## Chapter 2

## Weathering the storm: the financial system in Italy

The Italian financial system managed to cope with the "first round" of the crisis better than most of its European peers, and banks have suffered mostly on the funding side, due to the strong tensions affecting interbank markets. Banking supervision rules and practice played an important role in ensuring Italian banks took a relatively prudent attitude as did some specific features of the economy, such as the comparatively smaller size of firms and the low debt of households. However, some of these same features that helped to shield Italian banks from the first round of the crisis may expose them to the consequences of the recession. Italian authorities and the European Central Bank provided a prompt response to ensure the banking system had sufficient liquidity, and tensions in interbank markets eased significantly in recent months. A bank recapitalization scheme, though less urgent than in other countries, has been set up relatively late, and carries conditions that may have important limitations.

Like other OECD countries, Italy is facing strong headwinds from the international financial crisis. But so far the domestic banking system has been more resilient than in many other countries. This chapter suggests that this reflects a combination of factors including traditional banking relations, bank funding largely reliant on deposits, good supervision and the absence of a full-fledged housing bubble. The chapter analyzes how the structure of the Italian financial system affected the unfolding of the crisis in Italy. Credit decelerated significantly in recent months, although tensions in interbank markets eased somewhat. Some of the same factors that helped to shelter Italian banks from the first wave of the crisis may leave them exposed to the risks arising from the impact of the recession on the financial conditions of borrowers.

# Italian banks provide financing to the corporate sector, in particular small and medium sized enterprises

The Italian financial system is centred on the banking sector, which held about 60% of total (unconsolidated) financial assets at the end of 2006, while insurance companies, investment funds, pension funds and individual portfolios held smaller proportion of total assets. Stock market capitalisation is lower than in other advanced countries; in 2007, market capitalisation stood at 50% of GDP in Italy, well below that of France, Spain, the United Kingdom and the United States (Figure 2.1). The private bond market is relatively more developed, although much less so than in the United States. On the other hand, the Italian market for government bonds is very large reflecting high public debt.

The banking sector has been deeply restructured during the past ten years, with over 300 mergers and acquisitions, involving about half of total bank assets and concentrating over 50% of total assets in five banking groups, one of the highest among large European countries (Table 2.1). Two big groups (Unicredit and Intesa – San Paolo) account for more

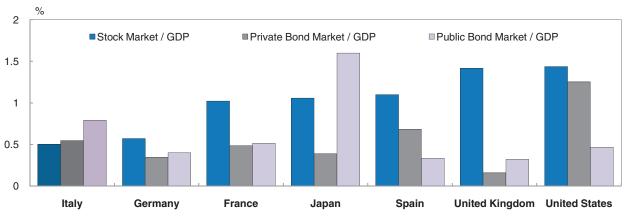


Figure 2.1. Stock and bond market capitalisation as a per cent of GDP, 2007

Source: World Bank Indicators of financial development.

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Table 2.1. Asset shares in the Italian financial system

| Banks   | Number | Share of total assets managed |
|---|--------|-------------------------------|
| Major groups  | 2      | 35.4                          |
| Large groups  | 3      | 16.1                          |
| Medium and small                                    | 56     | 36.7                          |
| Small (including co-operative banks)                | 603    | 11.8                          |
| Branches and subsidiaries of foreign banks          |        | 16.5                          |
| (average <sup>1</sup> in Germany, France and Spain) |        | 10.5                          |

1. Branches and subsidiaries of foreign banks

Source: Bank of Italy (2008a).

than a third of total assets, ranking them among the top European banks by size, with significant international operations. Foreign operations represent about a third of total assets for the top 5 banking groups. Other banking groups operate mostly in the domestic markets, where a large number of small banks, including co-operative banks specialized in local financing, are also active. Foreign banks have made a number of acquisitions in the Italian market, increasing international openness substantially.

The Bank of Italy has responsibility for the supervision of banks and other financial intermediaries and for the overall stability of the financial system. It also oversees the functioning of segments of the financial markets relevant to the implementation of monetary policy, such as the markets for interbank funds and government securities. ISVAP is the supervisory authority for insurance companies, COVIP for pension funds, and CONSOB for the Italian securities markets. Until 2005, the Bank of Italy was also responsible for competition issues in the credit market, tasks assigned to the Antitrust Authority since January 2006.

#### Firms rely on bank loans and short term debt

The Italian corporate sector is not heavily indebted by international standards, but its debt consists overwhelmingly of bank loans. Debt of non-financial corporations totalled 68% of GDP at end 2006, below that of most major countries, and the largest share of non-financial corporation debt is held by banks (Figure 2.2). However, according to national accounts data, leverage<sup>2</sup> of non-financial corporations at 38% is slightly above that of the Euro Area average, US and Japan. Part of these differences may be due to different sector and size composition, which importantly affect leverage, and in general the reliance of firms on external finance.<sup>3</sup> Analysis of firm level (balance sheet) data confirms that, even after accounting for cross country differences in the weight of sectors and size, Italian firms had, compared with the Euro area average, higher leverage, a larger fraction of bank loans over total debt, a larger share of short term debt in total debt, a lower share of bonds and a lower share of external equity (ECB, 2007 and Magri, S., 2006).

Trade credit is a larger share of total assets than in other developed countries (Omiccioli 2004, De Blasio 2004). Firms use it as a form of finance, particularly as a substitute for short term bank debt, to reduce transaction costs and synchronize payments, as a marketing tool or to reduce the effect of seasonality in production processes (Finaldi Russo et al. 2004, Carmignani, A. 2004). The wide use of trade credit may also result from the stronger inter-firm ties that develop with bilateral trade credit. The financial conditions of suppliers can be seriously affected by financial conditions of

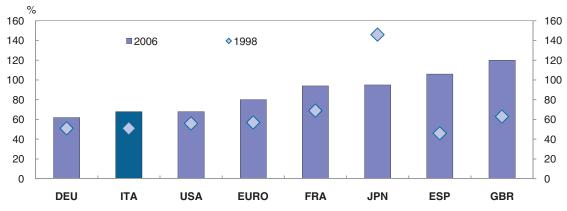


Figure 2.2. Financial debt of non-financial corporations, % of GDP

Source: Bank of Italy.

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purchasers; it may be that in times of rapidly falling confidence this credit channel, not visible in data on credit intermediated through banks or financial markets, contracts more strongly than bank credit.

Smaller firms rely more heavily than large ones on bank lending. Small and medium sized enterprises (with less than 250 employees), which account for a large proportion of output and employment, have higher leverage ratios than larger ones. Moreover, they resort more to short-term borrowing (Bank of Italy, 2008b). As their accounting information is often less transparent, they have less access to financial markets and therefore rely relatively more on internal funds and bank lending to finance operations. In recent years, Italian firms overall have increased their reliance on market-based financing, as witnessed by the rapid expansion of the bond and the stock markets and the increasing use by larger firms of the syndicated loans market.

#### The reliance on bank lending may be associated with lower innovation

The Italian financial system is skewed towards bank lending. This mainly reflects the size distribution of firms, but also Italian-specific features, such as insufficient shareholder protection (although there has been significant progress in recent years), weak enforcement of law and the tax system, which raise the costs of access to market finance. The structure of the financial system and the size of firms influence each other, as a bank-oriented system is more efficient to finance smaller firms, and firms tend to be smaller if the financial system is more bank oriented (Champenois, 2008)<sup>4</sup>.

There is broad consensus that financial development, especially the access to arm's length finance, enhances the robustness of economic growth, through more dynamic birth and growth of firms, spurred innovative activities and faster trend productivity growth (Rajan *et al.*, 1998, and Aghion *et al.*, 2007). A dynamic stock market is a stimulating factor for venture capital, which proves to be very important for the birth and expansion of innovative firms, but still ranks among the last in Europe.<sup>5</sup> The chosen proportion between debt and equity, the maturity structure of debt, the portion of market *versus* bank debt and the extent to which equity is sold on the market all influence incentives in strategic choices such starting new business lines and deciding to start exporting.

