

# Firms' financing and default risk during and after the crisis

## Summary of a conference hosted by the Banque de France and OSEO on 9 and 10 February 2012

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*Access to financing, whether from banks or financial markets, is crucial for the ongoing activity of firms and their growth. However, the worsening of the financial crisis heralded in late 2008 by the failure of Lehman Brothers led to a fall in the production of new loans and, as a consequence, in the growth rate of outstanding loans to non-financial firms during 2009. This development, which was common to many countries, sparked debate: was the decline in the production of new loans the result of falling demand for credit from firms following a reduction in their activity and a deterioration of the growth outlook? Or was it above all due to a change in the behaviour of banks whose credit standards for loans to companies had become tighter, notably because of higher default risk? Evaluating this increase in firms' default risk during the crisis and determining its main explanatory factors constitutes an essential element of an effective analysis of developments in the financing of firms and their consequences.*

*These were the different issues that the speakers analysed at a conference hosted on 9 and 10 February 2012 by the Banque de France and OSEO.<sup>1</sup> The first three studies presented, based on German, Italian and French data, showed that only a relatively marginal proportion of firms have faced credit rationing, even during the crisis. This conclusion is moreover consistent with the results of the survey conducted every six months by the European Central Bank (ECB) on enterprises' access to financing. This does not mean that the crisis did not lead banks to change their behaviour regarding the supply of credit and the setting of interest rates. An Italian study showed that the crisis caused banks to change the way they set interest rates, but not in a uniform manner. Moreover, studies based on Austrian and Spanish data clearly showed that the crisis was not the only determining factor in the change in banks' behaviour. The introduction of the new rules for prudential regulation, commonly*

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NB. The complete programme for the conference can be viewed at the following address: <http://www.banque-france.fr/economie-et-statistiques/la-recherche/seminaires-et-colloques/firms-financing-and-default-risk-during-and-after-the-crisis.html>.

1 A French state-owned bank that specialises in the financing of SMEs.

*known as Basel III, has also played an important role. Lastly, various studies devoted to firms' default risk showed that the default rate for firms has been strongly impacted by the economic crises. The Austrian, Swedish, Portuguese and French studies presented at the conference, all of which were conducted using large samples of company data, arrive at similar conclusions. Firms set up most recently, particularly small firms and those that accumulate short-term debt, are most exposed to default risk. This phenomenon is, however, more or less marked depending on the sector.*

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JEL codes: E51, G21, G32, G33.

On 9 and 10 February 2012, the Banque de France and OSEO hosted a conference devoted to developments in the financing of firms during the crisis, and their consequences in terms of firms' default and bankruptcy risks. This event brought together economists from academia, banking institutions and statistical institutes. It had a two-fold objective. First, to make an as accurate as possible assessment of developments in the financing of firms, particularly by banks, during the crisis and to identify firms' determinants for these developments, as well as those stemming from banks. And second, to attempt to evaluate the impact of these financing developments, as well as that of the crisis itself, on firms' default risk and survival. Even if, as Christian Durand recalled in his opening address, the situation that we have witnessed for the past few months due to what is commonly referred to as the "debt crisis" differs somewhat from the situation that prevailed from 2007 to 2010, having an accurate assessment of the developments in the first few years of the crisis and of their determinants is crucial in deciding how best to address the current problems.

The conference was structured around three questions, which will be discussed here in turn:

- How did the supply of credit and firms' demand for credit change during the crisis? Did these developments lead to credit rationing for some firms?
- What changes in banks' behaviour have been observed since the mid-2000s? Was the crisis the sole determinant of these changes?
- How did firms' default and bankruptcy risk change during the crisis? What were the determinants of these changes?

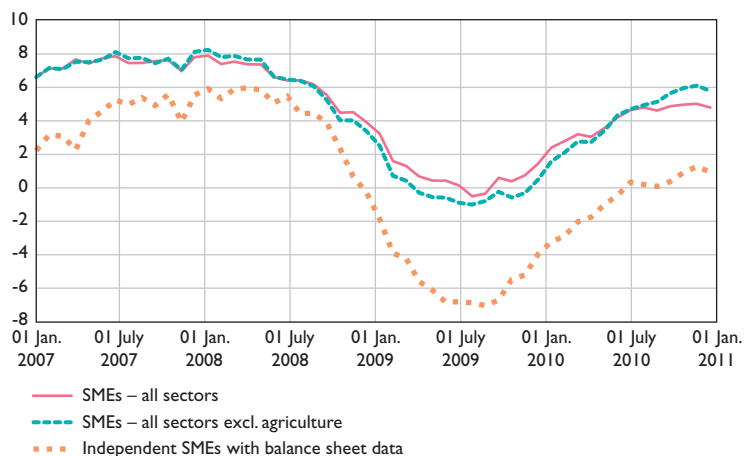
### How did the supply of credit and firms' demand for credit change during the crisis? Did these developments lead to credit rationing for some firms?

