CENTRO STUDI BANCA E FINANZA

www.cefin.unimore.it

ISSN 2282-8168

CEFIN Working Papers
No 41

The financing of Italian firms and the credit crunch: findings and exit strategies

by Elisabetta Gualandri and Valeria Venturelli

October 2013

CEFIN – Centro Studi di Banca e Finanza
Dipartimento di Economia Marco Biagi – Università di Modena e Reggio Emilia
Viale Jacopo Berengario 51, 41121 MODENA (Italy)
tel. 39-059.2056711 (Centralino) fax 39-059 205 6927

THE FINANCING OF ITALIAN FIRMS AND THE CREDIT CRUNCH: FINDINGS AND EXIT STRATEGIES

Elisabetta Gualandri
Department of Economics "Marco Biagi", University of Modena and Reggio Emilia
CEFIN - Centro Studi Banca e Finanza

Valeria Venturelli
Department of Economics "Marco Biagi", University of Modena and Reggio Emilia
CEFIN - Centro Studi Banca e Finanza

Preliminary version

Paper presented at the annual Conference of the European Association of University Teachers in Banking and Finance, Wolpertinger, Gothenburg, 28-31 August 2013

ABSTRACT

The aim of the paper is to analyse how credit crunch has modified the traditional bank-firm relationship with a particular attention to the Italian situation. Our analysis reinforces the finding that in Italy, the credit available to the real economy is insufficient in terms not only of quantity but also of quality. The subsequent step is to identify and discuss possible exit strategies for eliminating the credit crunch and to overcome serious intrinsic shortcomings in terms of alternative instruments, markets and intermediaries. In fact, if on the one hand the crisis has revealed the underdevelopment of the Italian financial market, the insufficient role of institutional investors, the embryonic state of the corporate bond markets and the virtual non-existence of commercial paper markets; on the other hand, it could finally provide the opportunity for the development of these channels. The changing role of banks in the new scenario is also analysed as well as the characteristics firms will require to benefit from it.

JEL classification: G18, G21, G28, G32, L50

Keywords: credit crunch, sovereign debt crisis, bank-firm relationship, SMEs financing, alternative financing measures.

1. INTRODUCTION

The second wave of the financial crisis, the sovereign debt crisis, which started in 2010, hit Italian banks hard, and since 2011 it has been causing a severe credit crunch for households and non financial corporations.

The aim of the paper is to analyse the way in which the credit crunch is leading to what has now become a structural disintermediation within the banking channel, and has also modified the traditional bank-firm relationship. As a consequence of these changes, action is required on the entire structure of the Italian financial system, to overcome serious intrinsic shortcomings in terms of instruments, markets and intermediaries.

To discuss these points, the paper is organised as follows. The first part will analyse the characteristics of and current trends within Europe's main financial systems: those of Italy, France, Germany, the United Kingdom and Spain. The aim is to assess the extent to which the banking system is central to companies' financial strategies, with a focus on the different size categories. We then move on to briefly describe the impact of the crisis on the Euro area credit markets, the process of fragmentation of the single financial market along national lines and the actions taken by the European Central Banks to combat this trend. The next step is to consider the trend in bank lending to non financial corporations during the last few years for each of the main European countries, in order to assess the significance of financial constraints and the severity of any credit crunches. The findings reveal that in Italy, above all, there are clear signs of a credit crunch, affecting SMEs in particular.

The final step is to identify and discuss possible exit strategies for eliminating the credit crunch in Italy: one possible way of overcoming financial constraints is for firms to turn to the bond and equity markets, which would require the involvement of new categories of financial intermediaries (institutional investors, equity funds and venture capitalists) and the emergence of new financial operators and vehicles (credit funds), as well as private and public guaranties for the securitisation of firms' loans, together with new funding platforms (crowdfunding). The changing role of banks in the new scenario is analysed as well as the characteristics businesses will require to benefit from it.

2. THE EVOLUTION OF FINANCIAL SYSTEMS AND FINANCIAL STRUCTURE OF NON-FINANCIAL COMPANIES IN EUROPE

The last two decades have seen profound changes in the structures of the main financial systems, and in operators' financial behaviours. In the financial literature (Thakor, 1996; Allen and Gale, 1999), the financial system of Continental Europe has been described as a bank-based intermediation model, contrasting with the Anglo-Saxon model, in which flows of finance pass mainly through the financial markets. For the theoretical and empirical literature are clear the implications of these two models, in terms of economic growth and the allocation and management of risks between operators. Bank-centred systems are considered to provide better intertemporal distribution of risks (Allen and Gale, 1995) but to be less effective in supporting new business ventures and technological innovations (Rajan and Zingales, 2003).