Financial systems oriented towards relationship lending appear to be less equipped to deal with the reallocation of resources, between and within sectors, needed to take advantage of growth opportunities or in times of restructuring to recover after a downturn (IMF, 2006). Conversely, in situations of financial distress, such systems may be more able to smooth shocks because banks have better information about their borrowers than bondholders. Hence they can more promptly address problems, limiting costs. Moreover, bondholders probably face greater co-ordination problems when debt needs to be restructured, delaying the resolution of distress and increasing costs. For the moment, however, these potential advantages of its bank-based system have not shielded Italy from credit tightening.

### Households are thrifty

Italian households<sup>7</sup> have a positive net financial position. Its ratio to GDP has diminished over the last 10 years, but remained higher than the euro area average, according to 2006 figures. Households' financial assets mostly consist of stocks, then come cash and deposits, and private and public bonds (Table 2.2). The share of bonds in total financial assets is larger than in most other countries. Government bonds traditionally represented the largest share, but in recent years the relative share of bank bonds has been increasing. Net wealth of Italian households<sup>8</sup> in 2007 consisted of 60% real assets and 40% financial assets. This distribution reflects changes in asset prices, but the share of real assets was larger even before the beginning of the latest housing market upswing.

Table 2.2. **Assets and liabilities of the household sector** 2006

|                | Cach               | Cash Equity |                                     |      | Financial assets and liabilities as a ratio to disposable income |         |                            |  |
|----------------|--------------------|-------------|-------------------------------------|------|--|---------|----------------------------|--|
|                | and deposits Bonds |             | Bonds and mutual Oth<br>fund shares |      | Financial<br>assets  | Financi | ial liabilities  of which: |  |
|                |                    | Per cent of | of total assets                     |      |  |         | Financial debt             |  |
| France         | 29.1               | 1.4         | 29.3                                | 40.1 | 2.90   | 0.84    | 0.70                       |  |
| Germany        | 33.9               | 10.3        | 24.9                                | 31.0 | 2.80   | 0.97    | 0.96                       |  |
| Italy          | 25.6               | 18.3        | 36.3                                | 19.8 | 3.62   | 0.67    | 0.47                       |  |
| Japan          | 50.1               | 4.7         | 16.1                                | 29.2 | 4.91   | 1.29    | 1.07                       |  |
| Spain          | 38.1               | 2.5         | 41.9                                | 17.6 | 2.81   | 1.33    | 1.24                       |  |
| United Kingdom | 26.0               | 0.8         | 14.6                                | 58.6 | 4.60   | 1.68    | 1.53                       |  |
| United States  | 13.1               | 7.1         | 45.5                                | 34.4 | 4.45   | 1.40    | 1.35                       |  |
| EU area        | 31.3               | 8.7         | 29.8                                | 30.3 | 3.05   | 0.95    | 0.89                       |  |

Note: Includes non incorporated firms and non-profit institutions. Funded occupational pensions are included in "other assets."

Source: Bank of Italy.

Although it has recently risen relative to disposable income, household indebtedness remains well below that of other countries. In 2006, the ratio of debt to disposable income was about 50% in Italy, compared with about 90% in the euro area, and more in Japan, Spain, the United Kingdom and the United States. According to the Survey of Household Wealth, only 12% of households had a mortgage and 13% a consumer loan in 2006 (Bank of Italy, 2008c). This compares with about 30% in France and 50% in the United States (data for 2004). Moreover, while credit to households has increased in recent years, this is mostly due to households in higher income brackets, with a more solid financial position.

### The impact of the crisis

Globally, the financial crisis affected the banking system through: losses on subprime and, more recently, prime mortgages granted by banks or mortgage brokers; increased liquidity needs to face losses incurred by structured investment vehicles which were taken off balance sheet but that were directly sponsored by banks; losses in portfolio investments in so-called "toxic" assets such as Asset Backed Securities, Collateralized Debt Obligations or shares of speculative funds investing in securities whose underlying assets were subprime mortgages; and difficulty in refinancing and funding due to tensions in interbank markets. Losses were also amplified by high levels of leverage worldwide.

#### Italian banks were less exposed

Italian banks were, overall, relatively less exposed in these asset classes, and were also less leveraged: at the end of 2007, the ratio between total assets and tier 1 capital was below 30 for the top 5 Italian banks, but around 40 for the average of the biggest European banking groups. Portfolio investment in "toxic assets" was also limited: Italian banks did invest in Asset Backed Securities, Collateralized Debt Obligations and other structured products, but their exposure, at the end of 2007, amounted to  $\in$  4.9 billion, only about 2% of supervisory capital. Exposure to counterparty risk connected with the possible default of financial guarantors (also known as monoline insurers)<sup>9</sup> was low, too. As a consequence, write-offs and losses have been limited: up to the third quarter of 2008, top banking groups made crisis related write-offs totalling  $\in$  4.5 billion. The top 5 banking groups were still reporting profits in the third quarter of 2008 and for the year as a whole, although these are substantially below the levels of previous years. Profits were partly sustained by the revision of international accounting standards (IAS) which allowed banks to value a smaller amount of assets at market prices.

Mortgages with very high loan to value (LTV) ratios are not common in Italy, as mortgages with a LTV ratio above 80% cannot enjoy the preferential risk weighting unless additional personal guarantees are provided to the lender. Indeed, the average loan to value ratio (around 50% in 2006) was one of the lowest among OECD countries. Moreover, equity extraction instruments were not offered (Calza et al., 2007, Rossi, 2008). No Italian bank offered subprime mortgages either domestically or abroad. The dynamics of the residential housing market in Italy were also different from elsewhere. House prices rose significantly during this cycle, but less so than in some other European countries and still rose slightly in 2008 (see Figure 1.4). The price-to-income ratio did not rise so much either, and residential investment, though still relatively high, has been less buoyant than in other countries (OECD, 2009). The volume of transactions has nevertheless fallen considerably and a stronger feedback into prices can be expected in the near future. There has been no increase in non-performing mortgages, which are at low levels. Moderate loan to value ratios (new mortgages in 2006 had an average LTV of 68% (Rossi, 2008)) ensure that incentives to default are less likely to arise, as house prices must fall very much to bring households into negative equity.

Italian banks did use securitization to move risk off their balance sheets and as a source of funding. Securitizations of assets located in Italy were about 7% of total gross emissions in Europe in 2007 (about 9% of the total amount outstanding), 10 mostly in the form of residential mortgage backed securities. In Italy securitized mortgages are less likely to become classified as non-performing than non-securitized mortgages (Bonaccorsi et al.

2008). <sup>11</sup> This suggests that banks were not using securitization just to clean their balance sheets. The quality of nearly all mortgages and therefore of securitized mortgages was relatively high, due to the absence of subprime borrowers. Thus, investment vehicles creating asset backed securities from such securitizations should have been relatively solid too. Still, Italian banks had little exposure to directly sponsored Structured Investment Vehicles <sup>12</sup> and what they had was mostly due to acquisitions of foreign banks. In these cases, the supervisory authority pressed banks to consolidate such vehicles in their balance sheets, so that risks were kept "inside" the system.

#### But credit has tightened severely nonetheless

The Italian banking system was nonetheless strongly affected by the crisis. Stock prices of financial firms plummeted: the index of financial shares lost 64% of its value from September 2007 to January 2009, in line with the losses suffered by the same index for the US (–62%) and the euro area average (–63%), although the fall was milder for the Italian index if computed from October 2008, when Lehman Brothers failed and the crisis became, globally, more acute. Credit default swap (CDS) spreads on Italian banks, which reflect market perceptions of default risk, rose significantly after the onset of the crisis (Figure 2.3). Although the average spread is lower than that of European and American banks, CDS spreads vary among Italian banks and some are relatively wide in comparison with European peers.

