridlock were key words for the banking crisis. Governments that were unhappy to have had no choice but to come to the rescue of the banks are now trying to regain control and impose new regulations. The regulations with the highest profile concern the separation of trading activities (trading on own account or for third parties) from other banking activities (deposits, loans, strategic and financial consulting, etc.). These are expected to have the advantage of creating a tighter barrier between activities, with the idea that this could protect investors if bank operations go badly on the financial markets. On 19 February 2013, the French Parliament passed a law on the separation of banking activities. Although the initial targets were ambitious, the separation is only partial, as only proprietary financial activities will be spun off. As these cover less than 1% of bank revenues, this measure tends to be symbolic. However, by giving legal force to the principle of separation, the State is demonstrating its willingness to take a more active role in supervision.

The idea of compartmentalizing banking activities is not new. In the aftermath of the 1929 crisis, the United States adopted the Glass-Steagall Act (1933), which required a strict separation between commercial banks (specialized in lending and in managing deposits) and investment banks (specialized in financial activities). France followed suit with its own banking law of 1945 [\[1\]](#). The expected benefits of separating

banking activities are twofold. On the one hand, customers' deposits would be better protected, because they could no longer be asked to absorb the potential losses of market activities; on the other hand, in case of bankruptcy, State aid would be limited, because only the retail part of the bank would be covered by a government guarantee.

Forty years later, in the wake of the major wave of deregulation in the 1980s-1990s, France was one of the first to abolish this distinction, with the Banking Act of 1984, thus establishing the principle of universal banking. This principle leads to grouping activities with high needs for liquidity (the financing of the economy) with those that make it possible to gather liquidity (deposit activities). This grouping has the undeniable merit of giving the banks a more solid financial foundation. Other benefits also flow from this: greater leverage; the size factor leads to economies of scale; and the banks' ability to internationalize allows them to join the "too big to fail" category. Across the Atlantic, these arguments certainly worked in favour of the abolition of the Glass Steagall Act in 1999 by the Clinton administration.

Since 2008, the banks have been hit by a number of shocks: the subprime crisis; the fall in financial stocks; the slump in economic growth; and fear of defaults on sovereign debt (for banks in the euro zone). These shocks have shown that some of the advantages of universal banking could turn into disadvantages if leverage is used too systematically and if large banks in difficulty begin to pose a systemic risk. Many voices then began to be heard advocating a new Glass-Steagall Act, based on a view that separating market activities [\[2\]](#) from other banking activities is a way of preventing large-scale banking crises. Trading on own-account activities concentrates the bulk of bank malfunctions, in particular reckless risk-taking and the occasional "mad" trader [\[3\]](#). This compartment has thus now become the focus of increasing attention by the regulators.

The Dodd-Frank Wall Street Reform and Consumer Protection Act [\[4\]](#) adopted in the United States in 2010 did not establish the separation of banking activities in a strict sense, but adopted the “Volcker rule,” which prohibits banks from “playing” with depositors’ money. This led to a virtual ban on the speculative proprietary activities of banking entities as well as on investments in hedge funds or private equity funds. In addition to this rule, this Act also represented a major reform in favour of the tighter regulation of all financial agents (banks, insurance companies, hedge funds, rating agencies, etc.) as well as closer monitoring of systemic risks.

Europe is in turn planning legislation on the separation of banking activities. At the request of European Commissioner Michel Barnier, the group of experts led by the Governor of Finland’s Central Bank, Erkki Liikanen, presented a [report](#) on 2 October 2012. It advocates a strict bank compartmentalization [\[5\]](#) but also reviews the remuneration of financial managers and traders, with a view to overhauling the current arrangements, which tend to “push people into crimes” such as excessive speculation, in order to make these arrangements more compatible with long-term objectives. If this report is turned into a European directive, it will then have to be transposed into the national law in each Member State. However, this Europe-level approach is likely to be overtaken by the legislative processes in several European countries. In Germany, a bill on banking regulation [\[6\]](#) was introduced by the government on 6 February 2013, and could enter into force by January 2014 (with implementation by July 2015). The United Kingdom stood out in 2011 with the publication of the Vickers report [\[7\]](#), although the British government is in no hurry to implement its recommendations, with a probable deadline of 2019. France, with its [“law on the separation and regulation of banking activities”](#), has not been left behind.

A MODEST FRENCH ACT ...

The French law has several components. In addition to establishing the principle of separation, it also provides for measures to protect bank clients and to strengthen the supervision and control of the banks. It does this in several ways:

- Each bank will be forced to develop a preventive recovery plan [8] for dealing with a crisis and a resolution plan in case it is failing (a bank testament). The resolution plan will be submitted for the appreciation of the Prudential Control Authority (ACP), which becomes the Prudential Control and Resolution Authority (ACPR).
- The Deposit Guarantee Fund (FGD) becomes the Deposit Guarantee and Resolution Fund (FGDR), with an increased capacity to intervene in the event of a bank failure.
- Macro-prudential supervision is strengthened by the establishment of the Financial Stability Council (CSF).
- The rights of bank clients are enhanced (transparency on the cost of loan insurance, free choice of loan insurers, right to a bank account, etc.).

However, the flagship measure in the reform is the separation between “activities useful to the economy” and speculative activities. Banks are to confine their proprietary or “own account” activities in an ad hoc subsidiary that is subject to specific regulation and funded independently. These subsidiaries will be prohibited from practicing certain speculative activities that are deemed “too risky or that may be harmful to the economy or society”, such as activities on the markets for derivatives whose underlying assets are agricultural commodities, or high-frequency trading. Many activities will nevertheless be spared, such as providing services to customers, market-making activities, cash management, and bank investment or hedging operations to cover

its own risks.

This law separating bank activities, which was initially presented as ambitious, will ultimately have only a limited impact. The universal banking model is not called into question. The admission of the head of the Société Générale bank could not be any clearer [\[9\]](#): less than 1% of revenues are concerned. We are therefore a long way from how banking was compartmentalized prior to 1984. The criterion for separation is ambiguous. In fact, the border is porous between hedging risk and pure speculation: the law advances a fuzzy principle of “economic relevance”, and the banks may be tempted to play around in this legal vacuum. As for market making [\[10\]](#), it is difficult to distinguish between speculative proprietary activities, which have to be spun off, and activities to promote market liquidity: high-frequency trading is for instance usually practiced under the guise of market-making agreements, so the law may be no more than a sword slashing water if the status of market maker is not defined more precisely [\[11\]](#).

The law also provides for prohibiting a banking group from holding shares of a speculative type, like a hedge fund. However, the loans granted by banks to hedge funds are always accompanied by guarantees. From this point of view, the law will also have little impact.

... BUT COULD IT GO FURTHER?

Finding a new financial paradigm for a banking model is a complex exercise. In practice, it is not easy to separate banking activities purely and simply without causing problems, and there are generally many limits to banking reform.

First, limiting investment banks' access to deposits as a source of liquidity, or eliminating this outright, would lead them to resort to more debt financing, which might be

difficult to reconcile with the constraints set by the Basel III prudential regulations, which took effect on 1 January 2013. It is already very demanding in terms of equity levels.

Furthermore, it is important to note that banking risk is not inherent just in market activities. There are many other recent examples. Mortgage lending has also been an important source of risk: in Spain, falling house prices and the insolvency of borrowers virtually bankrupted the banks; in the United States, the subprime crisis is a crisis of real estate loans that affected the markets through sophisticated securitization mechanisms that allowed the banks to take the risk off of their balance sheets (at least ostensibly); in the UK, Northern Rock is a retail bank that specialized in mortgages and was hit hard by the credit crunch and the housing crisis. To some extent, universal banks have played an important role in saving banks that were too specialized, for example, JPMorgan Chase (Universal) took over Washington Mutual (savings and loan) and Bear Stearns (business), and Bank of America (universal) rescued Merrill Lynch (business).

In addition, the separation is supposed to wall off banking activities more tightly. But what happens if the subsidiary that manages the proprietary speculation goes bankrupt and causes heavy losses to the parent? In the past, two of the four major French groups, Crédit Agricole and BPCE, had insulated their market activities in their respective subsidiaries, Natixis and Cacib, but nevertheless had to come to their rescue in 2008 and 2011, respectively. The insulation seems to be very permeable.

In a context of financial globalization, compartmentalization may never be very effective. By its very principle globalized finance makes it possible to connect everything. This is in particular the role of the interbank markets [\[12\]](#).

In practice, it is difficult for a government to reform its banking sector in the absence of coordination with other

countries. The domestic banks have foreign subsidiaries that may not be subject to the regulations. And above all, the profitability of rival foreign banks might improve, which would weaken the competitiveness of the domestic banks. At the European level, national interests differ, and each country may be tempted to impose its own bill. If the Liikanen report is turned into a Directive, then each Member State will be required to transpose it into their legal system. For the moment, the legislation of Germany and France is taking the lead. It is possible that these changes will influence any future directive.

If the effort to compartmentalize goes too far, there is also a risk of shifting the interconnections to less visible levels. It is essential to avoid falling into the trap posed by the dangerous illusion of thinking that we have eliminated a risk, when in fact it has just been moved.

Finally, too much regulation can sometimes kill regulation. In the financial sector, regulatory constraints may serve as a basis for speculation. So if a bank is having difficulty meeting certain regulatory constraints, the markets will be encouraged to speculate in order to provoke its failure and then profit from this. Caution is therefore needed before introducing new regulations.

Trying to apply the principle of separation too strictly could also lead to not supporting a commercial bank that is facing significant liquidity problems. However, according to the principle of "too big to fail", such a decision is not always wise. The failure to support Lehman Brothers was punished in a way that had a significant long-term impact, as its collapse hit the entire economic and financial network.

It is also worth noting that taking banking and financial regulation to be a miracle cure could have deleterious effects on individual and collective responsibility. People think that the law can resolve any problem. Yet at the same time, it is

very likely that the vectors of the next financial crisis will manage to circumvent the regulatory constraints, hence the importance for the supervisory authorities to remain vigilant and adopt a critical approach at all times.

GOING BEYOND THE POLITICAL SYMBOL

The government undeniably has little leeway to separate banking activities, because too much regulation may be ineffective or even dangerous. As a consequence, this law separating banking activities is not radical and will have a moderate effect on the banks. For its part, the government may have a clear conscience for having done something along the lines of its foreign counterparts. The bankers in turn are probably not unhappy at having given the impression of serving the public interest, especially at such a low cost.

Some will view this as just a poor political symbol. Others will try to go further and view this as giving hope that this reform will be seen as a strong signal to the banking world. This hope may not be in vain, as the principle of separation is now enshrined in law, and future governments will have plenty of time to strengthen it.

In practice, a change in economic paradigm that would lead to harmful speculation becoming increasingly rare will not result simply from a separation of activities. Banking laws should not be too complicated, because the devil has a tendency to hide in the details. The supervisory authorities must constantly keep a critical eye on the functioning of the markets, and the law needs to allow them some flexibility in determining when and how they should intervene. On these issues, Volcker's statement in 2011 is unambiguous [\[13\]](#): "I'd write a much simpler bill. I'd love to see a four-page bill that bans proprietary trading and makes the board and chief executive responsible for compliance. And I'd have strong

regulators. If the banks didn't comply with the spirit of the bill, they'd go after them." It is also worth examining various measures to make financial professionals (managers and market operators) more responsible. In this respect, the Liikanen report proposes revising the pay systems for bank executives and financial managers in order to make these systems more compatible with a long-term vision. It is also necessary to explore the possibility of increasing the criminal liability [14] of financial leaders. The permeability of the interface between careers in the regulatory sector and in the regulated sector also needs to be examined. In this regard, there are certainly ways to make the system less permeable. After all, recent history has shown that it is possible to go from being Chairman of the Fed to being a trusted advisor for a rich and powerful hedge fund...