The development trends of the financial systems considered, over the medium-long term, are analysed using the harmonised statistics produced by Eurostat - Financial accounts (1995-2011), after which we focus on the structural changes reflected in the evolution of financial aggregates and balance sheet structures for non-financial corporations in a number of key European countries: Italy, France, Germany, Spain and the United Kingdom.

Table 1 Financial Intensity Ratio: Non-financial corporations Financial Liabilities/GDP - (amount outstanding)

	1995	2000	2005	2007	2008	2009	2010	2011
Italy	1.55	2.13	2.19	2.32	2.34	2.30	2.28	2.18
France	1.90	3.60	3.34	3.95	3.14	3.59	3.66	3.43
Germany	1.36	1.90	1.77	1.92	1.72	1.87	1.89	1.81
Spain	1.63	2.70	3.31	3.81	3.31	3.37	3.34	3.12
United Kingdom	2.22	2.95	2.65	2.73	2.49	2.69	2.72	2.59

Source: Our processing of Eurostat Financial Accounts

Within the Italian financial system, the level of indebtedness of non-financial corporations continues to be lower than that of the other Euro area states, with the sole exception of Germany. All countries show a slowdown in the indebtedness of non-financial corporations, with the ratio falling from the peak recorded in 2007 (Table 1).

The financial surplus/deficit trend enables us to assess the extent of the imbalances arising from operators' real savings and investment decisions, and these imbalances' effects on the creation of financial assets and investment trends. A net financial surplus or deficit indicates whether an institutional sector is tending to be a net lender or borrower, while an analysis of changes in the financial assets and liabilities structure enables us to assess to what extent financial investments and new loans originate from real imbalances or are merely reflecting operators' tendency to focus on the financial dimensions of their balance sheets.

Table 2 Financial surplus/deficit of non-financial corporations (percentage of GDP)

	1995	2000	2005	2007	2008	2009	2010	2011
Italy	-3.8	-4.9	-3.6	-2.7	-4.9	-1.6	-2.1	-2.1
France	-1.9	-1.7	-1.9	-1.8	-2.9	-0.8	-0.9	-2.3
Germany	4.6	-5.0	1.4	10.8	-3.5	2.4	0.7	0.0
Spain	0.7	-4.3	-7.4	-11.5	-6.7	-0.4	1.6	1.1
United Kingdom	1.1	-1.0	2.3	2.1	2.8	3.3	4.7	4.1

Source: Our processing of Eurostat Financial Accounts

If we focus our attention on the trend in indebtedness of non-financial corporations, Italian firms consistently show a net financial deficit. In 2011 this deficit amounted to -2.1 per cent of GDP (Table 2).

An initial assessment of the way in which financial variables affect the operations of SMEs in the various countries surveyed can be made by examining firms' financial structures, considering both indebtedness levels, meaning their degree of dependence on external sources of finance, and the breakdown of borrowing by technical form and the type of intermediary involved. A greater or lesser degree of capitalisation, varying levels of dependence on bank lending, and the prevalence of medium-long term loans, are all good indicators of SMEs' relationship with the financial system in the various countries, and these features also affect firms' economic soundness and growth prospects.

During the period under consideration, the variation in the volumes of financial intermediation and the trend in net financial surpluses/deficits were accompanied by major changes in the composition of investors' financial portfolios. The breakdown of companies' sources of finance is illustrated with reference to total stocks of financial liabilities (Table 3).