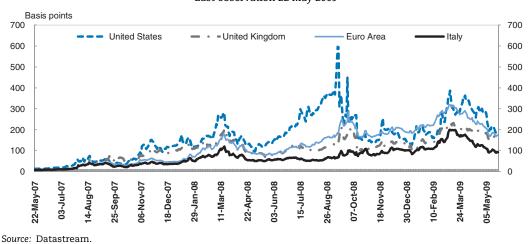


Figure 2.3. Bank credit default swap rates
Last observation 22 May 2009

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Interbank market funding has been difficult since mid-2007. Trading volumes have contracted significantly since then and spreads remained high and volatile for much of 2008. This was partly attributable to the much lower activity of foreign traders operating on the Italian interbank platform (e-MID). Interbank rates have fallen significantly following measures taken by the ECB and national central banks to boost liquidity and restore the proper functioning of the market. Since December 2008, interbank rates have been slightly below the average level reached in 2006, across all maturities. It was mainly uncollateralized transactions and the commercial paper market that were affected by the turmoil so that banks relied more on funds made available by the Eurosystem.

Italian banks have also been unable to issue significant volumes of bonds on the international bond market. They have thus increased the issuance of bonds to retail domestic investors, but this has implied an increase in overall funding costs, even though ECB refinancing rates have fallen significantly. Gross margins<sup>13</sup> are nevertheless not particularly low compared with the past. Whether this is a sign that banks are able to pass the increased costs of new funding to borrowers and use the margin to rebuild capital, or that higher gross margins are needed just to offset higher credit risk, is uncertain.

As the global financial crisis unfolded at an alarming pace, deposits from retail customers accelerated in 2008, helping to offset the fall in net interbank funding from abroad. The guarantee on an individual's account from the deposit insurance scheme,  $\in$  103 000, was already high by international standards, and the government acted early to support the guarantee fund. This may have helped banks' efforts to raise more deposits. In any case, given the sharp decline in stock markets and uncertainty on the financial soundness of borrowers, deposits could represent a relatively attractive alternative for investors.

The impact of the crisis on securities markets was severe. So far, insurance companies, with little direct exposure to subprime-mortgage related investments and to monoline insurers, have been much less affected. Overall, total exposure ranged between 0.17 and 0.2% of total reserves, and no insurance company has so far been in distress. The large fall in equity markets has, as elsewhere, discouraged new listings, with 7 IPOs in 2008, after 32 in 2007. Net private bond issues fell in the third quarter of 2008, but they are still at high levels compared with previous years. Spreads on Italian 10-year Treasury bonds rose significantly as markets demanded higher rates on Italian government debt even as rates on German debt were falling (see Chapter 1). Yield differentials widened also for private borrowers as the difference in rates on investment grade bonds issued by non-financial corporations and Italian Treasury Bills widened throughout the year, exceeding 160 basis points in early January 2009.

#### Why was the Italian banking sector less exposed?

Hence, the Italian banking system was less vulnerable to the "first round" of the crisis than that of other countries. This more limited impact can be attributed to a series of factors such as the reliance of Italian banks on a more "traditional" business model, their relatively small exposure to toxic assets, the characteristics of their funding base, and the limited recourse of Italian households to the credit market, discussed below.

The reliance of Italian banks on traditional lending activity to firms and households is to some extent visible in income and balance sheet data, although data may not be fully comparable across countries. Italian banks in aggregate have a relatively high share of loans to customers (as opposed to securities and other assets) but lower than in some countries more affected by the crisis (Table 2.3). Net interest income represented over half of total income in Italian banks, noticeably higher than French and Belgian banks but similar to Ireland and the United Kingdom. Among non-interest revenues, those from trading activities are an especially low fraction of total revenues, while revenue from services accounts for a large share. In 2006, when markets were still buoyant, revenues from trading activities constituted about 6% of total revenue, with the largest share of non-interest income represented by fees and commission charged for the sale of financial products on behalf of asset management and insurance companies, as well as fees for payment services.

Table 2.3. Net interest, per cent of total income; loans to customers, per cent of assets

All banks, 2006

|                             | Per cent                                  |  |     |               |   | Per cent              |                        |
|-----------------------------|---|--|-----|---------------|---|-----------------------|------------------------|
|                             | Loans<br>to customers,<br>share of assets | Net interest,<br>share of total income |     |               | Loans<br>to customers,<br>share of assets | Net in<br>share of to | terest,<br>Ital income |
|                             | ECB                                       | OECD                                   | ECB |               | ECB                                       | OECD                  | ECB                    |
| France                      | 35  | 25                                     | 37  | Ireland       | 62  | 65                    | 63                     |
| Belgium                     | 41  | 43                                     | 46  | Spain         | 69  | 63                    | 54                     |
| Germany <sup>1</sup>        | 42  | 68                                     | 48  | Denmark       | 71  | 53 <sup>2</sup>       | 56                     |
| Czech Republic              | 45  | 55 <sup>2</sup>                        | 41  | Finland       | 71  | 65                    | 54                     |
| Austria <sup>1</sup>        | 49  | 45 <sup>2</sup>                        | 65  | Switzerland   |   | 35                    |                        |
| Poland                      | 53  | 57 <sup>2</sup>                        | 63  | Canada        |   | 49 <sup>2</sup>       |                        |
| United Kingdom <sup>1</sup> | 55  | n.a.                                   | 65  | United States |   | 59 <sup>2</sup>       |                        |
| Netherlands                 | 58  | 54 <sup>2</sup>                        | 51  | Norway        |   | 70                    |                        |
| Italy                       | 59  | 60                                     | 52  | Korea         |   | 85 <sup>2</sup>       |                        |
| Sweden <sup>1</sup>         | 60  | 43 <sup>2</sup>                        | 52  |               |   |                       |                        |

Note: ECB data report consolidated accounts for "domestic banks", including their foreign subsidiaries. OECD data report consolidated accounts for all banks operating in the country. There are some potential inconsistencies between the two sets of data.

Source: ECB (2007), OECD.

The structure of funding also helped Italian banks overcome the tensions affecting the interbank market. Funding from retail customers, more stable than wholesale funding, constitutes a large share of the total. In June 2006, deposits from retail customers represented 37.4% of total funding, more than in Germany, France and the Euro Area average, although less than in Spain. Bonds sold to retail customers and in the Euro Area on total banks' funding, more than in the aforementioned countries and in the Euro Area on average, so that, overall, funding from retail customers represented 54.4% of total funding, a high value in international comparisons (Table 2.4). Banks were not raising funds through market instruments such as covered bonds, <sup>15</sup> which became very difficult to place as the crisis intensified, because the rules enabling Italian banks to issue such instruments were enacted only in mid-2007. Before that date, the issuance of covered bonds was not allowed. Even in the second half of 2007 no such bonds were issued, perhaps due to unfamiliarity with such instruments and the turmoil that was then erupting in global financial markets.

Finally, the limited recourse by Italian households to the credit market when compared with those of other countries suggests that the Italian market for retail products such as consumer credit was probably less mature, and banks likely had lower incentives to look for new and more complex products as they could still make money on more standard business lines.

These proximate causes of the relatively mild initial impact of the crisis on the Italian financial system may in turn depend on a prudent supervisory and regulatory stance as well as on more fundamental institutional factors, though it is difficult to provide hard evidence supporting some of the arguments.

<sup>1.</sup> ECB data use International Financial Reporting Standards, except for these countries.