[1] Law 45-15 of 2 December 1945 provided for the specialization of financial institutions by classifying the banks in three categories: deposit banks, business banks and long-term and medium-term lending banks (Articles 4 and 5).

[2] Asset management can be exercised:

– for one's own account (*proprietary trading*): the bank buys or sells financial instruments that are funded directly out of its own resources. These resources include not only the bank's capital, but also savers' deposits and loans. This means that, in addition to its own funds, the other categories involved in the bank's financing, including customer deposits, indirectly bear a risk.

– or on behalf of third parties (*non-proprietary trading*): unlike proprietary trading, the market or borrowing risks are borne mainly by the client. However, on certain products, the bank could face significant operating risks.

[3]

http://lexpansion.lexpress.fr/economie/trading-pour-compte-pro-pre-la-face-cachee-des-banques_233686.html.

[4] Title VI of the Act proposes improving regulation and is considered to be an application of the “*Volcker Rule*”, <http://useconomy.about.com/od/criticalissues/p/Dodd-Frank-Wall-Street-Reform-Act.htm>.

[5] The report recommends a separation of proprietary market activities but also of certain other activities on the financial markets and derivatives for third parties.

[6] Germany is also preparing a bill, under which the German banks will be obliged to wall off their proprietary trading. As in France, the universal banking model will not be called into question. http://m.lesechos.fr/redirect_article.php?id=reuters_00495696&fw=1.

[7] In September 2011, the Vickers Report recommended separating retail banking services from investment activities, by ringfencing retail banking services in subsidiaries, along with the requirement of a 10% equity cushion for retail banks. The British government is committed to introducing the reforms into law by 2015, with implementation set for 2019.

[8] This plan provides for different possibilities for recovery (recapitalization, a savings plan, restructuring, etc.) and excludes any call for public financial support.

[9] “We believe that, while in 2006-2007, 15% of activities could be considered market activities, 15% to 20% of which could be classified as disconnected from the customer, and consequently transferred to a subsidiary, this proportion is now less than 10%, and ranges from 3.5% to around 5% on average.” Frédéric Oudéa, 30 January 2013, at a hearing before the Finance Committee of the National Assembly, <http://www.assemblee-nationale.fr/14/pdf/cr-cfiab/12-13/c1213060.pdf>.

[10] Market-making corresponds to the permanent presence of an operator who provides liquidity to the market.

[11] In this respect, we should mention the amendment tabled by Karine Berger, who wants Bercy [the Ministry of the Economy] to set the threshold above which market activities must always be spun off.

[12] Since 2008, the crisis of confidence in the banking market has posed great difficulties for access to liquidity in some banks, even though they are perfectly solvent, which has forced the central banks to intervene and take the place of the interbank market.

[13] 22 October 2011,
http://www.nytimes.com/2011/10/22/business/volcker-rule-grows-from-simple-to-complex.html?pagewanted=all&_r=0.

[14] In this respect, the American authorities have not hesitated to take action against financial institutions that have failed to meet their obligations. See, for example, the recent action taken against Standard & Poor's, <http://www.bloomberg.com/news/2013-02-06/s-p-lawsuit-portrays-cdo-sellers-as-duped-victims.html>. See too the proceedings taken against a former employee of Goldman Sachs: <http://www.sec.gov/litigation/complaints/2010/comp-pr2010-59.pdf> and <http://dealbook.nytimes.com/2013/01/31/trader-accused-of-misleading-clients-leaves-goldman/> or the investigation into the infamous "London whale": <http://www.reuters.com/article/2013/02/15/us-lehman-jpmorgan-londonwhale-idUSBRE91E00W20130215>.

What monetary policy for the ECB in 2013?

By Paul Hubert

After the monthly meeting of the Board of Governors of the European Central Bank on 7 February 2013, the ECB decided to hold its key interest rate at 0.75%. The analysis of the economic situation by Mario Draghi made during the press conference afterwards pointed to contrasting developments justifying the status quo. In a recent study, we showed that the inflation forecasts of the ECB can shed new light on future trends in interest rates.

The status quo can be explained by a number of mutually offsetting factors. The banks have started to repay some of the cash obtained through the LTRO facility (140 billion euros out of 489 billion), which reflects an improvement in their financial position, while at the same time lending to non-financial firms is continuing to contract (-1.3% in December 2012) and consumer loans are still at very low levels.

From a macroeconomic viewpoint, the situation in the euro zone is not giving clear signals about future monetary policy: after shrinking by 0.2% in the second quarter of 2012, real GDP in the euro zone fell another 0.1% in the third quarter, while inflation, as measured on an annual basis, decreased from 2.6% in August 2012 to 2% in January 2013 and is expected to drop below the 2% mark in the coming months based on the figures for GDP growth and for current and anticipated oil prices.

Furthermore, the inflation expectations of private agents, as measured by the *Survey of Professional Forecasters*, remain firmly anchored around the ECB's inflation target. In the fourth quarter of 2012, expectations were for 1.9% inflation

for the years 2013 and 2014. Given that the target of “below but close to 2%” has now been reached, and with a euro zone in recession and unemployment at record levels, the ECB could give a boost to real activity. However, it anticipates that economic activity should gradually pick up in the second half of 2013, partly due to the accommodative monetary policy being followed today.

Given expectations, and in light of the historically low levels of key interest rates and the lag in the transmission of monetary policy to the real economy [\[1\]](#), a future rate cut seems very unlikely. One final element is sending out mixed messages: the recent rise of the euro – though it is still far from record levels – could nip in the bud the weak economic recovery that is underway, and could in the eyes of some justify support for export sectors [\[2\]](#).

In a recent [OFCE working paper](#) (No. 2013-04), we discuss how the ECB could use its inflation forecasts to improve the implementation of its monetary policy. We propose a new element to shed light on future developments in interest rates, based on the macroeconomic projections published quarterly by the ECB. In this study on the effects of the publication of the ECB’s inflation forecasts on the inflation expectations of private agents, we show that a 1 percentage point reduction in the ECB’s inflation projections is associated with a key interest rate cut by the ECB of 1.2 percentage points in the next two quarters. We conclude that the ECB’s inflation forecasts are a tool that helps to better understand current monetary policy decisions and to anticipate future decisions.

The latest inflation projections, published in December 2012, were 1.6% and 1.4% for the years 2013 and 2014, respectively.

The publication on March 7th of new projections could provide a further indication of the direction monetary policy is likely to take in 2013.

[1] On average, a change in the key rates is estimated to have an impact on inflation after 12 months and on GDP after 18 months.

[2] Remember, however, that about 64% of trade in the euro zone is conducted with euro zone partners, and thus is independent of fluctuations in exchange rates.

Is it possible to get over a banking crisis? Comparative analysis of Ireland and Iceland

By [Céline Antonin](#) and [Christophe Blot](#)

In economics, miracles sometimes prove to be mirages. Iceland and Ireland are witnesses. These two small open economies, paradises of liberalized deregulated finance, harboured growth in the early 2000s, but were hit hard by the financial crisis. The subsequent almost complete nationalization of their financial systems has had a negative impact on the public debt of the two countries. To stem the rising debt and the risk of unsustainability, since 2010 the two governments have implemented fiscal austerity plans, but with a difference: Ireland belongs to the euro zone, while Iceland doesn't. The latest [Note of the OFCE \(no. 25 dated 4 February 2013 \[in](#)

[French](#)) reviews the recent macroeconomic and financial situation of the two countries to show the extent to which different policy mixes may account for different trajectories for a recovery.

While in Iceland the banking crisis was amplified by a currency crisis, the depreciation of the crown was then a factor in the recovery, so that the country is now growing again. GDP was very volatile: between the third quarter of 2007 and the second quarter of 2011, GDP declined by more than 13%, but has rebounded by 5.7% since. There was less volatility and a shorter recessionary phase in Ireland than in Iceland (8 quarters), and the amplitude of the decline was smaller (-10.7%). However, the recovery is more timid, with GDP growth of only 3.4% since late 2009.

Our analysis leads us to two main conclusions: first, an internal devaluation is less effective than an external devaluation; and second, fiscal consolidation is less costly when it is accompanied by favourable monetary conditions and exchange policy. It is in light of these points that one can redefine the optimal policy mix in the euro zone, as we suggest in more detail in the [iAGS](#) report. An active monetary policy is essential to allow the refinancing of the public debt. The European Central Bank should therefore act as lender of last resort for the member countries. The countries running a surplus need a “reflationary” policy to help reduce their current account imbalances. Fiscal adjustments should be relaxed or even postponed to allow a more rapid return to growth.

The ban on naked CDS takes effect

By Anne-Laure Delatte

The [small CDS market](#) serves as an instrument for coordinating speculation against European states. To stop the speculation, the European Union recently adopted a new regulation that came into force on 1 November. Unfortunately, this new law, though pioneering and ambitious, suffers from flaws that render it ineffective. This provides an example of how the interests of a single economic sector can capture policy.

Quick primer on finance: how to speculate against a State

Two methods have won their spurs: short sales in the bond market and naked sales on the CDS market. Let's take two examples. If you think that Spain will not be able to meet its commitment to reduce its deficit in 2013, you could make money by betting against it the next time it issues bonds. To do this, you need to find an investor on the market who is prepared to buy Spanish bonds when they are next issued. You sell your customer bonds at that point while wagering that the price will be lower than what they think. You do not buy the titles at that time, as you can buy them at the time of delivery. You win if your expectations were correct: if the price of Spanish bonds declined due to the deterioration in the country's economic situation, then you will buy them for less than the purchase price that you agreed to. You are engaging in short selling.

There is another way of operating that the new European law also tries to counter. You make your bets on the market for credit default swaps (CDS), that is, the market for insurance against a Spanish default. It is smaller, it is concentrated, and it is easier to affect than the bond market. There's no

need for Spain to declare bankruptcy to pocket your winnings! Buy Spanish CDS (on state or Santander bonds) today and sell them when the risk has increased: you resell the protection for more ... One detail: do not actually burden yourself with Spanish bonds. They are useless since it is on the resale of the CDS that you make your profit. Your intention was never to insure the bonds... The CDS are tradable goods whose price evolves according to supply and demand. And this is precisely the advantage of a small liquid market: you can move the market with lesser amounts...

The Directive that took effect on 1 November 2012 banned these two strategies: short selling sovereign bonds and naked trading in sovereign CDS. If you now want to bet on the CDS market, you are required to hold in your portfolio the securities that the CDS protects, or at least very similar ones.

At last, a courageous law! A ban on naked CDS, which was considered in the United States and then abandoned in 2009, is a pioneering act by Europe! It's no longer possible to speculate against Europe's states...

Except that:

The ban does not apply to "market makers". Who are they? To be sure that a market works, certain operators are committed to always buy or sell a security to anyone who so wishes (they simply determine the price of the transaction). This ensures market liquidity. For example, Morgan Stanley is a very active market maker on the entire CDS market; the bank provides continuous prices for all market transactions. "So these market makers are useful. Can you imagine if we even included these operators in the ban on naked CDS? There would be no more liquidity!" This is the essence of the argument used by the major banks to negotiate their exemptions and the specific argument used to justify the exemption of these market makers from the ban on naked sovereign CDS sales in Europe. The

market makers won: they can continue to trade CDS without holding the underlying bonds.

But wasn't the point made [in the previous post](#) that this market is in fact highly concentrated? That 87.2% of transactions were carried out by the 15 largest banks in the world ... all of which are market makers? In other words, the new rule will be applied to everyone ... except the main players on the market. It seems that the big French banks are currently in discussion with the [European financial markets authority](#) (ESMA) over the exact definition of a market maker to ensure that they too are exempt.

Of course. But the hedge funds too? They aren't market makers, they're clients. So the Directive must apply to them!

Except that:

Only the sovereign CDS market is concerned. It is still possible to hold CDS on a bank issue without holding the title. So it will be easy to circumvent the ban on betting against a State by betting against one of its banks (Santander in the example above). One shudders when contemplating the fragility of Spain's banks...