Table 3 Non-financial corporations: breakdown of liabilities^ (percentage composition)

		Debt Securities	Loans	*of which: Short term loans/Total loans*	Listed shares	Insurance technical reserve	Other accounts (receivable /payable)
Italy	1995	1.53	47.51	59.37	10.15	5.04	35.78
	2000	1.27	39.85	55.81	29.60	4.40	24.89
	2005	3.27	46.64	39.36	18.74	5.22	26.12
	2007	3.04	49.40	38.47	18.89	4.75	23.91
	2008	2.95	55.75	36.95	10.80	5.02	25.48
	2009	3.82	54.43	31.93	13.08	4.91	23.76
	2010	4.32	52.68	32.12	12.98	4.64	25.38
	2011	4.01	53.61	33.67	10.81	4.59	26.98
France	1995	8.82	42.71	21.10	18.79	0.00	29.68
	2000	7.91	30.62	27.65	40.56	0.00	20.91
	2005	8.99	35.76	29.90	33.29	0.00	21.96
	2007	6.63	36.15	28.80	36.09	0.00	21.14
	2008	7.96	43.75	28.15	23.96	0.00	24.33
	2009	9.28	39.99	26.83	27.49	0.00	23.24
	2010	9.73	38.87	26.75	27.86	0.00	23.53
	2011	10.43	40.24	26.74	24.19	0.00	25.14
Germany	1995	2.77	43.60	33.04	20.88	6.88	25.86
	2000	1.74	37.60	34.10	33.17	5.59	21.90
	2005	3.52	39.34	32.10	27.35	6.81	22.98
	2007	3.29	36.52	32.33	32.83	5.98	21.37
	2008	4.16	42.50	33.53	21.26	6.63	25.46
	2009	3.98	42.00	33.00	22.61	6.49	24.92
	2010	3.98	41.23	35.43	25.79	6.18	22.82
	2011	4.15	44.35	37.47	21.92	6.23	23.35
Spain	1995	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
	2000	1.43	41.49	24.33	25.33	0.51	31.24

	2005	0.58	49.27	20.11	20.52	0.10	29.53
	2007	0.48	51.94	17.61	21.57	0.00	26.00
	2008	0.56	59.61	16.69	14.45	0.00	25.39
	2009	0.61	61.14	13.34	15.51	0.00	22.74
	2010	0.56	61.57	12.49	14.55	0.00	23.32
	2011	0.64	62.80	11.70	12.77	0.00	23.79
UK	1997	7.33	24.71	62.15	59.62	0.00	8.34
	2000	9.78	23.85	53.47	60.18	0.00	6.19
	2005	12.47	35.11	53.22	46.42	0.00	6.00
	2007	12.03	37.15	59.40	45.40	0.00	5.41
	2008	13.02	47.85	59.03	33.26	0.00	5.87
	2009	14.06	39.97	56.40	40.59	0.00	5.38
	2010	11.67	39.19	54.92	43.94	0.00	5.20
	2011	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

Source: Our processing of Eurostat Financial Accounts
^ Total liabilities are indicated net of : currency and deposits, derivatives, unlisted shares.

If, within the institutional sectors, attention is focused on companies' financial structures, a number of important differences between the behaviour of Italian businesses and those of their European competitors emerge. European non-financial corporations show a clear preference for bank loans, especially in Spain and Italy, where on average loans account for more than 50 per cent of total financial liabilities. If we exclude unlisted shareholdings, the second largest item in terms of size is listed shares, the value of which reflects the trend on the stock market: in almost all countries except Germany, this item peaked in 2000 and fell drastically from 2008 onwards.

In Italy, specifically, bank lending is particularly important, accounting for almost 54 per cent of total financial liabilities at the end of the period; as a logical consequence, listed shares (11 per cent) and debt securities (4 per cent) are less significant for Italian firms. However, the increase in the proportion of debt securities recorded in all countries, with the sole exception of Germany, during 2008/2009 should be underlined. Last but not least, the Other accounts payable/receivable heading appears to account for a similar proportion of the financial liabilities of all non-financial corporations; in this case, it is in the United Kingdom that the item is least significant.

Further pointers can be derived from the prevalence or otherwise of medium-long term loans. There is a very high degree of variation in the duration of bank loans from country to country, reflecting the differences in the bank-firm relationship in the main systems examined. In Italy, where short-term indebtedness has always been the rule, during the last few years the balance of the financial structure has improved, with short-term borrowing accounting for little more than 1/3 of total bank credit.