<sup>2.</sup> OECD data for these countries refers to 2005.

| June 2006                      | Ital      | Italy |           | Germany |           | France |           | Spain |            | Euro Area |  |
|--------------------------------|-----------|-------|-----------|---------|-----------|--------|-----------|-------|------------|-----------|--|
| Julie 2006                     | mln euro  | %     | mln euro  | %       | mln euro  | %      | mln euro  | %     | mln euro   | %         |  |
| RETAIL FUNDING <sup>1</sup>    | 1 129 132 | 54.4  | 3 007 372 | 47.1    | 1 768 244 | 42.0   | 963 012   | 48.5  | 9 488 973  | 46.9      |  |
| Deposits                       | 775 615   | 37.4  | 2 030 155 | 31.8    | 1 260 047 | 30     | 814 344   | 41.0  | 6 811 732  | 33.7      |  |
| Bonds <sup>2</sup>             | 353 517   | 17.0  | 977 217   | 15.3    | 508 197   | 12.1   | 148 668   | 7.5   | 2 677 241  | 13.2      |  |
| WHOLESALE FUNDING <sup>3</sup> | 945 642   | 45.6  | 3 371 837 | 52.9    | 2 438 209 | 58.0   | 1 021 762 | 51.5  | 10 736 116 | 53.1      |  |
| From residents in the country  | 533 361   | 25.7  | 2 489 771 | 39.0    | 1 347 740 | 32.0   | 600 883   | 30.3  | 5 942 098  | 29.4      |  |
| MFI                            | 454 007   | 21.9  | 1 911 641 | 30.0    | 1 249 576 | 29.7   | 268 108   | 13.5  | 4 480 754  | 22.2      |  |
| Deposits                       | 374 849   | 18.1  | 1 334 038 | 20.9    | 1 028 386 | 24.4   | 234 200   | 11.8  | 3 505 785  | 17.3      |  |
| Bonds                          | 79 158    | 3.8   | 577 603   | 9.1     | 221 190   | 5.3    | 33 908    | 1.7   | 974 969    | 4.8       |  |
| From residents abroad          | 412 281   | 19.9  | 882 066   | 13.8    | 1 090 469 | 25.9   | 420 879   | 21.2  | 4 794 018  | 23.7      |  |
| MFI                            | 402 520   | 19.4  | 826 570   | 13.0    | 1 064 067 | 25.3   | 404 712   | 20.4  | 4 579 657  | 22.6      |  |
| Deposits                       | 318 406   | 15.3  | 688 183   | 10.8    | 993 730   | 23.6   | 272 154   | 13.7  | 3 958 166  | 19.6      |  |
| Bonds                          | 84 114    | 4.1   | 138 387   | 2.2     | 70 337    | 1.7    | 132 558   | 6.7   | 621 491    | 3.1       |  |

4 206 453

1 984 774

20 225 089

Table 2.4. Funding structure of the banking system, selected countries

- 6 379 209 1. Funding from clients different from monetary and financial institutions and other financial corporations.
- 2. Includes bonds held by MFI resident outside the euro area.
- 3. Funding from MFI and other financial corporations.
- 4. Includes bonds held by MFI resident within the euro area, only.

2 074 774

Source: National central banks.

Total

## Prudential supervision and regulation

An obvious candidate to explain why Italian banks were less involved in the market for "toxic assets" is banking supervision. Both explicit regulation and supervisory practices seem to have played an important role in ensuring the Italian banking system did not increase its risk exposure or leverage excessively. World Bank indicators give Italy high scores in measures of "capital stringency" and of "restrictions" imposed on banks' activities (Laeven et al. 2008 and Figure 2.4). "Capital Stringency" is an index of regulatory oversight of bank capital which incorporates information on whether funds that count as regulatory capital are invested in assets other than cash, government securities, or borrowed funds, whether the authorities verify the sources of capital, and whether regulation requires that unrealized losses are deducted from capital. "Restrictions" is an index of regulatory restrictions on the activities of banks measuring regulatory impediments to engaging in securities market activities (e.g., underwriting, brokering, dealing, and all aspects of the mutual fund industry), insurance activities (e.g., insurance underwriting and selling), real estate activities (e.g., real estate investment, development, and management), and ownership of nonfinancial firms. These indicators are clearly neither direct measures of excessive regulation (i.e. that which unnecessarily stifles innovation) nor of immunity from crisis; the United Sates scores higher than Italy on both measures whereas the United Kingdom scores below.

Some detailed aspects of prudential regulation and of supervisory practices are relevant, however. In mortgage lending, the requirement for personal guarantees discourages mortgages beyond an 80% loan to value ratio; banks are held responsible for the respect of the rules governing lending and the sale of credit products through third parties - for example, banks must ensure that mortgage brokers conform to regulations; and legislation against usury prevents mortgages with excessively high interest rates, effectively forbidding subprime mortgages.

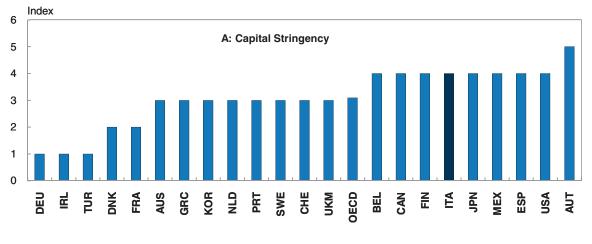


Figure 2.4. Indices<sup>1</sup> of regulatory oversight and restrictions



1. Coverage of these indicators differs across countries and may significantly affect the rankings, notably for the United States. Source: Laeven and Levine, 2008, Appendix 1.

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Regulation and prudential practice are also strict concerning disclosure and transparency. First, the supervisory authority can prescribe what information banks have to disclose in their balance sheet. As International Accounting Standards (IAS) set only general accounting principles, bank supervisors have some leeway about what information they require banks to report. Historically, Italian supervisors have asked banks to report a large amount of information on their assets, liabilities and exposures, thus enhancing the transparency of banks' balance sheets.

The prudential treatment of securitization in Italy has been stricter than that of the Basel I accord. Securitised loans can be considered as outside a bank's balance sheet only if there is an effective transfer of risk; this is similar to the more restrictive framework adopted in the Basel II accord. Furthermore, a law from 1999 requires that special purpose vehicles be recorded inserted in a dedicated register and must report information to the Credit Registry, ensuring that the supervisory authority has a large set of information about their capital situation. Finally, the crisis was also propagated in other countries and internationally by the liquidity needs of structured investment vehicles (SIVs), that were off-balance sheet but sponsored by banks, exposing the latter to risks that were not accounted for in computing capital ratios. In this respect, the Bank of Italy made it clear

that sponsoring SIVs, although possible in practice, would be subject to strict oversight, and that banks would have been required to consolidate sponsored SIVs into their balance sheets. A similar approach was taken by the Spanish authority and contributed to prevent the development of a shadow banking system (OECD, 2009, Chapter 3).

Separately, in 2003 the insurance industry regulator forbade the indexation of indexlinked products to securitizations or credit derivatives. Regulation has also discouraged the offering of guarantees against the default of bonds or other debt securities, thus reducing the extent to which Italian companies operated in the monoline market. These practices have also helped to limit the exposure of the insurance sector to the crisis.

Finally, the structure of the supervisory system is important. The Bank of Italy also has a duty of supervision on non-bank financial intermediaries that provide credit in different forms. Among such intermediaries are leasing and factoring (trade credit intermediary) companies, intermediaries offering consumer credit and, in general, all entities performing "any financing activity". In order to operate, such intermediaries must be officially registered and when obtaining registration they automatically become subject to prudential regulation. Thus, they have to comply with prudential capital requirements, they are required to adopt an appropriate governance structure, and must abide by regulatory rules to issue financial instruments. As the regulator is the same as for banks, regulatory arbitrage is difficult, even if the rules for "other intermediaries" are somewhat less stringent than those designed for banks.