In conclusion, the idea for such a law was commendable. But the devil is still and always in the detail. The financial sector has defended its interests during the drafting of the law. It is urgent to develop the means to counterbalance this during negotiations. The Finance Watch association has been created specifically with this objective: to be present and make the voice of civil society heard during the preparation of financial reforms. The only problem is, it's David against Goliath...

The crisis and market sentiment

By Anne-Laure Delatte

Fundamental factors alone cannot explain the European crisis. A [new OFCE working document](#) shows the impact of market beliefs during this crisis. In this study, we search for where market sentiments are formed and through what channels they are transmitted. What is it that tipped market optimism over into pessimism? Our results indicate that: 1) there is a strong self-fulfilling dynamic in the European crisis: fear of default is precisely what leads to default, and 2) the small market for credit derivatives, credit default swaps (CDS), insurance instruments that were designed to protect against the risk of a borrower's default, is the leading catalyst of market sentiment. This result should be of great concern to the politicians in charge of financial regulation, since the CDS market is opaque and concentrated, two characteristics that are conducive to abusive behaviour.

What role do investors play during a crisis? If massive sales of securities reveal the weaknesses of a certain business model, then it would be dangerous to limit them: it would be killing the messenger. But if these massive sales are triggered by a sudden turnaround in market sentiment, by investors' panic and distrust of a State, then it is useful to understand how market beliefs are formed so as to better control them when the time comes.

To answer this question in the context of today's European crisis, we have drawn on work on the crisis in the European Monetary System (EMS) in 1992-93, which has many common

features with the current situation. At that time investors were skeptical about the credibility of the EMS and put it to the test by speculating against European currencies (*sic*). The pound sterling, the lira, the peseta, etc., were attacked in turn, and governments had to make concessions by devaluing their currency. At first this crisis puzzled economists, as they were unable to explain the link between the speculative attacks and fundamentals: firstly, the countries under attack did not all suffer from the same problems, and secondly, while the economic situation had deteriorated gradually, why had investors decided all of a sudden to attack one currency and not another? Finally, why did these attacks succeed? The answer was that the speculation was not determined solely by the economic situation (the “fundamentals”) but was instead self-fulfilling.

The same may well be the case today. If so, then the crisis in Spain, for example, would have its roots in the beliefs of investors: in 2011, as Spain had been designated the weakest link in the euro zone, investors sold their Spanish securities and pushed up borrowing rates. Interest payments ate into the government accounts, and the debt soared. Spain’s public deficit will be higher in 2012 than in 2011 despite its considerable austerity efforts. The crisis is self-fulfilling in that it validates investors’ beliefs *a posteriori*.

How could this be proved? How can we test for the presence of a self-fulfilling dynamic in the European crisis? Our proposal is as follows: market beliefs must be a critical variable if, given the same economic situation, investors nevertheless require different interest rates: when the market is optimistic, the difference in interest rates between Germany and Spain is less than when the market is pessimistic.

Our estimates confirm this hypothesis for a panel consisting of Greece, Ireland, Italy, Spain and Portugal: without any significant change in economic conditions, interest rate spreads rose suddenly following a change in the beliefs of the

market.

The next question is to understand where these market beliefs are formed. We tested several hypotheses. Ultimately it is the market for credit default swaps (CDS) that plays the role of the catalyst of market sentiments. CDS are insurance products that were originally designed by banks to ensure against the possibility of a borrower's default. An investor who holds bonds may guard against the non-reimbursement of their security at maturity by buying a CDS: the investor then pays a regular premium to the seller, who agrees to repurchase these bonds if the borrower goes bankrupt. But this insurance instrument quickly became an instrument for speculation: the vast majority of operators who buy CDS are not actually owners of an underlying bond (underlying in financial jargon). In reality, they use CDS to bet on the default of the borrower. It is as if the inhabitants of a street all insured the same house, but did not live in it, and are hoping that it catches fire.

However, our results indicate that it is precisely in this market that investors' beliefs vis-à-vis the debt of a sovereign country are formed. In an environment marked by uncertainty and incomplete information, the CDS market transmits a signal that leads investors to believe that other investors "know something". Given equivalent economic situations, our estimates indicate that investors require higher interest rates when CDS spreads increase.

To summarize, some European countries are subject to self-fulfilling speculative dynamics. A small insurance market is playing a destabilizing role, because investors believe in the information it provides. This is troubling for two reasons. On the one hand, as we have said, this instrument, the CDS, has become a pure instrument of speculation. On the other hand, it is a market that is unregulated, opaque and concentrated – in other words, all the ingredients for abusive behaviour ... 90% of the transactions are conducted between the world's 15

largest banks (JP Morgan, Goldman Sachs, Deutsche Bank, etc.). Furthermore, these transactions are OTC, that is to say, not on an organized market, *i.e.* in conditions where it is difficult to monitor what's going on.

Two avenues of reform were adopted in Europe this year: on the one hand, a prohibition against buying a CDS if you do not own the underlying bond – the law will enter into force in November 2012 throughout the European Union. Second is a requirement to go through an organized market in order to ensure the transparency of transactions. Unfortunately, neither of these reforms is satisfactory. Why? The answer in the next post...

Friends of acronyms, here comes the OMT

By [Jérôme Creel](#) and [Xavier Timbeau](#)

We had the OMD with its Orchestral Manœuvres in the Dark, and now the OMT with its Orchestral Manœuvres in the [liquidity] Trap, or more precisely, “Outright Monetary Transactions”, which is undoubtedly clearer. The OMT is a potentially effective mechanism that gives the European Central Bank (ECB) the means to intervene massively in the euro zone debt crisis so as to limit the differences between interest rates on euro zone government bonds. The possibility that a country that comes into conflict with its peers might leave the euro zone still exists, but if there is a common desire to preserve the

euro then the ECB can intervene and play a role comparable to that of the central banks of other major states. Opening this door towards an escape route from the euro zone's sovereign debt crisis has given rise to great hope. Nevertheless, certain elements, such as conditionality, could quickly pose problems.

The OMT is simply a programme for the buyback of government bonds by the European Central Bank, like SMP 1.0 (the Securities Markets Programme) which it replaces but limited to States that are subject to a European Financial Stability Fund / European Stability Mechanism (EFSF / ESM) programme and thus benefiting from European conditional aid. For the ECB to intervene, the country concerned must first negotiate a macroeconomic adjustment plan with the European Commission and the European Council, and apply it. The ECB, potentially members of the European Parliament or the IMF can be a party to this (these institutions – the Commission, the ECB and the IMF – form the Troika of men in black, so famous and feared in Greece). Secondly, and more importantly, the country will be under the supervision of the Troika thereafter.

So if Italy and Spain want to benefit from the purchase of their bonds by the ECB, then their governments will have to submit to an EFSF or ESM adjustment programme. This does not necessarily imply that the plan imposed will be more drastic in terms of austerity than what these governments might have already devised or implemented (the doctrinaire approach in the management of public finances is highly contagious in Europe), but it will require the two countries to submit *ex ante* to outside scrutiny of any adjustment plan they develop and *ex post* to control by the Commission and the Council. If the country under surveillance starts *ex post* to veer away from implementing the adjustment plan, then it could, of course, withdraw from the programme, but its sovereign bonds would no longer be covered by OMTs. They would lose the support of their peers and would thus sail into the financial

markets in uncharted waters. That would probably be the first step towards a default or an exit from the euro.

Furthermore, the ECB has not committed itself to absorbing all the bonds issued and thus maintains a real threat capacity: if the country were to rebel, it could be obliged to face higher rates. The OMT thus introduces both a carrot (lower rates) and a stick (to let the rates rise, sell the bonds the ECB holds in its portfolio and thereby push rates upward), upon each new issue. The OMT is therefore akin to being put under direct control (conditionality) with progressive sanctions and an ultimate threat (exiting the programme).

The ECB says that its interventions will mainly cover medium-term securities (maturity between 1 and 3 years), without excluding longer-term maturities, and with no quantitative limits. Note that short / medium-term emissions *usually* represent a small proportion of total emissions, which tend to be for 10 years. However, in case of a crisis, intervention on short-term maturities provides a breath of fresh air, especially as maturing 10-year securities can be refinanced by 3-year ones. This gives the Troika additional leverage in terms of conditionality: the OMT commitment on securities is only for three years and must be renewed after three years. The financial relief for countries subject to the programme may be significant in the short term. For example, in 2012 Spain, which has not yet taken this step, will have issued around 180 billion euros of debt. If the OMT had reduced Spain's sovereign borrowing rates throughout 2012, the gain would have amounted to between 7 and 9 billion for the year (and this could be repeated in 2013 and 2014, at least). This is because, instead of a 10-year rate of 7%, Spain could be benefitting from the 2% rate at which France borrows for 10 years, or instead of its 4.3% rate at 3 years, Spain could have borrowed at 0.3% (France's 3-year sovereign rate). This is the maximum gain that can be expected from this programme, but it is significant: this roughly represents the equivalent

of the budgetary impact of the recent VAT hike in Spain (or a little less than one Spanish GDP point). This would not alter Spain's fiscal situation definitively, but it would end the complete nonsense that saw Spaniards paying much more for their debt to compensate their creditors for a default that they have been striving arduously not to trigger.

It can even be hoped (as can be seen in the easing of Spanish sovereign rates by almost one point following the ECB announcement on Thursday, 6 September 2012, or the almost half a point reduction in Italian rates) that the mere existence of this mechanism, even if Spain or Italy do not use it (and thus do not submit to control), will be enough to reassure the markets, to convince them that there will be no default or exit from the euro and therefore no justification for a risk premium.

The ECB announced that it would terminate its preferred creditor status for the securities. This provision, which had been intended to reduce the risk to the ECB, led to downgrading the quality of securities held outside the ECB and thus reducing the impact of ECB interventions on rates. By acquiring a government bond, the ECB shifted the risk onto the bonds held by the private sector, since in case of a default the Bank was a preferred creditor that took priority over private holders of bonds of the same type.

The ECB explained that its OMT operations will be fully sterilized (the impact on the liquidity in circulation will be neutral), which, if it is taken at its word, implies that other types of operations (purchases of private securities, lending to banks) will be reduced correspondingly. What do we make of this? The example of the SMP 1.0 can be drawn on in this regard. SMP 1.0 was indeed also accompanied by sterilization. This sterilization involved short-term deposits (1 week, on the ECB's liabilities side), allocated in an amount equal to the sums involved in the SMP (209 billion euros to date, on the ECB's assets side). Each week, the ECB

therefore collects 209 billion euros in short-term fixed-term deposits. This is therefore a portion of bank deposits that the ECB assigns to the sterilization instrument, without there being sterilization in the strict sense (because this does not prevent an increase in the size of the ECB's balance sheet nor does it reduce the potential liquidity in circulation). The mention of sterilization in the OMT appears to be an effort at presenting this in a way that can convince certain states, such as Germany, that this monetary policy will not be inflationary and therefore not contrary to the mandate imposed on the Bank by the Treaty on the European Union. Currently, and because the crisis remains unresolved, private banks have substantial deposits with the ECB (out of fear of entrusting these deposits to other financial institutions), which gives it considerable flexibility to prevent the announced sterilization from affecting the liquidity in circulation (the ECB has a little more than 300 billion euros in deposits that are not mobilized for sterilization). The ECB can then probably use the current accounts (by blocking them for a week), which poses no difficulty since the ECB lends to the banks on tap through long-term refinancing operations (LTROs). At worst, the ECB would lose money in the sterilization operation in case of a gap in compensation between the fixed-term deposits and the loans granted to banks. Sterilization could therefore lead to this kind of absurd accounting, but wind up, in a situation of monetary and financial crisis, having no impact on liquidity. On the other hand, if the situation normalizes, the constraint of sterilization would weigh more heavily. We're not there yet, but when we do get there, the ECB needs to limit lending to the economy or to accept an increase in liquidity if the OMT continues to be implemented for some euro zone members.