It is also worth assessing the differences in financial structure between the companies in different size categories. However, assessing European SMEs' forms of financing by size categories is highly problematical due to the differences in the ways financial statements are drafted in the various countries. Generally, the BACH harmonised database is the only reliable source for comparing the performance of

European firms[1]. It provides the basis for an international comparison between companies in different size categories with the aid of information drawn above all from the national financial statement databases and surveys carried out by the main countries' central banks. When examining the main financial statement of indicators of SMEs compared to companies in other size categories, it is important to remember that the BACH database's coverage of SMEs is much more limited than that of medium and large-sized firms. In particular, within the small enterprises category it underestimates the number of extremely small businesses, which are generally also the most financially and economically fragile.

Table 4 contains the main financial structure indicators for the various company size categories for 1999-2011, for the European countries under consideration.

Table 4 Breakdown of liabilities of European firms by size class

Capital and reserves as % of (liabilities + capital + reserves)					
		Small	*Medium*	*Large*	*Total*
Italy	2000	24.9	24.5	28.4	27.2
	2005	25.1	26.9	29.3	28.4
	2007	24.6	26.1	28.8	27.9
	2008	30.0	29.2	29.8	29.7
	2009	31.3	31.1	30.5	30.7
	2010	30.2	30.9	31.4	31.2
	2011	30.2	30.9	30.8	30.8
France	2000	32.1	30.9	24.6	27.1
	2005	32.0	33.5	31.4	31.9
	2007	31.5	33.4	32.2	32.3
	2008	31.6	33.7	30.2	31.0
	2009	32.4	33.6	30.5	31.3
	2010	32.7	33.6	32.8	32.9
	2011	31.0	33.8	31.1	31.5
Germany	2000	19.5	28.5	27.3	27.1
	2005	29.1	32.8	30.4	30.6
	2007	30.5	32.7	31.1	31.3
	2008	31.0	33.6	29.6	30.2
	2009	32.2	34.5	30.3	30.9
	2010	33.4	35.7	31.9	32.4
	2011	34.8	35.5	31.8	32.3
Spain	2000	39.1	44.2	39.5	39.9
	2005	40.2	42.1	36.3	38.1
	2007	40.3	40.1	35.4	37.2
	2008	41.6	42.0	34.3	36.5
	2009	42.5	42.1	35.1	37.8
	2010	44.4	40.7	35.8	38.6
	2011	46.8	40.7	35.2	38.5
Bank debt in % total debt					
		Small	*Medium*	*Large*	*Total*
Italy	2000	31.4	31.4	21.9	25.0
	2005	33.1	31.5	18.6	22.8
	2007	35.3	33.8	18.2	23.0
	2008	37.0	34.5	19.3	24.2
	2009	37.3	34.4	18.2	23.2
	2010	37.7	34.5	18.6	23.5
	2011	37.7	35.0	19.0	23.5
France	2000	25.4	22.8	10.8	15.2

[1] The BACH (*Bank for the Accounts of Companies Harmonised*) database supplies harmonised information on the financial statements of non-financial corporations in 12 countries (Austria, Belgium, Czech Republic, France, Germany, Italy, Luxembourg, the Netherlands, Poland, Portugal, Slovakia and Spain). The data are grouped by area of business (NACE classification) and size of business (turnover), on the basis of a uniform accounting framework.