Supervisory authorities showed awareness of the need for collaboration and exchange of information. Since the early 2000s agreements have been signed among Bank of Italy, CONSOB and ISVAP to exchange information on a regular basis, to identify financial conglomerates<sup>16</sup> and assess their capital adequacy, and to manage the application of the IAS accounting principles. In 2003, the Bank of Italy and ISVAP created a working group to monitor credit risk transfer between banks and insurance companies (Bank of Italy, 2004 and ISVAP, 2004).

#### **Institutional factors**

The relatively large protection given to deposits by the deposit insurance scheme, even before the crisis, may have made bank deposits more attractive to retail customers, favouring banks' funding. Moreover, as banks distribute a large share of financial products through their branches, they have an advantage in placing their own products with investors. All these factors likely contributed to the relatively high weight retail funding had, and still has, in banks' overall funding policy.

The relative underdevelopment of household credit may be partly due to bankruptcy legislation. Even after the 2005 reform of the bankruptcy code, there is no provision for individuals to declare default and obtain a "fresh start". This is likely to keep demand for credit lower than it would be if bankruptcy were available. This might be offset on the supply side by lower interest rates required by lenders who have higher security, in theory. In practice, however, the long delays in many civil court cases can mean that when default does occur, lenders often obtain repayment only with long delays and at high costs. This is probably a particularly inefficient equilibrium, depressing both demand for and the supply of consumer credit (White, 2005).

The ownership structure of some banks, where shareholders' agreements limit contestability, <sup>17</sup> may reduce pressure on CEOs for short term results and to improve upon the performance of their peers. Moreover, the transition from public to private ownership of

Italian "savings and loans" banks was achieved through the creation of "fondazioni bancarie" (banking foundations); their boards include representatives of local governments, business associations and other institutions and non-profit organisations. They may be less focused on maximizing share price value, at least in the short term, than private investors. The "fondazioni bancarie" are still among the main shareholders, even of large banking groups, although in most cases with non-controlling capital shares. In this environment, senior managers may have better incentives to create value in the medium run, rather than simply to outperform their peers in the short run, or to satisfy shareholders with immediate dividends and high share prices and avoid a take-over that may cost them their jobs. However, there are disadvantages in relatively closed structures, too; less competition means less pressure to keep costs to customers down, to innovate and to improve overall efficiency.

Indeed, Italian banks have been under close scrutiny in recent years following financial scandals related to the default of major non-financial corporations operating in the food industry, and following the Argentinean default. In both cases, banks placed bonds that were subsequently defaulted upon to retail investors; some investors won lawsuits against the bank that sold them the bonds on the grounds that the bank knew that the bonds were risky and that it placed bonds with retail investors so as to remove risk from its balance sheet. These episodes, and the ensuing clamour, may have put some pressure on banks to avoid taking on too much risk.

The structure of top executives' pay is a further factor that contributes to raise risk-taking incentives, particularly if variable pay is prevalent and takes the form of options, or other instruments whose value increases with volatility. Even though the incentive structure of lower level agents such as traders is also very important, top executives have decision powers over general strategies such as the resources to be used in trading activities, whether to operate in certain markets, or to develop certain risky products.

International data suggest that, on average, CEO pay – aggregating over all sectors – in Italy, in 2005, included a lower share of variable pay than, for example, in the United States, France, Germany and Spain (Towers Perrin, 2006). These data may not be representative of the particular situation in the financial industry but they provide a signal that payment structures for top executives in Italy put less weight on variable results. The difference with the United States is especially striking. In that country more than 60% of pay is variable, against 35% in Italy. Data from balance sheets of Italian banks suggest that in 2007 only 6 among the 27 listed banks and banking groups were using stock option plans for their top executives, including only 2 of the major 5 groups (LaVoce, 2009).

Performance pay, especially as stock options, can be a strong incentivizing mechanism and it can have beneficial effects for boosting productivity and for directing the action of the management towards creating shareholder value. However, as has emerged from the development of the crisis, payment structures that rely on stock options can also severely distort incentives and induce excessive risk taking. In March 2008, the Bank of Italy approved a new regulation on bank corporate governance requiring compensation mechanisms to provide incentives aligned on appropriate risk taking and directed at achieving the long term goals of the organisation; compensation policies should also be subject to endorsement and review by shareholders (Bank of Italy, 2008d).

Finally, the modest involvement of Italian intermediaries in the market of "toxic assets" and the prevalence of the relationship lending model do not seem to originate from limited competition. Weaker competition can indeed reduce the incentives to introduce

new products and, possibly, to take on risk (Hellman et al. 2000). However, extensive reforms took place in 1993, following the implementation of the 2nd Banking Directive, and empirical work on the Italian banking system indicates that competition increased significantly in the second half of the nineties (Angelini et al., 2003). International comparisons do not suggest that the Italian banking system was less competitive than its European peers in the early 2000s. OECD data indicate that Italy was around the OECD average when comparing indexes of regulation of activity, regulation of domestic and foreign entry, and the extent of government ownership (OECD, 2006). Measuring the degree of competition in banking is a complex task and different indicators often provide different answers. Although the picture that emerges from existing studies is blurred (Bikker et al., 2006), Italian banking does not stand out as particularly uncompetitive, so this may not be a good explanation for the relatively limited direct exposure of Italian banks to the financial crisis.

Not all the factors that have contributed to shield Italy from the direct impact of the crisis may be beneficial for long run growth, an issue not treated here. While the solvency of banks themselves may be less in question than in many countries, they are nevertheless part of the mechanism that is propagating the credit crunch and recession: the authorities have taken some measures to try to avoid a negative spiral between the current recession and further credit tightening (see Box 2.1).

## **Recent developments**

#### Credit is slowing down...

The flow of credit to households and firms, as well as its costs, both in terms of interest rates and in terms of collateral and guarantees required, exert important effects on real activity. Although the slowdown of credit may reflect a lower demand for new financing, in a context of increased uncertainty, it could also result from the reduced supply of credit by banks eager to deleverage. The contraction of credit could trigger a feedback loop, with weaknesses in the financial and real sectors feeding on each other.

After six years of sustained expansion, the growth rate of loans to non-financial corporations, corrected for securitizations, slowed significantly in the last quarter of 2008 (Figure 2.5). This was especially true for firms with less than 20 employees. The slowdown in loans has also been particularly marked for firms based in Southern Italy, the least developed area of the country.

Recent surveys of manufacturing firms report a significant worsening in credit conditions especially for firms that applied for obtaining new loans, or for expanding existing ones (Bank of Italy, 2008e and 2008f). Bank of Italy surveys report both increasing numbers of loan refusals and cuts in the size of existing credit lines, as well as increased costs on existing credit. Another survey on "Inflation and growth expectations", jointly run by the Bank of Italy and the financial newspaper Il Sole 24 Ore, in the first half of December 2008, indicates that about 40% of firms reported a worsening in access to credit, while 26.7% did so in September 2008, and about 20% in March (Bank of Italy, 2008e). The increase in the percentage of firms reporting worse credit conditions was especially pronounced among firms with 50 – 199 employees.