The deal that is now on the table places the euro zone countries in a formidable dilemma. On the one hand, acceptance of the Treaty on Stability, Coordination and Governance of the euro zone (TSCG) determines eligibility for the EFSF and the

ESM [\[1\]](#), and therefore now determines eligibility for the OMT programme. Refusing to sign the fiscal treaty means rejecting in advance the potential intervention of the ECB, and thus accepting that the crisis continues until the breakup of the euro zone or until a catastrophic default on a sovereign debt. On the other hand, signing the treaty means accepting the principle of an indiscriminately restrictive fiscal strategy (the rule on public debt reduction included in the TSCG will be devastating) that will trigger a recession in the euro zone in 2012 and perhaps in 2013.

Signing the treaty also means relieving the pressure of the markets, but only to wind up submitting solely to the Troika and to the baseless belief that the fiscal multipliers are low, that European households are Ricardian and that the sovereign debt is still holding back growth. It is true that lowering sovereign interest rates, particularly those of Italy and Spain, will create some breathing room. But the main gain from lower rates would be to spread the fiscal consolidation over a longer period of time. Interest rates place a value on time, and reducing them means granting more time. The debts contracted at negative real interest rates are not ordinary debts, and do not represent the same kind of burden as debts issued at prohibitively high rates.

It would be a terrible waste to gain new maneuvering room (the OMT) only to bind one's hands immediately (the TSCG and the Troika's blind fiscal strategy). Only a change in fiscal strategy would make it possible to take advantage of the door opened by the ECB. In short, saving the euro will not help if we do not first save the EU from the disastrous social consequences of fiscal blindness.

[\[1\]](#) Paragraph 5 of the preamble to the Treaty establishing the European Stability Mechanism states: "This Treaty and the TSCG are complementary in fostering fiscal responsibility and

solidarity within the economic and monetary union. It is acknowledged and agreed that the granting of financial assistance in the framework of new programmes under the ESM will be conditional, as of 1 March 2013, on the ratification of the TSCG by the ESM Member concerned and, upon expiration of the transposition period referred to in Article 3(2) TSCG on compliance with the requirements of that article.”

Banking union: a solution to the euro crisis?

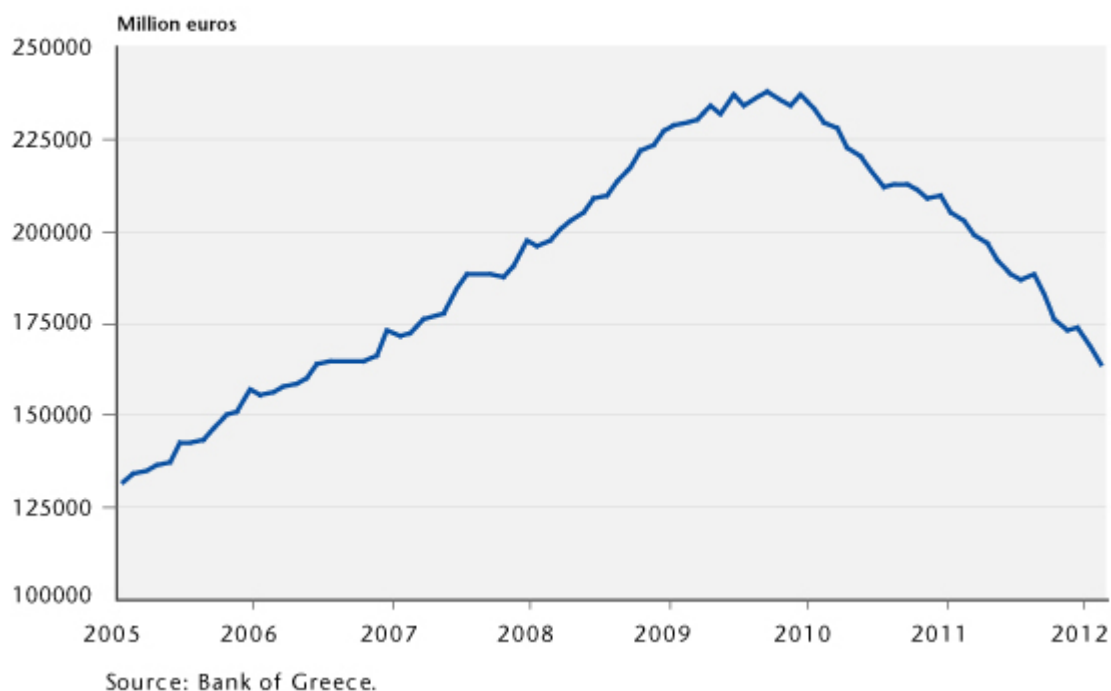
By Maylis Avaro and [Henri Sterdyniak](#)

The European summit on 28th and 29th June marked a new attempt by Europe's institutions and Member states to overcome the crisis in the euro zone. A so-called Growth Pact was adopted, but it consists mainly of commitments by the Member states to undertake structural reform, and the limited funds made available (120 billion over several years) were for the most part already planned. The strategy of imposing restrictive fiscal policies was not called into question, and France pledged to ratify the Fiscal Compact. The interventions of the European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM) will now be less rigid, as, without additional conditions, they can help countries that the financial markets refuse to finance so long as they meet their objectives in terms of fiscal policy and structural reform. But euro-bonds and the mutual guarantee of public debt were postponed. The summit also launched a new project: a banking union. Is this an essential supplement to monetary union, or is it a new headlong rush into the unknown?

The current crisis is largely a banking crisis. The European banks had fed financial bubbles and housing bubbles (especially in Spain and Ireland), and they had invested in mutual funds and hedge funds in the United States. After major losses during the crisis of 2007-2010, the Member states came to their rescue, which was particularly costly for Germany, the UK, Spain and above all Ireland. The sovereign debt crisis in the euro zone has compounded their woes: the sovereign debt that they hold has become a risky asset. The problem of regulating the banks has been raised at the international level (new Basel III standards), in the United States (Volcker's rule and Dodd-Frank law) and in Britain (Vickers report).

In June 2012, doubts about the soundness of Europe's banks surfaced yet again. The measures taken since 2008 to stabilize the financial system have proved insufficient. When Bankia, Spain's fourth-largest bank, announced that it was requesting State assistance of 19 billion euros, worries about the balance sheets of Spanish banks rose sharply. The rate of bad loans of the country's banks, whose balance sheets were hit hard by the real estate crash, rose from 3.3% at end 2008 to 8.7% in June 2012 [1]. Furthermore, many Greeks, fearing an exit from the euro zone, began to reduce their deposits in the banks there [2].

Total deposits of business and consumers in Greece's banks



In response to these dangers, the proposal for a European banking union was given a new boost by Mario Monti. Italy's PM suggested developing the proposals in preparation for the European Commission Single Market DG, an idea that currently has the support of the Commission, the European Central Bank, and several Member states (Italy, France, Spain, etc.) On the other hand, Germany believes that a banking union is impossible without a fiscal union. While Angela Merkel acknowledged [3] that it was important to have a European supervisory authority, with a supranational banking authority with a better general overview, she clearly rejected the idea of Germany taking a risk of further transfers and guarantees without greater fiscal and policy integration [4]. The euro zone summit meeting on 29 June asked the Commission to make proposals shortly on a single monitoring mechanism for the euro zone's banks.

This kind of banking union would rest on three cornerstones:

- a European authority in charge of centralized oversight of the banks,

- a European deposit guarantee fund,
- a common mechanism for resolving bank crises.

Each of these cornerstones suffers specific problems: some are related to the complex way the EU functions (Should a banking union be limited to the euro zone, or should it include all EU countries? Would it be a step towards greater federalism? How can it be reconciled with national prerogatives?), while others concern the structural choices that would be required to deal with the operations of the European banking system.

As to the institution that will exercise the new banking supervisory powers, the choice being debated is between the European Banking Authority (EBA) and the ECB. The EBA was established in November 2010 to improve oversight of the EU banking system, and it has already conducted two series of “stress tests” on the banks. As a result of the tests, in October 2011 Bankia reported a 1.3 billion euro shortage of funds. Five months later, the deficit was 23 billion; the EBA’s credibility suffered. In addition, the London-based EBA has authority over the British system, while the United Kingdom does not want to take part in the banking union. The ECB has, for its part, received support from Germany. Article 127.6 of the Treaty on the Functioning of the European Union [5], which was cited at the euro zone summit of June 29th as a basis for the creation of a European Banking Authority, would make it possible to give the ECB supervisory authority. On 12 June, the Vice-President of the ECB, Mr. Constancio, said that, “the ECB and the Eurosystem are prepared” to receive these powers; “there is no need to create a new institution”.

European oversight implies a common vision of banking regulation. There must be agreement on crucial issues, such as: “Does commercial banking need to be separated from investment banking?” “Should banks be prohibited from operating on the financial markets for their own account?” “Should public or mutual or regional banks be encouraged

rather than large internationalized banks?" "Should banks be encouraged to extend credit primarily to businesses and government in their own country, or on the contrary to diversify?" "Should the macro-prudential rules be national or European?" In our opinion, entrusting these matters to the ECB runs the risk of taking a further step in the depoliticization of Europe.

Applying the guidelines of this new authority will be problematic. A banking group in difficulty could be ordered to divest its holdings in large national groups. But would a country's government expose a national champion to foreign control? Governments would lose the ability to influence the distribution of credit by banks, which some people might find desirable (no political interference in lending), but in our opinion is dangerous (governments would lose a tool of industrial policy that could be used to finance Small and Medium Enterprises [SMEs] and Economic and technological intelligence [ETI] projects or to support the ecological transition).

For example, in a case involving Dexia, the opposition between the European Commission on the one hand and France, Belgium and Luxembourg on the other is blocking a restructuring plan. The plan includes the takeover of Dexia Credit Local's financing of local authorities by a banking collectivity that would be created based on cooperation between La Banque postale and the Caisse des depots. In the name of fair competition, Brussels is challenging the financing of local communities by such a bank, as Dexia has received public funding for its restructuring plan. This is threatening the continuity of the financing of the French local authorities, and could put a halt to their plans; in particular, it could prevent France from providing specific secure mechanisms for financing local authorities through local savings.

The purpose of a deposit guarantee fund is to reduce the risk of a massive withdrawal of deposits during a banking panic.

This fund could be financed through contributions by the European banks guaranteed by the fund. According to Schoenmaker and Gros [6], a banking union must be created under a "veil of ignorance", that is to say, without knowing which country poses the greatest risk: this is not the case in Europe today. The authors propose a guarantee fund that at the outset would accept only the strongest large transnational banks, but this would immediately heighten the risk of the zone breaking apart if depositors rushed to the guaranteed banks. The fund would thus need to guarantee all Europe's banks. According to Schoenmaker and Gros, assuming a 100,000 euro ceiling on the guarantee, the amount of deposits covered would be 9,700 billion euros. The authors argue that the fund should have a permanent reserve representing 1.5% of the deposits covered (*i.e.* about 140 billion euros). But this would make it possible to rescue only one or two major European banks. During a banking crisis, amidst the risk of contagion, such a fund would have little credibility. The guarantee of deposits would continue to depend on the States and on the European Stability Mechanism (ESM), which would have to provide support funds, ultimately by requiring additional contributions from the banks.

The authority in charge of this fund has not yet been designated. While the ECB appears well positioned to undertake supervision of the banking system, entrusting it with management of the deposit guarantee fund is much more problematic. According to Repullo [7], deposit insurance should be separated from the function of lender of last resort. Indeed, otherwise the ECB could use its ability to create money to recapitalize the banks, which would increase the money supply. The objectives of monetary policy and of support for the banks would thus come into conflict. What is needed is a body that handles deposit insurance and crisis resolution and is separate from the ECB, and which must have a say on the behavior of the banks, and which would be additional to the EBA, the ECB, and the national regulators.