	2005	25.7	21.1	10.2	14.8
	2007	28.3	22.2	12.6	17.2
	2008	30.5	23.8	13.3	18.1
	2009	31.6	24.8	13.1	18.1
	2010	31.6	25.6	13.3	18.6
	2011	31.5	26.3	12.3	18.1
Germany	2000	44.1	43.5	13.7	19.0
	2005	45.6	40.6	11.0	17.0
	2007	44.4	37.8	11.2	16.5
	2008	45.5	39.1	12.5	17.5
	2009	45.8	39.2	12.0	17.2
	2010	45.9	38.7	11.6	16.7
	2011	47.9	41.7	11.5	16.1
Spain	2000	38.3	35.1	19.1	24.3
	2005	43.5	39.9	20.3	28.9
	2007	40.7	42.6	27.4	32.4
	2008	41.1	43.3	28.7	32.2
	2009	43.4	44.6	28.1	33.5
	2010	42.2	45.4	30.4	34.7
	2011	40.3	44.4	31.7	34.7
Short-term bank indebtedness as % of total liabilities to banks					
		Small	*Medium*	*Large*	*Total*
Italy	2000	69.5	73.9	67.5	69.6
	2005	63.5	65.7	47.8	55.4
	2007	62.8	65.4	48.2	55.6
	2008	62.0	66.3	48.6	55.9
	2009	58.2	61.2	43.4	50.9
	2010	57.7	60.0	45.1	51.4
	2011	59.3	62.1	48.5	53.8
France	2000	23.1	31.8	39.1	32.7
	2005	19.1	26.2	29.8	25.6
	2007	15.6	22.2	20.8	19.5
	2008	14.0	21.2	22.3	19.6
	2009	12.4	16.5	15.0	14.4
	2010	11.2	14.3	15.5	13.9
	2011	10.1	13.5	19.0	14.9
Germany	2000	39.0	30.6	34.0	33.6
	2005	36.9	28.7	28.4	29.9
	2007	27.6	25.4	35.0	31.1
	2008	27.1	24.4	32.6	29.5
	2009	26.3	22.2	26.3	25.1
	2010	25.6	22.5	23.8	23.7
	2011	25.0	23.7	24.8	24.5
Spain	2000	51.2	55.0	34.7	42.5
	2005	44.1	47.8	26.8	37.3
	2007	36.0	44.4	31.9	35.0
	2008	29.1	47.2	38.5	37.2
	2009	23.2	37.7	33.1	30.5
	2010	23.4	36.2	31.5	29.8
	2011	23.3	35.4	31.5	30.1

Source: Our processing of BACH data set

Except for the German situation for the period under consideration, with regard to the capitalisation indicator, there are no substantial differences between the different size categories of company. It is interesting to note that small and medium Spanish enterprises have a higher degree of capitalisation than the country's large companies. However, it should be remembered that the database used tends to underestimate the proportion of very small businesses, which normally have a much lower level of capitalisation than other firms.

Bank indebtedness accounts for a significant proportion of small enterprises' financial liabilities, but this proportion decreases significantly as the firm's size increases. This is consistent with large European corporations' tendency to make greater use of the bond market as an alternative to bank loans.

Last but not least, there is a very high degree of variation in the duration of bank loans from country to country, reflecting the differences in the bank-firm relationship in the main systems examined.

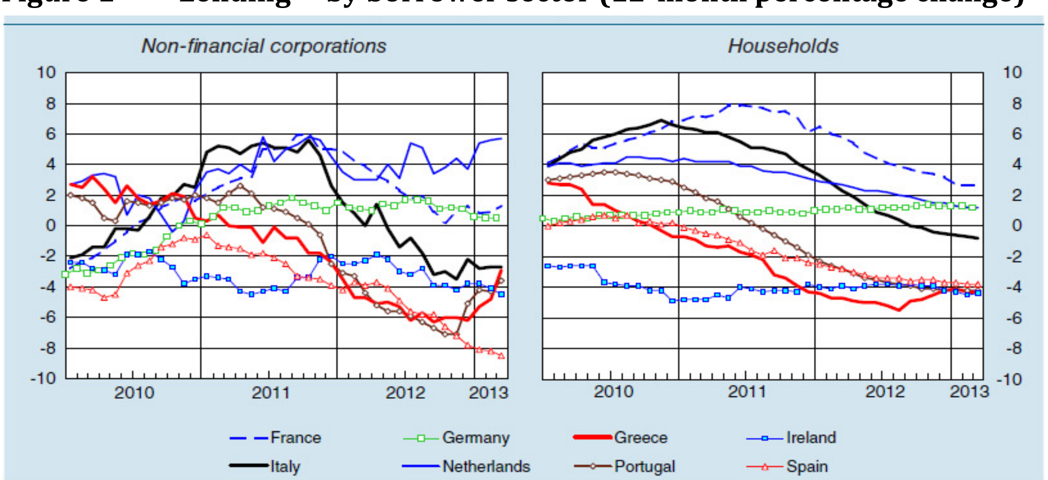
From this initial survey, it is quite clear that the structure of the financial system varies from country to country, with banks paying the central role in financing non-financial corporations, especially those of smallest size: this applies in particular to Italy, Spain and Germany. This makes it particularly important to investigate the way in which the crisis, and especially the sovereign debt crisis, has impacted on firms' ability to finance their operations, distinguishing borrowers by company size category where possible.