In France and many other countries, notably in Europe, the financial crisis led to a more or less protracted slowdown in the granting of credit to businesses. Thus, in France, the annual growth rate of outstanding loans to firms fell significantly in 2009, and even became negative for some categories of firms (primarily small and medium-sized enterprises – SMEs, see Chart 1).<sup>2</sup>

<sup>2</sup> Kremp (E.) and Sevestre (P.) (2011): "Did the crisis induce credit rationing for French SMEs?"

Chart I Loans to SMEs in France, 2007-2011

(year-on-year change)



Source: Banque de France.

The same trend was observed in many other countries. Thus, in Germany, this growth rate declined in 2009 to  $-3.4\%$  year-on-year in December of that year (Rottmann and Wollmershauser, 2011)<sup>3</sup> and the same developments were observed in Italy, with a negative annual growth rate of loans to enterprises of  $-0.7\%$  at the same date (Barboni and Rossi, 2011).<sup>4</sup>

In France, as in other countries, the reason for this slowdown has been the subject of much debate: was it caused by a decrease in the demand for lending from businesses which, faced with an unfavourable growth outlook, reduced their activity and revised their investment projects downwards? Or was it above all the result of a tightening by banks of their credit standards for loans to businesses? Identifying the primary cause for the slowdown observed in the granting of loans to firms is crucial to determine the economic policy measures, notably in respect of monetary policy, that should be implemented to avoid a potential “suffocation” of firms caused by credit rationing.

This is the question that the three studies presented in the first session of the conference set out to answer. The first study, presented by Horst Rottmann and Timo Wollmershauser, aimed to assess to what extent the lending behaviour of German banks could be deemed to be too restrictive. To do this, Horst Rottmann and Timo Wollmershauser used data from the economic survey conducted by the Ifo.<sup>5</sup> In this survey, as well as the questions about the business climate, firms are surveyed every six months

3 Rottmann (H.) and Wollmershauser (T.) (2011): “A micro data approach to the identification of credit crunches”.

4 Barboni (G.) and Rossi (C.) (2011): “Does your neighbour know you better? Local banks and credit tightening in the financial crisis”.

5 Ifo Institute: Information und Forschung Institut.

about their perception of banks' behaviour regarding the granting of credit. There are three possible replies: firms can report that banks' behaviour is "accommodating", "normal" or "restrictive". The authors then estimate a model aimed at identifying what in the variation in firms' responses as to the restrictive nature or otherwise of banks' lending stems from greater strictness of their credit standards for loans and not from expected consequences of the economic situation, both from the point of view of firms and banks. The results obtained show that the "restrictive" nature of banks' supply of credit was more marked in the period 2003-2004 than it was during the recent financial crisis. More precisely, this restrictive behaviour decreased steadily between the start of the period analysed (2003-2004) and July 2007. Following the subprime crisis, the credit restriction indicator increased almost continuously up until end-2009, although it did not return to the levels seen in 2003-2004, then started to fall again from the start of 2010 onwards. Thus, while the crisis caused banks to adopt a more restrictive approach, it does not appear that this led to an increase in credit rationing for firms. The drop in outstanding loans to firms appears primarily to be due to a fall in demand for lending.

The analysis presented by Giorgia Barboni and Carlotta Rossi of Italian firms' access to credit before and during the crisis is in some respects similar to Rottmann and Wollmershauser's paper. The data it is based on are comparable in nature: they come from an annual survey carried out by the Banca d'Italia of firms in manufacturing and services. In this survey, firms are notably asked whether they have additional financing needs and, if so, whether they have been refused additional lending by banks. A positive response to these two questions is then taken as an indication that the firm has faced credit rationing.