Percentage change on a year earlier 16 16 14 14 12 12 10 10 8 8 6 6 4 4 2 2 n n Jan-04 Jul-04 Jan-05 Jul-05 Jan-06 Jul-06 Jan-07 Jul-07 Jan-08 Jul-08 Jan-09 Source: Bank of Italy. StatLink http://dx.doi.org/10.1787/638713107238

Figure 2.5. Growth rate of loans to non-financial corporations

## ... due to both demand and supply side factors

The slowdown in credit is partly attributable to weaker demand, as firms are revising down their investment plans and cutting production, as both export and domestic demand weakened and then fell. Separating demand factors from supply is difficult, but it is clear that supply side factors contributed to the deceleration in lending. According to the Bank Lending Survey, credit conditions to non-financial companies were tightened in the second half of 2007 and for households as from early 2008 (Figure 2.6). The tightening involves amounts, margins, maturities and specific covenants aimed at limiting risk. Banks attribute the tightening both to the worsening of the crisis with the absence of liquidity in wholesale funding markets following the failure of Lehman Brothers, and to the increased riskiness of borrowers stemming from the poor economic outlook. The fourth quarter of 2008 was the first time credit managers reported that they expected significantly less tightening in the future than in the recent past.

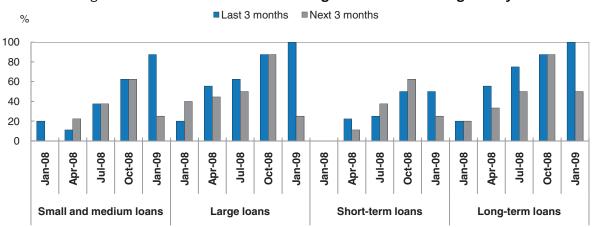


Figure 2.6. Credit conditions according to the Bank Lending Survey

Source: Bank of Italy.

StatLink http://dx.doi.org/10.1787/638723007546

Lower tension on the interbank market and measures to ensure provision of liquidity have started to produce some effects on loan interest rates. The cuts in the policy rate enacted by the ECB and the facilities it created to enhance liquidity provision helped to stabilise interbank rates. Even though funding conditions for banks are improving, rates may still be relatively high, on average, reflecting increased riskiness of borrowers induced by the recession. There has been a slight decrease in interest rates on new loans to non-financial corporations, in particular on larger loans. Interest rates are still high, and rising, on consumer credit, probably reflecting a riskier composition of borrowers applying for new loans in this market segment (Figure 2.7). The seasonally adjusted flow of non-performing loans increased, and the rise has been stronger in Southern Italy and in the construction sector. On the other hand, there has been no significant change in the default rate of loans to households.

14 14 Consumer credit Mortgage 12 12 Loans to non-financial corporations - • Short-term interest rates 10 10 8 8 6 6 4 2 2 0 Jan-2005 ul-2005 ct-2005 Apr-2006 Jul-2006 ct-2006 Jul-2008 Jan-2009 Jan-2006 Jan-2007 4pr-2007 Jul-2007 Oct-2007 Jan-2008 **Jct-2008** Source: Bank of Italy.

Figure 2.7. Average interest rates for mortgages, consumer credit and business loans

All major Italian banking groups issued statements indicating they plan to raise their capital ratios in 2009 and this is almost certainly contributing to credit tightening. Even though no bank has fallen short of minimum regulatory requirements, the current situation of Italian banks may at first sight appear worse than that of international competitors. As of June 2008, the 2 top Italian banking groups had a core tier 1 ratio below the average of major European competitors. However, the Italian authorities have adopted a relatively strict approach, within the Basle II accord, for what classes of capital can be included into core tier 1, so that a lower core tier 1 ratio may not necessarily signal a weakness in a cross-country comparison. In fact, when analyzing the ratio between bank capital and total assets, major Italian banks fare better than their European counterparts. <sup>18</sup>

Higher capital ratios may nonetheless be needed to weather the increase in nonperforming loans that the recession will bring and to provide a buffer in case further losses, for example from foreign exposure, materialize. This seems to be confirmed by the

StatLink http://dx.doi.org/10.1787/638747323123

fact that equity markets appear to require banks to have higher capital ratios, and higher ratios are probably a key condition for the recovery of a bank's share price. Capital ratios can be increased in several ways: by selling non-core assets, <sup>19</sup> raising more capital from current shareholders or raise equity on the market, or using government recapitalization facilities. The alternative is to reduce the amount of credit granted to customers, which is likely to exacerbate the recession and therefore ultimately be of no benefit to the banking sector in aggregate.

#### Risks

Even if the financial crisis had a milder impact on the Italian financial system than in other countries, and no bank found itself in conditions of financial distress, there are significant downside risks, stemming from the severity of the contraction in economic activity and its impact on the financial soundness of firms and households, both in Italy and abroad, especially for larger banks that have significant foreign activities.

### Domestic borrowers face hard times

The effect of the deteriorating economic environment on borrowers' capacity to service their loans is a major source of risk. National accounts data indicate that firms' operating profits continued to decline in the twelve months ending in September 2008, following a trend which started in 2004 and became more pronounced in the second half of 2007. Self-financing as a ratio to value added reached its lowest level in 15 years. Worsening financial conditions of borrowers can have a direct effect on banks' profitability, and could, in principle, affect the solvency of some banks. The latest significant banking crisis occurred in the early nineties, when Italy also experienced a large devaluation of its currency and was close to a public debt crisis, although the contraction in economic activity was lower than that forecast for the current recession (GDP growth dropped from 0.8% in 1992 to –0.9% in 1993, bouncing back to 2.2% in 1994) (see Figure 1.5).

Moreover, the Italian enterprise sector enters the present recession in an already fragile state, following a decade of slow growth with low productivity. The Italian financial system could be highly exposed to the contraction of economic activity. The interest margin is a large component of banks' revenues and this could constitute a source of weakness during the "second round" of the crisis, as borrowers' defaults are likely to increase. Small firms in Italy tend to rely a lot on short term bank borrowing, and with high leverage and less easily available collateral than large firms they are likely to suffer from the drying up of credit during a downturn. The widespread use of trade credit can also increase fragility and amplify the intensity of downturns, as financial conditions of different firms become interlinked through trade payables and receivables.<sup>20</sup>

#### Foreign subsidiaries may be vulnerable

A key source of risk is Italian banks' exposure to foreign markets, notably Central and Eastern Europe, where two major Italian banks have recently finalized important acquisitions, mostly establishing subsidiaries. Such exposure topped 148 billion euros in December 2008, 5% of total assets of the Italian banking system. This is not particularly large, although major banking groups, those most affected by the financial crisis, are also those most exposed and may have to absorb important losses in a context in which they are struggling to increase their capital ratios. At end 2007, Italian-owned banks held large fractions of total bank assets in Croatia, Slovakia, Hungary, Poland, Austria, Bulgaria and

Slovenia.<sup>21</sup> In absolute terms, Italian banks are mostly exposed to Poland, Croatia, Hungary and Russia (Table 2.5). In recent years these countries experienced a strong growth of credit relative to GDP, although it still remains at modest levels in comparison with Western European countries. Most loans, even if issued in local currencies, are indexed to the Euro, so that although foreign exchange risk is borne by borrowers, this increases counterparty risks for Italian-owned banks. As the recession hits these countries, Italian-owned banks could suffer losses both through deterioration in credit quality due to the adverse business cycle and due to devaluations of local currencies which may raise incentives to default. On the other hand, the overall exposure of the Italian system towards developing countries<sup>22</sup> (which include Eastern Europe) was, in 2007, lower than that of German, French, Spanish and Dutch banks.

Table 2.5. Italian banks assets in Central and Eastern Europe

|                 | Exposure (loans) bin euros | Share of banking system's assets owned<br>by Italian owned banks |  |  |
|-----------------|----------------------------|--|--|--|
| Poland          | 35                         | 18.2   |  |  |
| Croatia         | 22                         | 43.6   |  |  |
| Hungary         | 18                         | 20.3   |  |  |
| Russia          | 16                         | 1.6  |  |  |
| Slovak Republic | 13                         | 25.5   |  |  |
| Czech Republic  | 12                         | 9.1  |  |  |
| Romania         | 8                          | 8.8  |  |  |
| Bulgaria        | 5                          | 14.5   |  |  |
| Slovenia        | 5                          | 10.4   |  |  |

Source: Bank of Italy (2008a), p. 249 (Italian version) and Table 21.2 for Column 2 (share of assets).