The ECB on the other hand would continue to play its role as lender of last resort. But it is difficult to see how such a complicated system would be viable.

As the risk of a country leaving the euro zone cannot yet be dismissed, the question arises as to what guarantee would be offered by a banking union in the case of a conversion into national currency of euro-denominated deposits. A guarantee of deposits in the national currency would, in the case of an exit from the euro, heavily penalize customers of banks that suffer a devaluation of the national currency against the euro, whose purchasing power would decline sharply. This kind of guarantee does not solve the problem of capital flight being experienced today by countries threatened by a risk of default. What is needed is a guarantee of deposits in euros, but in today's situation, given the level of risk facing some countries, this is difficult to set up.

German and Finnish politicians and economists such as H. W. Sinn are, for instance, denouncing an excessive level of risk for Germany and the Nordic countries. According to several German economists, no supranational authority has the right to impose new burdens (or risk levels) on the German banks without the consent of Parliament, and the risk levels need to be explicitly limited. The German Constitutional Court might oppose the deposit guarantee fund as exposing Germany to an unlimited level of risk. Moreover, according to George Osborne, the Chancellor of the British Exchequer, a bank deposit guarantee at the European level would require an amendment to existing treaties and the consent of Great Britain.

On 6 June, the European Commission began to develop a common framework for resolving banking crises by adopting the proposal of Michel Barnier, which has three components. The first is to improve prevention by requiring banks to set up *testaments*, that is, to provide for recovery strategies and even disposal plans in case of a serious crisis. The second

gives the European banking authorities the power to intervene to implement the recovery plans and to change the leadership of a bank if it fails to meet capital requirements. The third provides that, if a bank fails, the national governments must take control of the establishment and use resolution tools such as divestiture, the creation of a defeasance bank, or "bad" bank, or an internal bailout (by forcing shareholders and creditors to provide new money). If necessary, the banks could receive funds from the ESM. Bank-related risks would therefore be better distributed: the shareholders and creditors not covered by the guarantee would be first to be called upon, so that the taxpayers would not pay to reimburse the creditors of insolvent banks. In return, bank loans and shares would become much riskier; bank reluctance about inter-bank credit and the drying up of the interbank market due to the crisis would persist; and the banks would find it difficult to issue securities and would have to raise the level of compensation. However, Basel III standards require banks to link their lending to the level of their capital. This would pose a risk of constraining the distribution of credit, thereby helping to keep the zone in recession. Based on the decisions of the summit on 29 June, Spain could be the first country whose banks would be recapitalized directly by the ESM. However, this would not take place until early 2013; the terms of the procedure and the impact of ESM aid on the governance of the recapitalized banks still need to be determined. As can be seen in the Dexia example, what terms are set for the reorganization of a bank can have serious consequences for the country concerned: are governments (and citizens) willing to lose all power in this domain?

A banking union can help break the correlation between a sovereign debt crisis and a banking crisis. When the rating agencies downgrade a country's debt, the securities suffer a loss in value and move into the category of "risky assets", becoming less liquid. This increases the overall risk faced by the banks in the country concerned. If a bank is facing too

much overall risk and it is no longer able to meet the capital requirements of Basel III, the State must recapitalize it, but to do this it must take on debt, thereby increasing the risk of a default. This link between the banks' fragile balance sheets and public debt generates a dangerous spiral. For instance, since the announcement of the bankruptcy of Bankia, Spain's 10-year refinancing rates reached the critical threshold of 7%, whereas last year the rates were about 5.5%. In a banking union, the banks would be encouraged to diversify on a European scale. However, the crisis of 2007-09 demonstrated the risks of international diversification: many European banks lost a great deal of money in the US; foreign banks are unfamiliar with the local business scene, including SMEs, ETIs and local government. Diversification based on financial criteria does not fit well with a wise distribution of credit. Moreover, since the crisis, European banks are tending to retreat to their home countries.

The proposal for a banking union assumes that the solvency of the banks depends primarily on their own capital, and thus on the market's evaluation, and that the links between a country's needs for financing (government, business and consumers) and the national banks are severed. There is an argument for the opposite strategy: a restructuring of the banking sector, where the commercial banks focus on their core business (local lending, based on detailed expertise, to businesses, consumers and national government), where their solvency would be guaranteed by a prohibition against certain risky or speculative transactions.

Would banking union promote further financialization, or would it mark a healthy return to the Rhineland model? Would it require the separation of commercial banks and investment banks? Would it mean prohibiting banks whose deposits are guaranteed to do business on the financial markets for their own account?

[1] According to the Bank of Spain.

[2] The total bank accounts of consumers and business fell by 65 billion in Greece since 2010. Source: Greek Central Bank.

[3] “La supervision bancaire européenne s’annonce politiquement sensible”, *Les Echos Finance*, Thursday 14 June 2012, p. 28.

[4] “Les lignes de fracture entre Européens avant le sommet de Bruxelles”, *AFP Infos Economiques* 27 June 2012.

[5] Art 127.6: “The Council, acting by means of regulations in accordance with a special legislative procedure, may unanimously, and after consulting the European Parliament and the European Central Bank, confer specific tasks upon the European Central Bank concerning policies relating to the prudential supervision of credit institutions and other financial institutions with the exception of insurance undertakings.”

[6] D. Schoenmaker and Daniel Gros (2012), “A European Deposit Insurance and Resolution Fund”, *CEPS working document*, No. 364, May.

[7] Repullo, R. (2000), “Who Should Act as Lender of Last Resort? An Incomplete Contracts Model”, *Journal of Money, Credit, and Banking* 32, 580-605.

The financial markets: Sword of Damocles of the presidential election

By [Céline Antonin](#)

Although some of the candidates may deny it, the financial risk linked to the fiscal crisis in the euro zone is the guest of honour at the presidential campaign. As proof that this is a sensitive issue, the launch in mid-April of a new financial product on French debt crystallized concerns. It must be said that this took place in a very particular context: the Greek default showed that the bankruptcy of a euro zone country had become possible. Despite the budgetary firewalls in place since May 2010 (including the European Financial Stability Fund), some of France's neighbours are facing a lack of confidence from the financial markets, which is undermining their ability to meet their commitments and ensure the fiscal sustainability of their government debt, the most worrying example to date being Spain. What tools are available to speculators to attack a country like France, and what should be feared in the aftermath of the presidential election?

The tool used most frequently for speculation on a country's public debt is the Credit Default Swap, or CDS. This contract provides insurance against a credit event, and in particular against a State's default (see the "Technical functioning of CDS" annex for more detail). Only institutional investors, mainly banks, insurance companies and hedge funds, have direct access to the CDS market on sovereign States [\[1\]](#).

Credit default swaps are used not only for coverage, but also

as an excellent means of speculation. One criticism made of the CDS is that the buyer of the protection has no obligation to hold any credit exposure to the reference entity, i.e. one can buy CDS without holding the underlying asset ("naked" purchase/sale). In June 2011, the CDS market represented an outstanding notional amount of 32,400 billion dollars. Given the magnitude of this figure, the European Union finally adopted a Regulation establishing a framework for short-selling: it prohibits in particular the naked CDS on the sovereign debt of European States, but this will take effect only on 1 November 2012.

The FOAT: new instrument for speculation on French debt?

This new financial instrument, introduced by Eurex on April 16 [2], is a futures contract, that is to say an agreement between two parties to buy or sell a specific asset at a future date at a price fixed in advance. The specific asset in this case is the French Treasury OAT bond, with a long residual maturity (between 8.5 and 10.5 years) and a coupon of 6%, and it has a face value of 100,000 euros. Should we worry about the launch of this new contract on the eve of the presidential election? Not when you consider that the launch of the FOAT addresses the gap in yields between German and French bonds that has arisen since the recent deterioration of France's sovereign rating: previously, as German and French bond yields were closely correlated, the FOAT on German bonds allowed coverage of both German and French bond risks. After the gap in yields between the two countries widened, Eurex decided to create a specific futures contract for French bonds. Italy witnessed this same phenomenon: in September 2009, Eurex also launched three futures contracts on Italian government bonds [3]. In addition, Eurex is a private market under German law, and is much more transparent than the OTC market on which CDS are traded. Note that the FOAT launch was not very successful: on the day it was launched, only 2,581 futures contracts were traded on French bonds, against

1,242,000 on German bonds and 13,671 on Italian bonds [\[4\]](#).

Even if, as with the CDS, the primary function of the FOAT is to hedge against risk, it can also become an instrument for speculation, including via short selling. While speculation on French debt was previously limited to large investors, with an average notional amount of 15 billion euros per CDS [\[5\]](#), the notional amount of the new FOAT contract is 100,000 euros, which will attract more investors into the market for French debt. If speculators bet on a decline in the sustainability of France's public finances, then the price of futures contracts on the OAT bonds will fall, which will amplify market movements and result in higher interest rates on OAT contracts.

The not so rosy future?

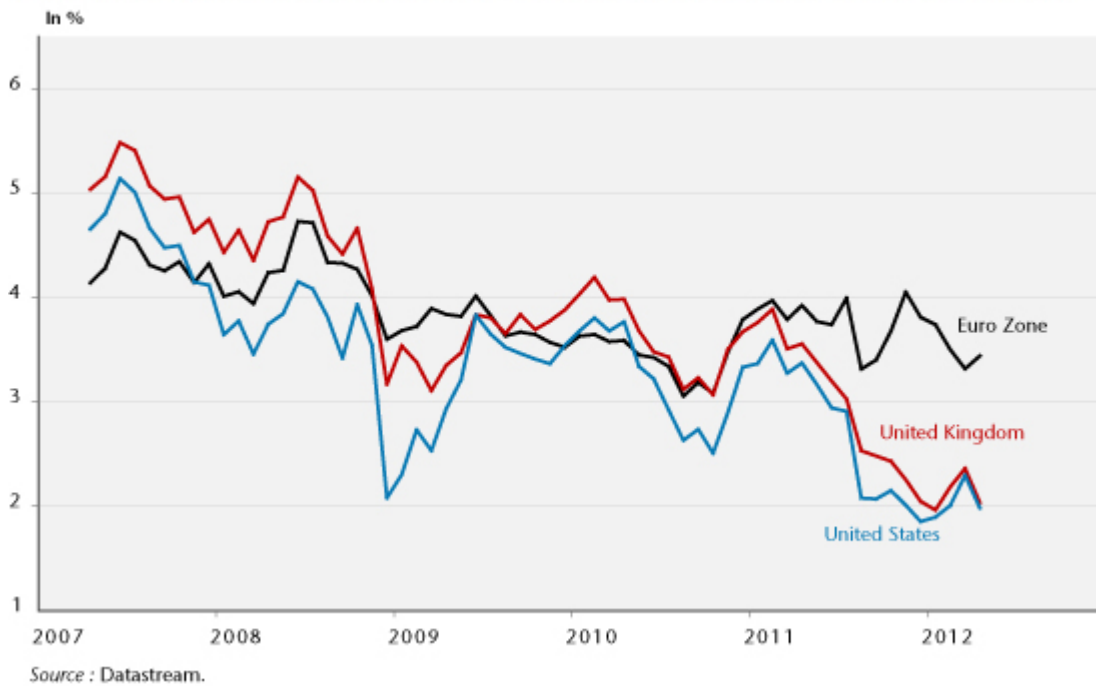
It is difficult to predict how the financial markets will behave in the wake of the French presidential election. Studying what has happened in other euro zone countries is not very informative, due to each one's specific situation. The country most "comparable" to France would undoubtedly be Italy. However, the appointment of Mario Monti in November 2011 took place in an unusual context, where the formation of a technocratic government was specifically intended to restore market confidence through a strenuous effort to reduce the deficit, with Italy also benefitting from the ECB's accommodative policy.