Thus, the survey data give a direct answer to the question of the level of credit rationing to which Italian firms have been subject. Only 5.2% of the firms surveyed can be regarded as having been rationed in their request for bank lending. This figure may appear low. It should however be noted that it is consistent with those arising from other surveys, such as the ECB's SAFE<sup>6</sup> survey conducted in the euro area countries and surveys carried out in France by Insee or OSEO.<sup>7</sup> The paper's aim is then to estimate the respective roles of the crisis, firms' characteristics and those of banks in the variations in credit rationing. A hypothesis to which the authors subscribe particularly is that firms that have a relationship with a local bank (in contrast to banks that have a network of branches throughout the country) suffered less than other firms, everything else being equal: local banks appear to develop "special" relationships with their customer

6 "Survey on the access to finance of SMEs in the euro area", available at <http://www.ecb.int/stats/money/surveys/sme/html/index.en.html>. The first wave of the survey was carried out in June-July 2009, and part of the survey is conducted every six months in order to update the main results.

7 Source: semi-annual business surveys of SMEs, OSEO. Available in French at: [http://www.oseo.fr/notre\\_mission/publications/etudes\\_et\\_rapports/generalistes](http://www.oseo.fr/notre_mission/publications/etudes_et_rapports/generalistes).

firms, which leads them to be more accommodating should difficulties arise. Their findings do not invalidate this hypothesis: during the crisis, local banks turned down requests for lending from businesses less often than other banks.

This question of the possible rationing of credit is also the topic of the paper presented by Elisabeth Kremp and Patrick Sevestre,<sup>8</sup> who investigate French SMEs' access to bank lending given that it is commonly agreed that SMEs are more subject than larger enterprises to difficulties in accessing external financing, including bank financing. This study differs, however, from the two previous papers in the nature of the data and the methodology used. Elisabeth Kremp and Patrick Sevestre estimate a disequilibrium model using balance sheet data from 60,000 independent SMEs (excluding micro-enterprises) compiled between 2004 and 2010. Their results show that these SMEs were rationed only to a small degree, even during the crisis. Over the period as a whole, less than 5% of firms with outstanding loans were subject to partial rationing and less than 1.5% of firms with no outstanding loans were in this position as a result of full rationing. The smallest SMEs and SMEs that were less than five years old were, however, affected more significantly: 7.0% of the smallest SMEs and 7.4% of the youngest SMEs were partly rationed; 2.6% of the smallest SMEs and 2.2% of the youngest SMEs were fully rationed. While this rationing increased slightly in 2009, it remained lower than its 2004 level owing to the sharp increase in loans observed up until 2007. This study's findings are therefore quite similar to those of the two previous papers. They are also corroborated by the SAFE survey that was conducted from 2009 onwards by the ECB among business managers: less than 30% of SMEs applied for loans in the six months preceding the survey, and less than one in ten of these SMEs that had applied for a loan reported having been subject to partial rationing and one in ten reported having been subjected to full rationing in 2009 or 2010. Similarly, OSEO's business surveys confirm on the one hand the limited nature of credit rationing and, on the other, the decisive role played by the reduction in firms' activity and in their investment projects.

Several explanations can be given for this finding, which might appear surprising. First of all, as early as October 2008, the ECB implemented strong non-standard monetary policy measures in order to allow banks to continue to play their role of financing the economy. In addition, in France, the setting in place of credit mediation also certainly played a positive role with respect to SMEs' access to bank financing. In addition, as David Scharfstein showed in his opening lecture, European banks, which accounted for nearly 30% of the syndicated loan market in the United States between 2005 and 2007, subsequently encountered

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<sup>8</sup> Kremp (E.) and Sevestre (P.) (2011): "Did the crisis induce credit rationing for French SMEs?"

difficulties in financing their dollar-denominated loans, which led them to scale back their positions on this market. It is therefore possible that at least part of the funds freed up in this way were used to maintain the financing of firms in Europe. Lastly, if the crisis did not result in extensive rationing, this may be because there had been relatively abundant credit in the preceding period. This was the argument put forward by two of the papers presented at the conference.

### What changes in banks' behaviour have been observed since the mid-2000s? Was the crisis the sole determinant of these changes?

The low level of credit rationing during the crisis might seem paradoxical. However, Horst Rottmann and Timo Wollmershauser's paper discussed above shows that banks steadily increased their supply of lending to businesses between 2004 and 2007 and that, in spite of the fall triggered by the crisis, credit supply remained at a much higher level than in 2004.