3. THE CRISIS AND THE CREDIT MARKET IN THE EURO AREA

During the first few years of its existence, the Euro area witnessed a growing convergence of the different member states' financial markets, in a progression towards a single financial market. However, since the beginning of the crisis, and especially the sovereign debt phase, the Euro area has experienced the opposite trend, with severe fragmentation of the single financial market along national lines.

Since the onset of the sovereign debt crisis in the peripheral states - Greece, Portugal and Ireland and then, since summer 2011, Spain and Italy - the credit markets have become strongly differentiated, with disparities from country to country in the growth of lending and the cost of credit.

Figure 1 Lending(1) by borrower sector (12-month percentage change)



Source: ECB.
(1) Loans in euros and other currencies granted by monetary financial institutions, adjusted for the accounting effects of securitizations.

Source: Banca d'Italia 2013, Annual Report 2012, Figure 7.6

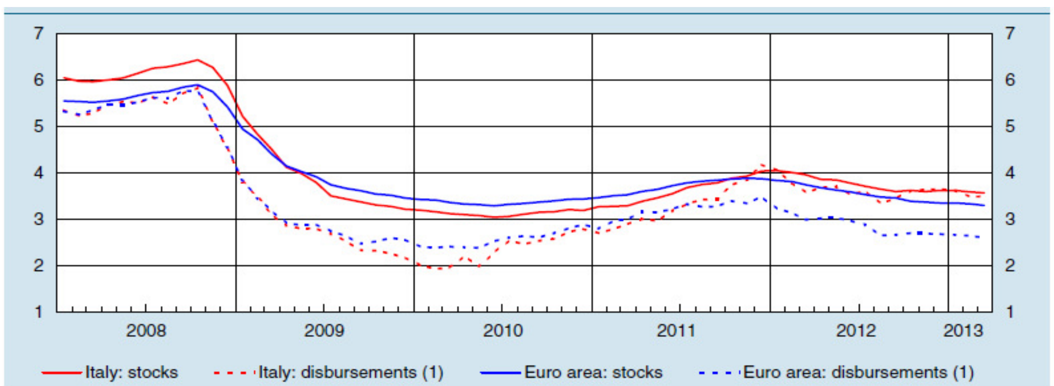
Figure 1 describes the growth in lending since 2010 for non-financial corporations and households in selected Euro-area countries. For non-financial corporations the divergence of growth in lending has increased since 2012: the trend is a negative one for Greece, Ireland, Portugal, Italy and particularly severe for Spain; it is slightly positive for Germany and France; positive for the Netherlands.

The cost of bank financing differs in the various countries, with an increasing level of divergence. A recent analysis of lending rates in the Euro area (Neri, 2013) reveals that for non-financial corporations the standard deviation of interest rates on loans increased only slightly during the first phase of the crisis, from 0.6 percentage points (2003-summer 2007) to 0.7 (September 2007- April 2010), but rose to 1.4 percentage points during the sovereign debt crisis. In this phase the variation in the cost of new loans reflected a strong correlation of lending rates with sovereign spreads.

One clear indicator of the fragmentation of the credit markets is the differentials in the cost of credit for corporations between peripheral and core countries. Interest rates on loans to businesses, which until 2011 were more or less the same in Italy (about 5 per cent) and Germany (about 4.7 per cent) have since strongly diverged: in 2013, Germany corporations are financing their operations on average at a cost of 3 per cent, as are those in France, while both Italian and Spanish corporations are paying rates of more than 6 per cent.

The trend in the differentials in interest rates on bank loans to firms between Italy and the Euro area is depicted in Figure 2.

Figure 2 Interest rates on bank loans to firms (monthly data; per cent)



(1) New transactions other than current accounts.
Source: Banca d'Italia 2013, Annual Report 2012, Figure 14.9 a

The negative effects of this financial fragmentation are particularly damaging for SMEs: the interest rate differential between new small and large (over one million Euro) loans in 2012 averaged about 150 basis points, compared to about 80 during 2003-2009 (Banca d'Italia 2013b, p. 78). The divergence in interest rate differentials between peripheral and core countries is particularly high: it is 2.3 percentage points in Spain but just one point in France (Draghi, 2013).