The [French budgetary configuration is different](#), as the financial imperative appears only in the background. The candidates of the two major parties both advocate the need to restore a balanced budget. Their timetables are different (2016 for Nicolas Sarkozy's UMP, 2017 for François Hollande's PS), as are the means for achieving this: for Sarkozy, the focus will be more on restraint in public spending (0.4% growth per year between 2013 and 2016, against 1.1% for the PS), while Hollande emphasizes growth in revenue, with an

increase in the tax burden of 1.8% between 2012 and 2017 (against 1% for the UMP).

But this is not the heart of the matter. What is striking, beyond the need to reduce public deficits in the euro zone countries, is the fact that our destinies are inextricably linked. As is shown by the graph on changes in bond yields in the euro zone (Figure 2), when the euro zone is weakened, all the countries suffer an impact on their risk premium relative to the United States and the United Kingdom, although to varying degrees. It is therefore unrealistic to think about France's budget strategy and growth strategy outside of a European framework. What will prevent the financial markets from speculating on a country's debt is building a Europe that is fiscally strong, has strict rules, and is supported by active monetary policy. This construction is taking place, but it is far from complete: the EFSF does not have sufficient firepower to help countries in difficulty; the growth strategy at the European level agreed at the summit of 2 March 2012 needs to be more comprehensive; and the ECB needs to pursue an active policy, like the Fed, which specifically requires a revision of its statutes. As was pointed out by Standard and Poor's when it announced the downgrade of the French sovereign rating last December, [what will be watched closely by the financial markets is the fiscal consistency of the euro zone.](#) On 6 May 2012, what attitude will the next President then take vis-à-vis the construction of the budget and how able will he be to assert his position in the euro zone – this will determine the future attitude of the financial markets, not only vis-à-vis France, but also vis-à-vis every euro zone country.

Figure 1. Average yields on 10-year bonds in the euro zone, the United States and the United Kingdom



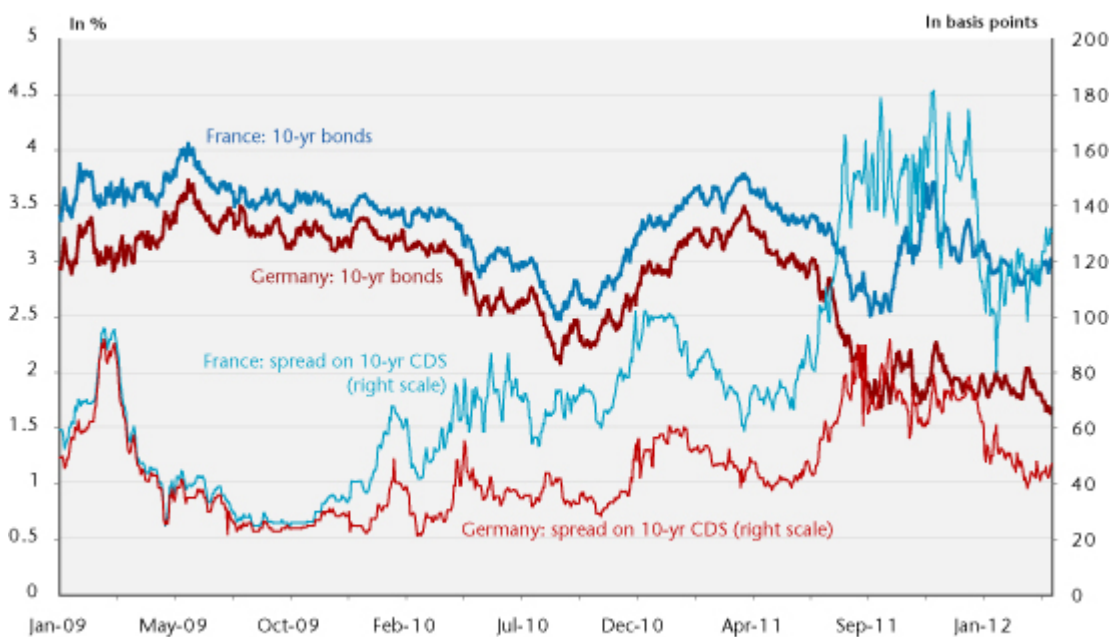
Annex: Technical functioning of Credit Default Swaps

The contract buyer acquires the right to sell a benchmark bond at its face value (called the “principal”) in case of a credit event. The buyer of the CDS pays the seller the agreed amounts at regular intervals, until maturity of the CDS or the occurrence of the credit event. The swap is then unwound, either by delivery of the underlying instrument, or in cash. If the contract terms provide for physical settlement, the buyer of the CDS delivers the bonds to the seller in exchange for their nominal value. If the CDS is settled in cash, the CDS seller pays the buyer the difference between the nominal amount of the buyer’s bonds and the listed value of the bonds after the credit event (recovery value), in the knowledge that in this case the buyer of the CDS retains its defaulted bonds. In most cases, the recovery value is determined by a formal auction process organized by the ISDA ([International Swaps and Derivatives Association](#)). The annual premium that the bank will pay to the insurance company for the right to coverage is called the CDS spread and constitutes the value listed on the market: the higher the risk of default, the more the CDS spread increases (Figure 1). In reality, as the banks are both the buyers and sellers of protection, the spread is usually

presented as a range: a bank can offer a range from 90 to 100 basis points on the risk of a French default. It is thus ready to buy protection against the risk of default by paying 90 basis points on the principal but it demands 100 to provide that protection.

To illustrate this, consider the following example. On 7 May 2012, a bank (buyer) signs a CDS on a principal of 10 million euros for five years with an insurance company (seller). The bank agrees to pay 90 basis points (spread) to protect against a default by the French State. If France does not default, the bank will receive nothing at maturity, but will pay 90,000 euros annually every 7 May for the years 2012-2017. Suppose that the credit event occurs on 1 October 2015. If the contract specifies delivery of the underlying asset, the buyer has the right to deliver its French bonds with a par value of 10 million euros and in exchange will receive 10 million euros in cash. If a cash settlement is expected, and if the French bonds are now listed only at 40 euros, then the insurance company will pay the bank 10 million minus 4 million = 6 million euros.

Annex Figure. France/Germany: premiums on 10-year CDS and 10-year bond yields



Source : Datastream.

[\[1\]](#) Individuals can play on the markets for corporate CDS via trackers (collective investment in transferable securities that replicates the performance of a market index).

[\[2\]](#) The Eurex was created in 1997 by the merger of the German futures market, Deutsche Termin-Börse (DTB), and the futures market in Zurich, the Swiss Options and Financial Futures Exchange (SOFFEX), to compete with the LIFFE. It belongs to Deutsche Börse and dominates the market for long-term financial futures.

[\[3\]](#) In September 2009 for bonds with long residual maturities (8.5 to 11 years), October 2010 for bonds with short residual maturities (2 to 3.25 years) and July 2011 for bonds with average residual maturities (4.5 to 6 years).

[\[4\]](#) Note that this comparison is biased due to the fact that there are 4 types of futures contracts on German debt, 3 on Italian debt and only 1 on French debt.

[\[5\]](#) Weekly data provided by the [DTCC](#) for the week of 9 to 13 April 2012 on CDS on French sovereign debt: the outstanding notional amount came to 1,435 billion dollars, with 6822 contracts traded.

Europe's banks: leaving the

zone of turbulence?

By [Vincent Touzé](#)

The 2008 crisis almost endangered the entire global financial system. Thanks to support from governments and central banks, the banking sector has recovered and once again appears to be solid financially. In the aftermath of the crisis, the public finances of the Southern euro zone countries – Portugal, Italy, Spain and Greece – and Ireland (the “PIIGS”) have, in turn, been severely weakened. Greece was forced to suspend payments, and the risk of default is still hanging over the others. Since early 2011, bank liabilities in these economies have become a significant concern of the financial markets. Despite good stress tests, this fear intensified in August 2011. European banks then entered a new period of turmoil, and the European Central Bank was forced to lend them more than 1,000 billion euros for 3 years at a rate of 1% in order to avoid a major credit crunch.

As part of their investments abroad and through their foreign branches, Europe’s banks hold liabilities from the PIIGS countries through lending to the banking sector, to the public sector (sovereign debts and credits) and to households and private non-bank enterprises. France is one of the countries that is most heavily exposed to the PIIGS (public and private sectors combined), with a total commitment by the banking system in the third quarter of 2011 of about 437 billion euros (see table), or 21.9% of GDP. Germany’s exposure, at about 322 billion euros (12.5% of GDP), is smaller. The exposure of the UK banking system is comparable and is valued at 230 billion euros, or 13.3% of GDP. In comparison, the Japanese and US banks hold little debt: 59 billion euros (1.4% of GDP) for Japan and 96 billion (0.9% of GDP) for the United States. In the course of the financial crisis, Europe’s banks have pulled back from these countries (1). According to the statistics of the Bank for International Settlements (Figure 1), the

reduction in exposure was most pronounced in Greece (-55% since Q1 2007) and lowest in Portugal (-15%). Divestments of the debt of Spain (-29%), Italy (-33%) and Ireland (39%) have been comparable and are at an intermediate level compared to the previous two.

Guarantee funds can be drawn on if a bank goes bankrupt, but generally their provisions are insufficient to support a "big" bank in difficulty. According to the principle of "too big to fail", the state must intervene to avoid bankruptcy. Possible avenues of action include acquiring some of the bank's capital, nationalizing it by refloating it, or facilitating its long-term refinancing through the purchase of bonds. A bank failure has to be avoided at all costs, because it is frequently accompanied by panic, with collateral damage that is difficult to predict or contain. The mere fact that a State announces credible support for a bank or a banking system is often sufficient to avert a panic. If the States were to come to the rescue of the banks in the case of the Greek default, the macroeconomic implications of a 50% default on all private and public debts seem relatively minor, since it would require, for example in the case of France, a cost of around 17 billion euros, an amount that is much less than 1% of GDP (see table). By contrast, a 50% default of all the PIIGS would require 220 billion euros in support from France (11% of French GDP). The macroeconomic cost beforehand might seem high, but it is not insurmountable. Unfortunately, the spontaneous failure of one or more PIIGS would lead to an uncontrollable chain reaction whose overall macroeconomic costs could be considerable.

This financial crisis is also hitting the life insurance companies, right in the midst of a period of reform in prudential regulations. The banking sector has just managed to come up to Basel II standards and will steadily have (until 2019) to adopt Basel III (2), while the insurance industry is changing rapidly towards Solvency II (3). These two regulatory

reforms are leading to an increasing need for capital just as the financial crisis is undermining balance sheets and putting greater pressure on capital ratios. While equity capital can be used to withstand a financial crisis, at the same time regulations can compel recapitalizations in very difficult refinancing conditions. This is an undesirable pro-cyclical result of the prudential regulations.

The risk of a default on payments by some PIIGS has made financial analysts pay particularly close attention to the solvency and profitability of European banks. However, the results of the stress tests (4) on the European banks published in mid-July 2011 were considered good. The hypotheses used are far from being optimistic. In the euro zone (and respectively in the other countries), they point to a fall in the growth rate of 2 points (2.4 points respectively) in 2011 and 2 points (1.9 points respectively) in 2012 compared to a reference scenario. In the euro zone, this entry into recession (-0.5% in 2011 and -0.2% in 2012) would be accompanied by higher unemployment (0.3 point in 2011 and 1.2 points in 2012), a lower inflation rate (-0.5 point in 2011 and -1.1 points in 2012), a sharp drop in property prices, a rise in long-term rates as well as discounts on sovereign debt (5) of up to 30%. The objective of this "stressed" scenario is to test the capacity of the banks to be able to maintain a "core Tier 1" ratio greater than 5% (6). Under these extreme assumptions, only 8.9% of the 90 banks tested achieved a ratio that was below the 5% ceiling that would trigger a de facto recapitalization to meet the target (7). The four French banks succeeded on the stress tests without difficulty, as they maintain high ratios: 6.6% for Societe Generale, 6.8% for the Banque populaire-Caisse d'épargne, 7.9% for BNP Paribas and 8.5% for Crédit Agricole. The countries where failures were observed include Austria (1 bank), Spain (5 failures) and Greece (2 failures). In view of the stress tests, the European banking system could therefore be considered as capable of withstanding a major economic

crisis.