Paul Gaggl and Maria Teresa Valderrama's<sup>9</sup> paper investigates whether it was the low level of interest rates observed in the years preceding the crisis, notably between June 2003 and December 2005, that led banks to have accommodating lending policies. To answer this question, the authors constructed a database bringing together information on the outstanding loans of over 47,000 Austrian firms, the characteristics of these firms (size, age, sector of activity, financial ratios, etc.) and the possible occurrence of bankruptcy. Aggregated information on banks was also included in the analysis. The period considered is 2000-2008. The central conclusion of the analysis conducted is that the ECB's keeping interest rates low over quite a long period (around two-and-a-half years) led banks to "soften" their credit standards and to extend loans to riskier firms which they would not have lent to if interest rates had been higher. These banks' higher loan portfolio risk then made them more vulnerable to a negative shock such as the failure of Lehman Brothers and forced them to reduce their supply of credit.

It was, among other reasons, to limit credit booms in times of economic expansion and credit rationing when there is a downturn that a set of new prudential regulations, known as Basel III, has been put in place. One of the components of this new framework aims to make it compulsory for banks to build up a capital buffer during periods of economic growth, i.e. to raise their capital ratio in order to limit the risks of excessive surges in credit. In contrast, during downturns, this buffer serves to cushion

<sup>9</sup> Gaggl (P.) and Valderrama (M.T.) (2011): "Do banks take more risk in extended periods of expansive monetary policy? Evidence from a natural experiment".

unfavourable shocks and can help less well-capitalised banks to avoid substantially reducing their supply of credit.

The purpose of the study by Gabriel Jimenez, Steven Ongena, José-Luys Peydro and Jesus Saurina<sup>10</sup> is precisely to assess the impact on the supply of credit by Spanish banks of quite similar regulatory measures introduced in Spain at the start of the 2000s. This study draws on a database that compiles information on loans extended to more than 100,000 Spanish firms, the characteristics of these loans and of the recipient firms and, above all, information on the setting in place of capital buffers by banks. Two periods are looked at: 2000-2001 and 2007-2009. The authors show that these measures did indeed produce the expected effects for Spanish banks: the setting in place of these capital buffers reduced the growth of credit during the economic upturn, but increased it during the crisis, thus cushioning the adverse impact of the crisis on credit supply.

While the ability of firms to obtain a loan from their bank(s) is obviously crucial for them to continue with their business and its expansion, the cost at which these loans are obtained is also a very important component of financing conditions for firms. This issue of the impact of interest rate developments on loans to businesses was addressed by Leonardo Gambacorta and Paolo Emilio Mistrulli.<sup>11</sup> Their study aims to identify the banks that were most able to limit the widening of the spread (i.e. the difference between the interest rate on the loan and the rate at which the bank can obtain refinancing from the ECB) in spite of the crisis. To do this, they analyse developments in the interest rates on overdrafts granted between June 2008 and March 2010 to more than 80,000 Italian firms. Their conclusion is that it was the largest, most liquid and best-capitalised banks that widened their spread the least. In addition, firms that had a "close" relationship with their bank<sup>12</sup> saw their spread increase less significantly than that applied to other firms.

Lastly, Carlos Gonzalez-Aguado and Javier Suarez presented a theoretical model aimed at explaining why firms' probability of default or of bankruptcy increases following a protracted period of low interest rates. The explanation that they offer relates not to banks, but to firms themselves. In the proposed model, entrepreneurs have to call on external finance. The available resources are drawn from the cash flow from the firm's past activity and from its new borrowing. The entrepreneur uses these resources to repay past borrowing and to remunerate his investment.

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10 Jimenez (G.), Ongena (S.), Peydro (J.L.) and Saurina (J.) (2011): "Macroprudential policy, counter-cyclical bank capital buffers and credit supply: evidence from the Spanish dynamic provisioning experiments".

11 Gambacorta (L.) and Mistrulli (P.) (2011): "Bank heterogeneity and interest rate setting: what lessons have we learned since Lehman Brothers?"

12 This "closeness" is measured using different indicators: whether the firm's head office is located in the same region as that of the bank extending the loan; the number of banks lending to the firm and other indicators of the concentration of lenders; and the length of the firm's credit history with the bank.