#### The commercial property market may be less risky than elsewhere

The Italian commercial property market seems to pose less risk than in other European countries, being relatively under-developed in Italy (ECB, 2008). The share of invested property in investible property<sup>23</sup> is below 50%, while it is around 70% or more in the United States, Germany, Canada, Japan and the United Kingdom. Available price data, even though not very representative for Italy, indicate a moderate increase in nominal terms in the 2004-06 period, at around 2-3%, that is significantly lower than the increase that occurred in other countries such as Ireland, UK, Spain, France (above 12% for the former two countries, around 8% for the latter two). Survey results indicate that Italian banks have an exposure to commercial property-related loans comparable to that of the euro area average, which is not particularly large, at around 5% of total assets.

#### Raising funds from retail customers may become more difficult

As noted, Italian banks have recently become more reliant on retail funding, attracting more deposits and issuing bonds to small domestic investors. As the recession unfolds, relying on this source of funding will become increasingly difficult: weaker appetite for risk from households could reduce the demand for bank bonds and the widening spread between Italian and German government bonds might increase the cost of new issuances. Even if the recession decreases funding needs as the demand for credit weakens, due to scrapped investment plans by firms and deferred purchases of durables by households, banks will face significant disbursements to repay maturing bonds, unless they can roll them over. In the 12 months following September 2008, bonds worth € 130 billion are due to be repaid. In the

12 months following September 2009, a further € 172 billion of bonds is due to mature (Figure 2.8). These amounts are larger than a few months ago, reflecting increased bond issues during 2008 and shortening maturities. Moreover, more than 300 billion of government bonds will mature in 2009-10 (about € 150 billion in each year, and in addition to a similar amount of short term government debt). It is possible that financing this much will strain the supply of funds, and could be reflected in a reduction in lending. However, the return to normal functioning of interbank markets is likely to ease funding conditions, as will government and monetary authority liquidity assistance programs; furthermore, investors who might previously have directly invested their funds or placed them with nonbank intermediaries may be happy to lend to sound banks at the moment.

- • Sep 2007 --- Dec 2007 € Billions 200 200 160 160 120 120 80 80 40 0 40 1 year 1 - 2 years 2 - 3 years 3 - 4 years 4 - 5 years 5 - 6 years Time to maturity

Figure 2.8. Maturity structure, bank bonds

Source: Bank of Italy.

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#### Policy measures by Italian authorities

The authorities have adopted several measures to help the financial system weather the global financial storm (Box 2.1). Measures were designed to ease liquidity constraints faced by the banking sector, such as reducing the minimum size of loans eligible for refinancing operations with the ECB and the possibility to swap Italian treasury bills held by the Bank of Italy with assets held by banks. In order to improve interbank lending, the Bank of Italy, the Italian Banking association and an electronic interbank platform set up a system to allow anonymous collateralised borrowing. This initiative has been criticized on the grounds that it may contribute to fragmenting European interbank markets, as its participation is open to non-Italian bank branches only subject to agreement with the foreign institution's central bank, and that it represents an implicit subsidy to participating banks. The main issue is that the Bank of Italy provides a guarantee of last resort in case the collateral posted in the mutual scheme is not sufficient to cover the amounts due by an insolvent institution. Foreign banks can participate as long as the respective national central bank takes part in the guarantee scheme on the same terms as the Bank of Italy. To the extent to which other countries' central banks do not agree to participate in the guarantee scheme, this will end up being open only to Italian banks. However, while this may be thought of as fragmenting markets to some extent, it is hard to see who actually

suffers from this compared with the absence of the facility. The potential implicit subsidy to Italian banks would arise only if a trader fails to make a payment and both that trader's collateral and the mutual guarantee were insufficient to cover the amount due; it is not out of line with various guarantees that have been given to both banks and non-financial corporations in other OECD countries.

Bank recapitalization measures were established in October 2008 and further measures taken in February 2009. The October measures are for use only if the Bank of Italy deems a bank to have a dangerously low level of capital; this has not yet occurred. The February measure is intended for voluntary use by sound banks. The conditions have been the subject of protracted negotiations and are quite complicated (see Box 2.1).

The conditions attached to the "Tremonti bonds" in the February measures are intended to strike a balance between the need to avoid subsidies to banks, which would affect competition, and the need to encourage banks to use the funds and recapitalize so that they can be more robust to face the recession. The government wished to avoid taking a direct equity stake which might have allowed a more simple set of conditions. But the government argues that since these are designed for basically sound banks there is no need to take any ownership stake, and that it is more appropriate to design a hybrid instrument with strong incentives for the borrowers to repay early. The option to convert to equity is one-sided, as banks may redeem the bonds with equity at their own choosing, but the government bears no downside risk in this case since equity conversion cannot take place at a price below 110% of the share price at the time of the original bond issue. The other conditions attached to the bonds have laudable aims but would probably be better pursued through other means. Conditions on ensuring funds to SMEs are likely to be difficult to enforce and the moratorium on mortgage payments should be part of a coherent social safety net rather than specific to homeowners with mortgages.

The government enacted measures to cap the actual interest rate paid on existing adjustable rate mortgages to 4% (or the interest rate when the mortgage was taken out, if higher) during all 2009. This is to avoid households facing increasing costs on their payments. This measure does not look particularly convincing for two reasons. The first is that it is likely to be of little use: in practice, most adjustable rate mortgages will have a rate below 4% during the year because the Euribor interbank rate, to which most adjustable rates mortgages are indexed, has fallen and is expected to remain low for some time. The second is that it distorts the market: people choosing an adjustable rate mortgage chose not to buy insurance against interest rate risk and for some time they enjoyed a pretty low rate on their mortgage; on the other hand those choosing a fixed rate mortgage did insure against interest rate risk, which they would probably not have done if free governmental insurance had been available.

#### **Recommendations**

In order to further improve supervisory practice, it is important to keep strengthening information sharing and co-ordination both among domestic regulators in charge of different areas of the financial system and between domestic and foreign regulators. The authorities had already strengthened domestic co-ordination and information sharing before the onset of the crisis and this should be continued and extended to all regulatory authorities. The greater international profile of Italian intermediaries increases the need to monitor the activity of cross border operations. Risks for Italian banks are likely to come

#### Box 2.1. Measures to support the financial system

In October 2008 (ratified in December, Law 190/2008) measures were taken in relation to the deposit guarantee scheme, bank liquidity, and emergency bank recapitalization:

- A supplementary state guarantee to the retail bank deposits guarantee system. This did not change the level of deposit insurance, already at € 103 000, but provided a guarantee of state finance to underpin the insurance fund for three years.
- Instruments to improve bank liquidity, in place until December 2009: a state guarantee for certain bank liabilities; a facility for swapping certain bank debt for Italian government securities; and a temporary state guarantee for non-bank securities sold to banks and eligible for Eurosystem re-financing operations. The cost of the state guarantee and of the swaps are in line with the Eurosystem recommendations.
- For recapitalisation of banks deemed by the Bank of Italy to have inadequate capital. Up to 31 December 2009
  the Ministry of Finance can subscribe capital increases in the form of non-voting preference shares, in such
  banks or bank holding companies.

Other measures taken directly by the Bank of Italy in October reduced the minimum size of loans eligible for refinancing and provided for swaps, against commission, of government debt held by the Bank of Italy for assets held by banks that were not eligible for Eurosystem refinancing.