After the second aid package to Greece on 21 July 2011, and with ongoing pressure on the other sovereign debts, worry seized the stock markets, and European bank stocks fell sharply from August to December 2011 (Figure 2). These stock market changes were in complete contradiction with the positive results of the stress tests. There are three possible ways to interpret the reaction of the financial markets:

- An actual crisis would be much sharper than the hypotheses of the stress tests;
- The stress test methods are not adequate for estimating the consequences of a crisis;
- The markets get swept up in the slightest rumors and are disconnected from basics.

For now, with respect to the most pessimistic forecasts, it does not seem that the stress test hypotheses are particularly favorable. However, they have weaknesses for assessing systemic financial crisis, in that each bank does not include in its assessment the damage brought about by the application of the scenario to other banks or the consequences for the credit market. There is no feedback from the financial interconnections. Moreover, the economic crisis can greatly increase the default rates of private companies. This point may have been underestimated by the stress tests. Note also that the tests are performed at an internal level, which can also lead to different assessments of the consequences of certain scenarios. In addition, the stress tests evaluate the financial soundness of the banks, but de facto, a bank, although solvent, can see its stock price fall in times of crisis for the simple reason that its expected profitability decreases. Most importantly, the runaway financial markets are due to the lack of a consensus on the decisions taken within the European Union on finding a definitive solution to the debt crisis but also to the fact that the statutes of the European Central Bank prohibit it from participating in public debt issues. These uncertainties reinforce the volatility of

the stock price of banks that are particularly exposed to PIIGS, as evidenced by the strong correlation between CDS on private banks and on sovereign debt in the euro zone (8).

With the beginning of a solution on Greek debt, the stock market listings of European banks have been rising since January 2012. Hopefully the agreement of 21 February 2012 on Greek sovereign debt will calm the storm that hit the bond markets. The operation provides that private investors agree to give up 107 billion euros of the 206 billion of debt they hold and that the euro zone States agree a new loan of 130 billion. The agreement is a swap of debt. The old bonds are exchanged against new ones at a discount of 53.5% of the face value (9) and at a new contractual interest rate. The write-down was not a surprise for the banks, which have already set aside provisions for the losses. The operation was a clear success (10), as 83% of the holdings were voluntarily offered for exchange on 9 March (11). The level of participation was increased to more than 95% by carrying through a compulsory exchange with creditors who had not responded positively to the operation (collective action clauses for debt held under Greek law). After this exchange, the European states, the IMF, and the ECB will hold "more than three-quarters of Greek debt" (12), which means that any new crisis of Greek sovereign debt would have little impact on private investors. A new source of uncertainty comes from the CDS that were taken out for the purpose of hedging or speculation ("naked CDS"). Initially, the International Swaps and Derivatives Association (ISDA) (13) announced on 1 March that this exchange was not a "credit event". On 9 March, it revised its judgment (14). The ISDA now believes that the collective action clauses are forcing owners to accept the exchange, which constitutes a credit event. The Greek default on payments is a legally recognized event, and the CDS are thus activated. According to the ISDA, the net exposure of CDS to Greece would amount to only 3.2 billion dollars. To estimate the overall cost of the CDS for the financial sector, the residual value of the bonds would have

to be subtracted from that amount. Given the inability of Greece to resume growth, the sustainability of its remaining debt is not guaranteed, and the risk of contagion persists. In any event, the public debt of the Southern euro zone countries and Ireland are now considered risky assets, which is a factor that is weakening the European banking sector. In this respect, since late March the recent rise in interest rates on Italian and Spanish public debt has provoked a decline in the stock prices of European banks (Figure 2).

The ongoing financial crisis is weakening the banking sector in the euro zone, which could lead it to reduce its exposure to risk: a major credit crunch is thus to be feared. The latest ECB survey covering 9 December 2011 to 9 January 2012 (15) with regard to the lending conditions set by banks is not very reassuring. Tighter conditions are expected by 35% (against 16% last quarter) of banks on business loans and by 29% (against 18% last quarter) of banks on consumer loans. In light of this prospect, on 21 December 2011 the ECB conducted a long-term refinancing operation. This was a huge success, with 489 billion euros in credits granted to the banking sector. The funds were loaned at 1% for a period of 3 years. Although it is still difficult to assess the impact of this measure, ECB president Mario Draghi said in February that this injection of liquidity had clearly avoided a major credit crunch. On 29 February 2012, the ECB launched a second long-term refinancing plan (16). The subscription was very substantial, with 530 billion euros disbursed. It is therefore reasonable to think that a credit crunch will be avoided.

In conclusion, the banking sector's escape from the zone of turbulence depends on four key factors:

- 1) Only a long-term return to growth across the euro zone as a whole will make it possible to consolidate the public purse and reduce the number of business failures (17), thereby de facto reducing banks' exposure to the risk of default, with responsibility incumbent on the European governments and the

ECB to identify and implement the “right” policy mix and the appropriate structural measures.

2) The Greek State is insolvent; this failure in public finances must not be allowed to spread to other economies, since the banking crisis is also a test of the strength of financial solidarity in the euro zone, and it remains to be seen whether the Germans are more inclined to support Spain or Italy in case of a risk of default than they were with Greece.

3) The banking crisis has brought to the fore the procyclical effects of the prudential regulations, which need to be corrected.

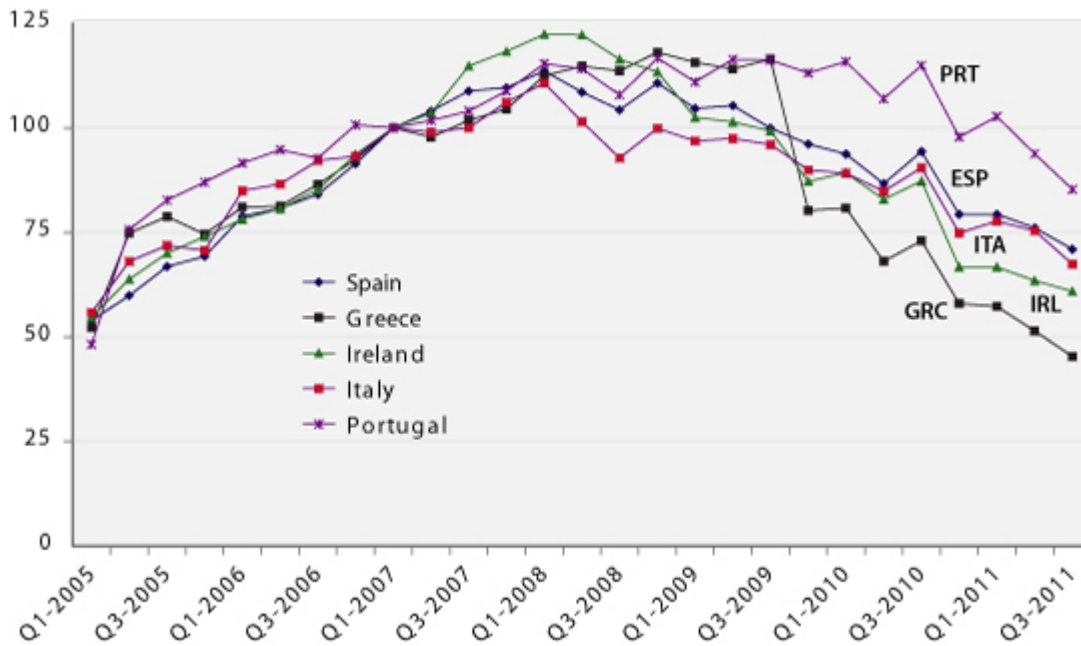
4) The maneuvering room of governments as first responders in a crisis has become very limited due to their massive debt. If there is a new major shock, the ECB could have no other choice but to be the lender of last resort.

Exposure of the national bank sector to the PIIGS 3rd quarter 2011 (billion euros)

Creditor country	DEU	FRA	GBR	JPN	USA
SPAIN					
Bank	44,3	25,0	13,4	2,9	13,0
Public sector	18,6	19,1	4,3	7,0	3,7
Private non-bank sector	50,7	57,9	48,0	7,5	17,0
Total	113,6	102,0	65,7	17,4	33,7
GREECE					
Banks	0,7	0,4	0,7	0,2	0,9
Public sector	8,0	5,1	1,5	0,1	1,0
Private non-bank sector	4,5	28,3	6,0	0,5	2,3
Total	13,2	33,8	8,2	0,8	4,2
IRELAND					
Banks	14,1	6,9	12,7	1,1	6,4
Public sector	2,0	1,8	3,3	0,5	1,3
Private non-bank sector	55,6	11,7	80,8	12,2	23,2
Total	71,7	20,5	96,8	13,9	30,8
ITALY					
Banks	28,4	26,3	5,5	1,9	6,8
Public sector	31,4	58,1	6,0	17,5	7,2
Private non-bank sector	42,4	178,6	31,7	6,3	9,3
Total	102,1	262,9	43,3	25,7	23,3
PORTUGAL					
Banks	6,2	4,4	2,3	0,1	1,1
Public sector	5,6	3,8	1,2	0,3	0,6
Private non-bank sector	9,4	10,0	13,0	0,6	1,8
Total	21,2	18,2	16,5	1,0	3,5
TOTAL PIIGS					
Banks	93,6	63,0	34,6	6,3	28,2
Public sector	65,6	87,9	16,3	25,4	13,9
Private non-bank sector	162,6	286,5	179,6	27,1	53,6
Total	321,8	437,4	230,4	58,8	95,6
% of GDP	12,5	21,9	13,3	1,4	0,9

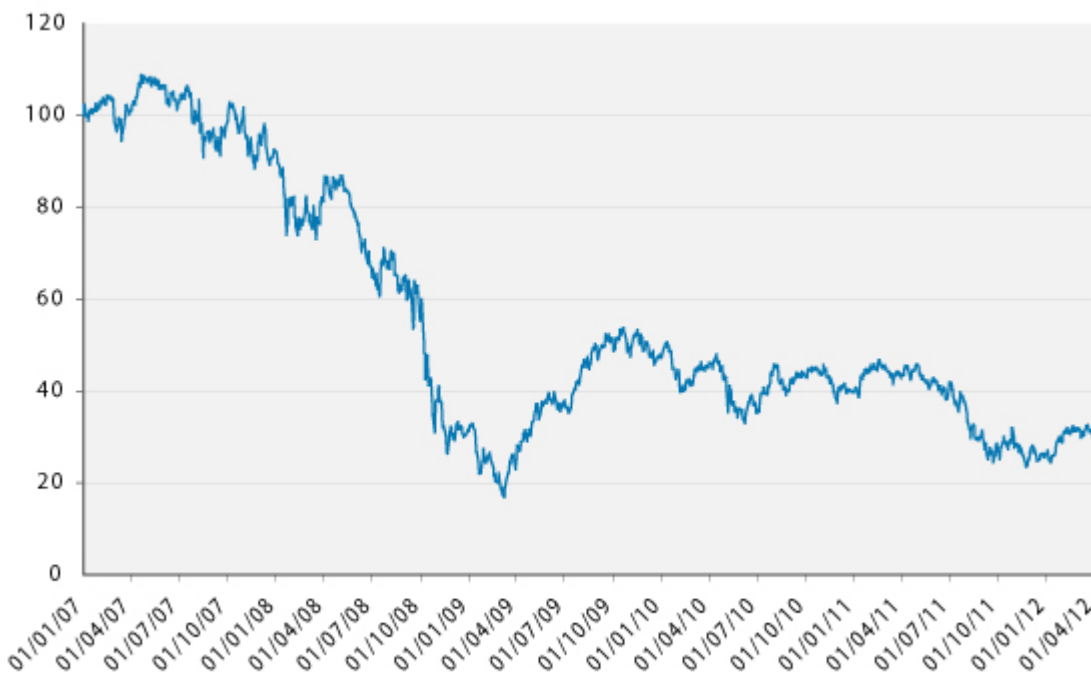
Sources : Banque des règlements internationaux – Consolidated banking statistics / ultimate risk basis – and author's calculations.