A highly indebted entrepreneur must therefore devote a large proportion of his firm's resources to repaying his borrowing and, if his own remuneration becomes too low, may no longer have the incentive to keep running his business. This is how excessively low interest rates can lead to higher risk of company defaults: a low rate of interest encourages entrepreneurs to take on high levels of debt, which, in the event of an increase in interest rates, reduces their own remuneration and may prove to be prejudicial, over the short term, to the survival of their business. However, over the long term, this increase in interest rates leads firms to reduce their optimal debt levels and lowers their default rate.

The issue of firms' default risk was the subject of the conference's third session.

### How did firms' default and bankruptcy risk change during the crisis? What were the determinants of these changes?

The presentation by Andrea Weber and Christine Zulehner<sup>13</sup> was devoted to the investigation of two related questions: what is the relationship between the performance of firms and the composition of their workforce? And does this relationship vary over the economic cycle? To answer these questions, Weber and Zulehner exploited the Austrian Social Security Database, which enabled them to match longitudinal data on employees and firms in the private sector (apart from those in the construction, tourism and public administration sectors). They limit their analysis to firms that were set up between 1978 and 2003. In particular, they examine the survival of these firms, for each of which they have quarterly information about staff levels, the proportion of women, the proportion of blue collar workers, the median wage and average age of employees. The median survival time for the observed firms is 6.25 years. During the crisis periods, this median survival time drops to 5.5 years. By estimating a statistical model for firm survival, Weber and Zulehner find that a firm's probability of survival increases with the proportion of women employed by the firm, with this effect being even more pronounced in the case of large companies. Generally speaking, the firm's survival depends significantly on the characteristics of its workforce; it increases with firm size and the proportion of highly skilled and young workers. It is higher in firms with a lower turnover rate. The net number of firms set up varies greatly over the cycle. Firms set up during the periods of economic crisis hire less often from the stock of unemployed workers, pay higher wages to compensate for the risk of unemployment, but are subject to higher default rates.

<sup>13</sup> Weber (A.) and Zulehner (C.): "Firm performance and workforce characteristics during the economic crisis".

The issue of the relationship between the macroeconomic cycle and company default risk was also the subject of the presentation by Tor Jacobson, Jesper Lindé and Kasper Roszbach.<sup>14</sup> Their study draws on an extremely rich panel dataset that contains observations for virtually all of the firms set up in Sweden between 1990 and 2009. During this period, Sweden went through a full-scale banking crisis. The results obtained by Jacobson, Lindé and Roszbach show that macroeconomic fluctuations had a substantial impact on business defaults. Their analysis was carried out using a logit model that included both financial ratios and macroeconomic factors as explanatory variables. This model accounts with great precision for the very sharp increase in the number of business defaults during the banking crisis, as well as the fluctuations in default frequencies during the other sub-periods. Moreover, the effects of the macroeconomic variables differ from one economic sector to another. The model's out-of-sample evaluations show that it performs better than logit models that exclude macro information and than statistical analyses of time series carried out on aggregate data. The results of this study show that firm-specific factors make it possible to accurately predict firms' relative risk of default, but that macroeconomic factors are necessary to understand fluctuations in the absolute risk level.

But bankruptcy is not the only event that brings a firm's activity to an end. Some firms exit via voluntary liquidation, an event that is legally and economically distinct. In an econometric analysis based on Portuguese company data, Antonio Antunes, José Mata and Pedro Portugal<sup>15</sup> distinguish between voluntary liquidations and bankruptcies, which are quite different both regarding the magnitude of the losses incurred and the identity of those that bear them. In the case of liquidation, the creditors are generally repaid. On the other hand, bankruptcies result in outright losses for creditors, whose loans are not paid back. To conduct their analysis, Antunes, Mata and Portugal combined two very rich sources of data. The first contains information about all Portuguese firms that employ paid labour, while the second provides information about all of the loans granted by banks to firms. These data make it possible to distinguish between liquidations and bankruptcies. Larger firms and those that are the most productive have lower probabilities both of exiting voluntarily and of going bankrupt. When examining other determinants of exit, Antunes, Mata and Portugal find that access to funds differs greatly between voluntary exit and bankruptcy. Their findings also support the idea that financial decisions are used to signal firms' quality and reduce the degree of information asymmetries between borrowers and lenders. Probabilities of bankruptcy increase with the amount of short-term loans taken out by a firm, whereas the probability of voluntary exit is not affected by this type

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<sup>14</sup> Jacobson (T.), Lindé (J.) and Roszbach (K.): "Firm default and aggregate fluctuations".