A system for anonymous but collateralized interbank lending was put in place and has been operational since 2 February 2009. The Bank of Italy evaluates the collateral provided by participating banks. It provides prompt settlement of transactions if a party to a contract defaults. It collects the collateral itself. Participating banks jointly guarantee the collateral of defaulting parties, up to the limit of 10% of their own collateral. Access to this facility, for the moment, is restricted to Italian banks, or banks from the European Union provided agreement is reached with the respective central bank.

A decree introduced in November 2008 (ratified in January, Law 2/2009) includes a very heterogenous set of measures, some fiscal (see Box 1.1). Article 12 relates to banks. It provides for the Ministry for the Economy and Finance to buy specific financial instruments (which have become known as "Tremonti bonds") issued by listed Italian banks or bank holding companies, up to the end of 2009; it is up to banks themselves whether they wish to issue the bonds which, under certain circumstances, are also open to non-government subscribers. The instruments would qualify as core tier 1 regulatory capital and carry no voting rights. The main financial and other conditions of issue are as flows:

 Two types of repayment schedule for the first 4 years, where the issuer can choose an option with lower redemption price and higher coupon payments, or one with higher redemption price and lower coupon payments.

The bonds may be perpetual, but the interest rate rises through time, while interest is payable only if the bank has distributable profits pursuant to the last profit and loss statement.

- The bank has the option of repaying with ordinary shares, provided the share prices exceeds 110% of its level when the bonds were issued.
- The bank must maintain an adequate volume of lending on appropriate terms and conditions, to be agreed in a memorandum of understanding, to families and small and medium size enterprises; the Ministry of Economy and the Bank of Italy will monitor lending flows.
- The bank must adopt a code of ethics, particularly regarding executive compensation and dividend policy, and grant a one year moratorium on mortgage payments due by unemployed people or put on reduced time.

Also specified in Law 2/2009:

- A cap of 4% (or the interest rate when the mortgage was taken out, if higher) on the interest rate households pay on flexible interstate mortgages during 2009, with the difference paid by the government.
- Banks must offer, among their products, mortgages indexed to the ECB main refinancing rate.
- A fund of (up to) € 1.6 billion to provide guarantees on loans given to small and medium sized enterprises; up to 30% of the fund can be used as a further governmental guarantee to those provided by Mutual Guarantee Institutions ("Confidi").

from foreign operations and timely sharing of information and co-operation among home and host country authorities can be critical. This is also important for the insurance market as some foreign intermediaries operating in Italy are supervised by their home country supervisor, while others are supervised by ISVAP, and smooth systems of information sharing and co-ordination of activities are needed to ensure adequate monitoring.

The measures implemented so far seem to have no adverse implications for regulatory arbitrage, and care must continue to be taken to avoid creating opportunities for such behaviour. As argued above, regulatory arbitrage does not seem to be an important issue within national boundaries as the supervisory system is relatively comprehensive. However as Italian institutions increase their international scope so, potentially, they could undertake risky activities that the relatively conservative Italian regulators would not permit, but this should be unlikely because the Italian regulators supervise the consolidated position of Italian banks, so can intervene on risk-taking at a group-wide level. Nevertheless, strengthening communication and co-operation can also serve the purpose of reducing the scope for regulatory arbitrage.

In general, for all capitalization measures, guarantees and so on, it is important to strike the right balance between incentives for banks to use the facility and avoiding implicit subsidies and other market distortions. This is of course much easier said than done even in "normal" times. In the case of the recapitalisation bonds, paying attention to these issues, but also mixing them with other objectives, has led to a somewhat complicated structure, though not out of line with measures in a number of other countries. Nevertheless, the government is seeking to influence some aspects of bank behaviour; such measures are understandable but unlikely to be very useful. Insofar as they are felt to be essential, a more level playing field would be obtained if they applied to all financial institutions, not just those issuing recapitalisation bonds.

In the longer run (and largely irrelevant to resolving the current crisis, but nevertheless of importance), the authorities, in co-ordination with others in the euro area, should consider ways to revise capital requirements to make them less pro-cyclical, with

#### Box 2.2. Summary of recommendations on the financial system

#### In the short term

While giving banks appropriate incentives to use recapitalisation facilities, avoid thereby introducing market distortions such as sector specific subsidies.

Continue information sharing and co-ordination both among domestic regulators in charge of different areas of the financial system and between domestic and foreign regulators.

Continue to ensure that changes in the regulations or supervisory structure do not create room for regulatory arbitrage, either within Italy or between the domestic and foreign operations of Italian banks.

#### In the longer term

Consider ways to revise capital requirements to make them less pro-cyclical.

Establish the regular publication of a financial stability report (preferably around a core format standardised with other countries).

one interesting option being to build on the Spanish-style dynamic provisioning mechanism, or building capital buffers (not just accounting provisions) in good times. Also a much longer-term issue, and probably not decisive, is the possibility of re-considering the proprietary structure of the Bank of Italy (it is formally owned by supervised banks). In practice it has not made much difference, but a change would avoid the accusation of "being owned by those who are regulated" which might sometimes undermine support for good policies. Finally, the regular publication of a financial stability report would be a useful way to communicate supervisory authorities' actions and judgements about the soundness of the financial system.

#### Notes

- For insurance corporations the figure refers to technical reserves. These figures do not include
  assets under management by foreign mutual fund controlled by Italian intermediaries. These are
  mostly based in Luxemburg and Ireland, and do not raise funds only in Italy. The inclusion of the
  assets of such intermediaries does not alter the picture.
- 2. Leverage is measured as the ratio of financial debt over financial debt plus equity valued at market prices.
- 3. It is also the counterpart of a relatively high capital-output ratio in Italy, according to national accounts data.
- 4. However the 2008 changes in company taxation, limiting the deductibility of interest expenses over a certain threshold, has moved the system towards an increased tax neutrality between debt and equity.
- 5. See Gompers, P. et al. (2004), data from the European venture Capital Association, Bentivogli et al. (2009) and Bank of Italy (2008b).
- 6. In this respect, bankruptcy law plays an important role, too.
- 7. The category labelled "households" includes also non incorporated firms and non-profit organisations, according to the European system of accounts (SEC95).
- 8. Including only individuals and non incorporated firms, excluding non profit organisations.
- 9. Insurance companies offering assurance against default risk.
- 10. Data from the European Securitizations Forum and Bank of Italy Annual Report on 2007.
- 11. Nevertheless, Bonaccorsi *et al.* (2008) also show that the average loan of a bank that securitizes part of its loans is riskier than those of banks that do not participate in securitization.
- 12. SIVs typically receive a credit line called "liquidity backstop" by the sponsoring bank to ensure funding liquidity.
- 13. This is computed as the difference between the average rate on new loans to non-financial corporations and the rate on new bond issues by banks.
- 14. This aggregate also includes bonds held by monetary and financial institutions resident outside the Euro Area.
- 15. Debt securities backed by assets that remain on the borrower's consolidated balance sheet.
- 16. Large financial groups active in different financial sectors, often across borders.
- 17. Shareholders' agreements are not currently in place in the top 2 banking groups. At the beginning of 2008, about 70% of the capital of the top 5 banking groups was freely traded on the stock market.
- 18. See IMF (2008) and Mediobanca (2008). In 2006 Italian banks had an average capital to assets ratio of 7.1, as against 6.0 in France and 4.3 in Germany. Admittedly, the UK stood at 8.9 and Iceland at 7.8.
- 19. The two top banking groups recently sold part of their real estate assets.
- 20. See, among others, Kiyotaki, N. et al. (1997), Boissay, F. (2006), and Battiston et al. (2007).
- 21. Countries are listed in order of the share of total banking system assets intermediated by Italianowned banks.

- 22. As defined by the Bank for International Settlements (BIS).
- 23. "Invested" property: not owner-occupied and thus owned by professional real estate investors for investment purposes. "Investible" property: investment grade quality which can be sold to professional investors or currently owner-occupied, but could become available for sale later.

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