Graphique 1. Foreign debt held by European banks (Base 100 = 1st quarter 2007)



Sources : Banque des règlements internationaux – Consolidated banking statistics /ultimate risk basis – and author's calculations.

Figure 2. Stock market index of European banks (base 100 = 1 January 2007)



Sources : Datastream (FTSE World Europe Banks).

[1] Note that a financial depreciation (capital loss) on the balance sheet value of assets in the PIIGS implies an automatic reduction in the exposure to these economies.

[2] http://www.bis.org/speeches/sp100921_fr.pdf

[3]

http://ec.europa.eu/internal_market/insurance/solvency/background_fr.htm.

[4] *European Banking Authority*, 2011, http://stress-test.eba.europa.eu/pdf/EBA_ST_2011_Summary_Report_v6.pdf.

[5] European Banking Authority (2011), *Methodological Note – Additional guidance*, June 2011.

[6] The minimum level required by Basel II for the Core Tier 1 ratio is only 2%, which rises to 4.5% under Basel III (in force in 2013). This ratio measures the proportion of risk-weighted assets covered by equity capital.

[7] For a bank whose ratio falls to $x\%$, the recapitalization requirement corresponds to $(5\%-x)/x$ % of post-shock equity capital. Hence if $x=4\%$, the recapitalization requirement would correspond to 25% of the equity capital.

[8] “The correlation between interest rates on public debt and on private debt will make it difficult to resolve the sovereign debt crisis in the euro zone”, *Flash marchés*, Natixis, 14 March 2011 – N° 195, <http://cib.natixis.com/flushdoc.aspx?id=57160>.

[9] For example, each old bond with a face value of 100 euros is exchanged for a new one worth 46.5 euros. The EFSF guarantees 15 euros and the Greek state 31.5 euros.

[10]

<http://www.minfin.gr/portal/en/resource/contentObject/id/baba4f3e-da88-491c-9c61-celfd030edf6>.

[11] In light of the holders of public debt who are not subject to Greek law and who are refusing to take part in the operation, the deadline of 9 March (see

<http://fr.reuters.com/article/frEuroRpt/idFRL6E8F540020120405>) was put off to 4 April and then to 20 April. The Greek state considers that this refusal to exchange will not be sufficient to block the operation, as, given the collective action clauses, voluntary or required participation amounts to at least 95.7%. With regard to the recalcitrant investors, the Greek state has the choice of waiting a little longer, meeting its contractual commitments (continued reimbursement of the face value and interest as initially scheduled), make a new exchange offer (but this must be equitable with respect to those who accepted the previous offer) or default, with the risk of pursuit in the international courts.

[12] Olivier Garnier, "Comprendre l'échange de dette publique grecque", *Le Webzine de l'actionnaire – Analyses*, Société Générale, 13 March 2012, <http://www.societegenerale.com/actiorama/comprendre-l%E2%80%99echange-de-dette-publique-grecque>.

[13]

http://www.isda.org/dc/docs/EMEA_Determinations_Committee_Decision_0103201202.pdf.

[14] <http://www2.isda.org/greek-sovereign-cds/>

[15] The Euro Area Bank Lending Survey, 1February 2012, http://www.ecb.int/stats/pdf/blssurvey_201201.pdf.

[16]

http://www.ecb.int/press/pr/date/2011/html/pr111208_1.en.html.

[17] "Les entreprises après la crise", Colloquium Banque de France, 28 June 2011, http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/publications/Bulletin-de%20la-Banque-de-France/Bulletin-de-la-Banque-de-France-etude-185-2.pdf

Positions of French and German Banks in European interbank lending network

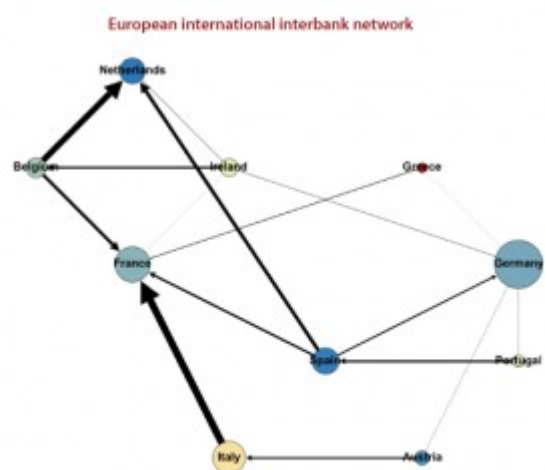
by [Zakaria Babutsidze](#)

Recent desperate cries for help from French and other European banks raise the question of exactly what type and how much trouble have they managed to get themselves into. The question can be approached from many angles. Here I try to gain insights into the topic by analyzing the cross-border interbank lending network. This is a network that facilitates the flow of much needed liquidity across the sovereign borders within the Eurozone. Due to high interconnectedness, banks in each country affect (and are affected) directly or indirectly (by) the banks in all other countries. Banks of different countries play different roles in this vital network: some are net creditors, others are net debtors. In this post I take on the challenge of contrasting the behavior of the two largest creditors in the system (the banking sectors of France and Germany) who are often blamed for the recklessness in their lending practices.

Inspired by [visualization of the network](#) by The New York Times, I use the data on Consolidated Banking Statistics issued in December 2011 by the [Bank for International Settlements](#). The data comprises the claims of banks in a given country filed vis-à-vis banks in other countries as of June 2011. Numbers do not include holdings of sovereign debt. The data is available only for 10 out of 17 Eurozone countries:

France, Germany, Italy, Spain, The Netherlands, Austria, Ireland, Belgium, Portugal and Greece. As I am interested in the role of national financial systems in European network I cancelled out the counter-claims across the borders and proceeded with the volume of the net claims of one European country banking sector vis-à-vis others.

The resulting network connects each of the 10 countries to the other nine. Each connection has a direction that reflects the current debt balance of a country's banks vis-à-vis another country's banks. I apply simple weighted network analysis to the data in order to dissect the European interbank lending network. The volume of mismatch between the claims vis-à-vis partners is used for weighting the links in the network. To make the methodology clearer consider a hypothetical example. Banks of country A owe 100 Euros to the banks of country B. At the same time, banks of country B owe 40 Euros to banks of country A. Then the mismatch between the countries amounts to 60 Euros which country A owes to country B. This way I determine the direction of each link in our network, or who is the creditor and who is the debtor. In addition to this, I take into account the value of the mismatch in the following way. If country C owes country D 30 Euros, we say that the link between A and B, which we have discussed earlier, is twice stronger than that between C and D.



The size of the nodes corresponds to the size of the sovereign debt a country is holding. The color of the nodes (ranging from blue for low values to red for high values) corresponds to the share of sovereign debt to GDP. Links between pairs of nodes describe net claims reported by the banks of a given country vis-à-vis banks of another. For example the arrow originating in Austria and pointing at Italy tells that Austrian banks owe Italian banks. The only links visualized in the picture are the links that carry the value of at least 5% of the debtor's GDP. The thickness of the link corresponds to the volume of the debt.

A quick glance at the network visualization on Figure 1 is enough to notice the special role French and German banks are playing in the system. Banks in these two countries are the ones that are exposed the most to the problems in other European countries.

Recognizing that European cross-border interbank lending network is tightly embedded into global interbank lending network I augment the data with the three largest global players: The United Kingdom, The United States and Japan. In what follows I report two sets of results: one – for isolated European interbank lending network (that I call a closed network), the other – for the extended (open) network that includes three large international players. In the latter case, non-Eurozone countries are taken into account in the calculations but are excluded from the presented rankings.

There are a few important characteristics of the network that we can look at. I concentrate on country rankings with respect to statistics describing country's banks' access to interbank loans, their importance in facilitating interbank liquidity flow and their overall role as lender's or receivers of the loans.

Ranking of countries with respect of different measures for closed and open European cross-border interbank networks

Panel A		Panel B	
Closeness		Betweenness	
	Closed	Open	
1	Belgium	France	Netherlands
2	Germany	Germany	Italy
3	Netherlands	Belgium	Austria
4	Italy	Netherlands	Portugal
5	Austria	Austria	Spain

Panel C		Panel D	
In-Degree		Eigenvector	
	Closed	Open	
1	France	Germany	France
2	Germany	France	Netherlands
3	Netherlands	Spain	Germany
4	Italy	Netherlands	Belgium
5	Spain	Italy	Italy

Note: France and Germany are highlighted with uniform colors.

The measure that allows us to rank the countries in our

network with respect to their access to loans is closeness centrality. This statistic measures the distance of the country's banks to the banks of all the other countries in the network. Higher centrality implies shorter distance. This, in its turn, means that banks do not have to go far in search of financial resources. Panel A of Table 1 presents the ranking of the countries with respect to closeness centrality. When the European network is considered in isolation from the rest of the world it is Germany that has the easiest access to liquidity, while France does not appear in first half of the list. However, when European network is regarded as being embedded in global interbank lending network France tops the list leaving Germany at close second. This allows to conclude that French banks go mainly outside the Eurozone for borrowing money, while German banks balance their borrowings between European and non-European banks.

Panel B of Table 1 presents rankings with respect to betweenness centrality, which measures how much control do a country's banks have over the liquidity flow through the network. This statistic calculates the frequency with which the country appears on the routes that money has to travel from every country to every other country. Higher centrality means that the banking system of the country lies on large number of routes between pairs of other countries. In this respect the closed European network is independent of influence of France and Germany. This points to the fact that banks in the system can reach each other without necessarily going through Germany or even France. The major brokers within the Eurozone seem to be the Dutch banks. Once extra-European links are considered French banks lead the board, while Germany does not appear in top five. France's top seat in open network implies that it plays the role of a broker between European and non-European banks.

Next measure is the in-degree of the country in the weighted network. This statistic basically measures how important of a

creditor a given country is for the other members of the network. Being largest creditors France and Germany swap the places as we move from closed to open network. From here we can conclude that Germany, although being larger creditor than France, has heavier non-European presence. This, clearly, is good for German banks in such turbulent times for Europe. In contrast French banks are more exposed to European risk.

Finally, Eigenvector centrality measures the importance of the country's banks in the system more accurately. It takes into account not only creditor and debtor positions in the network but also the identity of the countries that a given country has ties with. According to this measure French banks play an absolutely central role in the network under discussion. Germany comes second once we discuss an open network. The difference between France and Germany is driven by the differences in their European/non-European credit ratio as well as by the differences in composition of European credit. The most notable difference is France's extreme exposure to troubled Italy.

A broader view at Table 1 allows us to make an additional conclusion regarding the behavior of French and German banking systems. From the table it is apparent that going from closed to open network (which adds American, British and Japanese banking systems to the picture) affects positions of France much more than those of Germany. This implies that German banks keep balance in their activity between European and non-European partners. They diversify their risk more efficiently. While French banks put all their eggs in one basket – Europe, which might not be the best strategy to pursue.

All in all, the present analysis shows that the prize for reckless lending goes rather to French than to German banks. They are central in the network by virtually any measure. In visualization in Figure 1 French credit, directly or indirectly, can reach all countries except Germany and

Netherlands, while German credit only extends to four countries. And, importantly, that list of four does include Italy.