<sup>15</sup> Antunes (A.), Mata (J.) and Portugal (P.): "Borrowing patterns, bankruptcy and voluntary liquidation".

of debt. Firms that borrow from several banks have a lower likelihood of voluntary exit. Conversely, firms that borrow from several banks have a higher risk of going bankrupt. Younger firms have a lower probability of exiting voluntarily and of going bankrupt. Firms that have more owners and those that have foreign owners have significantly lower probabilities of going bankrupt, while the reverse is true for voluntary exit.

Lastly, Denis Fougère, Cécile Golfier, Guillaume Horny and Elisabeth Kremp<sup>16</sup> measured the effect of the 2008 crisis on the failure rate of firms in France. The point of departure for their study is the observation that the rise in failures among firms resident in France in 2008-2010 was preceded by an acceleration in business start-ups in 2003-2004. Consequently, in order to identify the impact of the 2008 economic and financial crisis, they distinguish among the failures that occurred in 2008-2010 those that were caused by the crisis and those that resulted mechanically from company demography, since we know that many businesses do not survive the first years of their existence. The study by Fougère *et al.* was conducted using a sample of firms set up between 1 January 2000 and 31 December 2007, extracted from the Banque de France's Companies Directorate database. This period makes it possible both to encompass the 2003-2004 period in which business start-ups accelerated and to study firms that were still young at the onset of the crisis. The originality of this study stems from the size of the dataset and the diversity of the statistical sources. The statistical analysis focuses on the lapse of time between the date of the firm's creation and the date of its first default. The impact of the crisis is estimated using a duration model, stratified according to the date of the firm's creation. This model takes account of the effects of the firm's age, its sector of activity, its size and its history of payment incidents on trade bills. The proportion of failures attributable to the crisis varies greatly from one sector to another. All cohorts combined, it amounted to 27% in retail trade, 35% in transportation, 43% in manufacturing and 46% in construction. In particular, the most recently created firms, i.e. those set up in 2006 and 2007, were those that were affected most by the crisis.

### Did firms alter their liquidity management after the crisis?

This was the topic which Murillo Campello<sup>17</sup> focused on his presentation, this being the second keynote speech of the conference after David Scharfstein's lecture. Campello's point of departure was that companies use the cash they have to meet their liquidity needs, particularly during crises. If the amount of cash held influences investment, firms' liquidity

<sup>16</sup> Fougère (P.), Golfier (C.), Horny (G.) and Kremp (E.): "Did the 2008 crisis affect the survival of French firms?".

<sup>17</sup> Campello (M.): "Corporate liquidity management: lessons from the financial crisis".

management is of particular interest for the economy. But the causal link between holding cash and investment is hard to establish. It was noticed that US firms were accumulating cash in the years leading up to the 2008 crisis. This accumulation was particularly pronounced among “riskier firms”. This development was due to a change in the law that occurred in 2004: in that year, Congress passed the Homeland Investment Act (HIA), which provided for a one-off tax break for firms that brought back to the United States cash held abroad. The tax rate on repatriated cash dividends was lowered from 35% to 5.25%. Congress predicted that this measure would create 500,000 jobs over the following two years as a result of funding investment with this cash. Following the adoption of this law, only USD 400 billion of the USD 1,000 billion that US companies held in cash abroad was repatriated and the resulting job creation was much more modest than anticipated. Moreover, from August 2007, the first signs of a liquidity shortage for firms were observed. In particular, those with maturing debt had difficulty obtaining refinancing. Firms consequently resorted on a large scale to taking out lines of credit. What happened then? Some 19% of firms that took out credit lines violated their covenants, but these lines of credit were only cancelled for 9% of them. The others renegotiated their credit lines, with these new lines having similar maturities, but consisting of lower amounts. These lines of credit, many of which were not repaid, created very serious problems for banks. Firms used credit lines to ensure that they had sufficient levels of liquidity. But this raises many questions: should lines of credit enable firms to obtain liquidity? Are banks the best institutions to provide this type of service to firms? Which firms should be allowed to take out credit lines? How do credit lines and liquidity needs interact? While banks can help firms to insure themselves against idiosyncratic risks, they are not the best providers of liquidity insurance for systematically riskier firms. Since the start of the crisis, firms have accumulated large amounts of cash, notably because of their low levels of investment, difficulties in accessing liquidity in capital markets, a slowdown in acquisition activity and because the tax systems in most of the countries in which US firms operate encouraged the holding of cash. In total, the amount of cash accumulated by US firms now stands at over USD 2,000 billion. We should therefore expect to see intensive M&A activity over the coming months.

Murillo Campello came back to this prediction in the roundtable that concluded the conference. During the roundtable, David Scharfstein argued for the setting in place of an optimal system of regulation for the two activities that currently fall within the competence of banks, i.e. the granting of loans to firms and risk-sharing. His greatest fear is that these activities are partly taken over by the shadow banking system. Another problem is ensuring that creditors that have provided short-term credit are reimbursed in the event of the firm going into liquidation. Should the US Treasury open credit lines for them, with the risk of losing money if

there are too many credit lines? Pierre Jaillet then recalled the respective roles of equity capital, bank financing and market financing in the financing of firms. He also stressed the responsibility of economic policies, including monetary policy, in ensuring that external financing (bank and market financing) is not subject to distortion that would generally hamper growth and lead to an inefficient allocation of capital or to credit rationing, both of which would affect potential growth. He considered that over the past few years, economic policies have been pragmatic and able to adapt in order to avoid such distortions and any kind of credit rationing. Arnaud Caudoux commented that, during the last two months of 2011 and at the start of 2012, OSEO observed a collapse in requests for bank financing guarantees. He added that the difficulties in accessing long-term financing that companies suffer from stem not so much from the lack of long-term resources, but more from the absence of an appropriate financing mechanism (the investors are there and have funds, but lack a tool to invest in SMEs). OSEO is studying, together with the banking industry and the Treasury, the development of such mechanisms, notably via the introduction of a system of covered bonds backed by SME debt, with a State guarantee (hence OSEO's involvement). Lastly, Jean-Paul Pollin raised two points that in his view are important: on the one hand, the impact of the new regulations on the financial sector and, on the other, the possible contraction in the future of financing via equity capital. The first point concerns primarily European firms. First, because external financing in continental Europe is strongly intermediated. And then, because Europe has chosen to introduce, in parallel with the Basel III accords, new regulations for the insurance sector, known as Solvency 2. We may wonder whether the respective effects of these changes in the regulation of banks and insurance companies will not lead to a significant tightening of financing conditions for businesses. Second, the new regulatory framework to which financial institutions will be subject to should also encourage them to reduce their equity capital financing. But this is not the main cause for the rise in what we may fear is a genuine "equity gap", i.e. a scarcity of financing via share issuance. Above all, this scarcity (or this higher cost of equity capital) will stem from the ageing population, and perhaps also from investor wariness regarding these risky investments (that have been relatively unprofitable over the past decade) which the crisis has exacerbated.

**Among the conference speakers and discussants were:**

- G. Barboni (LEM, Sant'Anna School of Advanced Studies)
- C. Bruneau (Université de Paris I – Panthéon Sorbonne)
- M. Campello (Cornell University and NBER)
- A. Caudoux (OSEO)
- G. Cette (Banque de France)
- L. Clerc (Banque de France)
- C. Durand (Banque de France)
- D. Fougère (CREST and Banque de France)
- L. Gambacorta (Bank for International Settlements)
- P. Givord (Insee, CREST)
- C. Golfier (Banque de France)
- G. Horny (Banque de France)
- J-P. Huiban (INRA, ALISS)
- T. Jacobson (Sveriges Riksbank)
- P. Jaillet (Banque de France)
- E. Kremp (Banque de France and NBER)
- C. Lelarge (Insee, CREST)
- J-S. Mésonnier (Banque de France)
- P. Mistrulli (Banca d'Italia)
- B. Mojon (Banque de France)
- S. Ongena (University of Tilburg)
- B. Planès (OSEO)
- J-P. Pollin (Université d'Orléans)
- P. Portugal (Banco de Portugal)
- D. Scharfstein (Harvard Business School and NBER)
- P. Sevestre (Banque de France and Université de Paris I – Panthéon Sorbonne)
- J. Suarez (CEMFI)
- M.T. Valderrama (Oesterreichische Nationalbank)
- A. Weber (University of Mannheim)
- T. Wollmershäuser (CESifo and University of Munich)
- C. Zulehner (Johannes Kepler University Linz)