In a single currency area, domestic markets severely fragmented along national lines hamper the transmission of monetary policy and are an obstacle to the communication of uniform messages across the economies of the various States. The use of non-standard monetary policy instruments by the European Central Bank starting in 2011 and 2012 (the Securities Market Program SMP, the Long Term Refinancing Operations LTROs and the announced Outright Monetary Transactions OMTs) and the transfusion of large amounts of liquidity onto the market, have all been intended to restore the proper transmission of monetary policy in the financial market (Draghi, 2012).

Italian banks have made ample use of the refinancing on offer from the ECB, especially the LTROs of December 2011 and February 2013, receiving about 25 per cent of all the funds granted. In spite of this, and notwithstanding official interest rates which have been gradually reduced to levels close to zero, Italian banks' lending volumes and the interest rates charged are being adversely affected by a number of key factors: initially, from 2011, these were the credit squeeze and the higher cost of borrowing on the markets due to the sovereign risk and the tightening of capital ratios (Cosma and Gualandri, 2012). Since 2012, other factors related to the increased risk level within the economy due to the ongoing serious recession have made their effects felt: in Italy, GDP fell by seven percentage points in real terms between 2007 and 2012, while industrial output slumped by 25 per cent. This has triggered a considerable rise in the rate of non performing loans (NPLs) and especially of defaults, and a decrease in the coverage ratio (provisions for NPLs in relation to NPLs), leading to the need for additional large provisions to cover bad debts. The rate of NPLs rose from 4.5 per cent at the end of 2007 to 12.3 per cent in June 2012, while during the same period the coverage ratio fell from 49.4per cent to 37.7 per cent (Banca d'Italia 2013a and 2013b). In 2102, the Bank of Italy (Banca d'Italia, 2013c) performed in-depth checks, with on site supervision, on the country's 20 biggest banks (except for the two largest), which led to higher provisions for default and raised the coverage ratio for the sample of positions analysed from 31 per cent at 30 September 2012 to 43.5 per cent at 31 December 2012. These checks are continuing in 2013 and are expected to lead to further provisions[2].

In the meantime, the introduction of Basel 3 and in particular the new rules regarding capital adequacy, liquidity and stable funding have produced further pressures on Italian banks. Moreover, the higher risk associated to the present economic conditions, as described above, has created a bias towards investments in national government bonds, also due to their eligibility for the ECB refinancing.

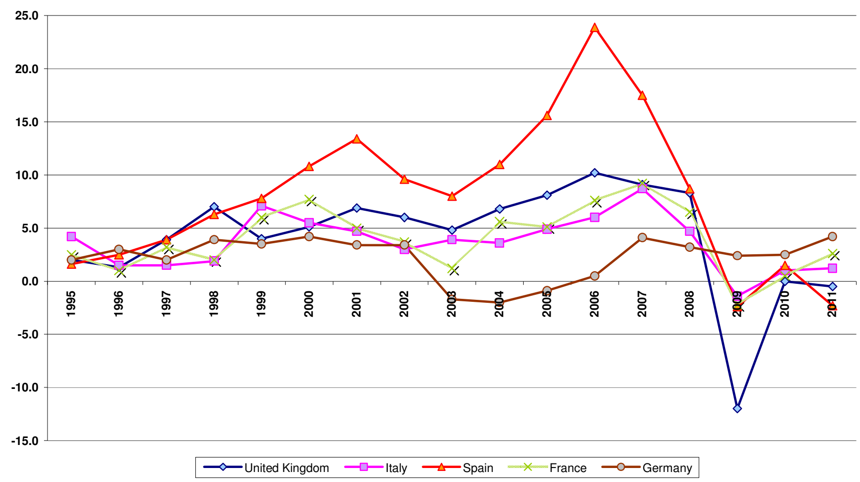
The final result of this situation is the the emergence of a severe credit crunch. Banks have implemented strict creditworthiness assessment procedures, with strong rationing to low rated firms, and an increase in the cost of lending to cover the increased risk pricing (Cosma and Gualandri, 2013), as we will see in the next section.

[2] It should be remembered that the criteria for defining NPLs are stricter in Italy than in other European States (Banca d'Italia, 2013b and 2013c).

4. ITALIAN FIRMS: FINANCIAL CONSTRAINTS AND CREDIT CRUNCH

In view of the banks' centrality in supporting companies' financial structures, we now focus more closely on an analysis of bank lending flows (Figure 3), especially starting in 2008, when credit crunch became widespread.

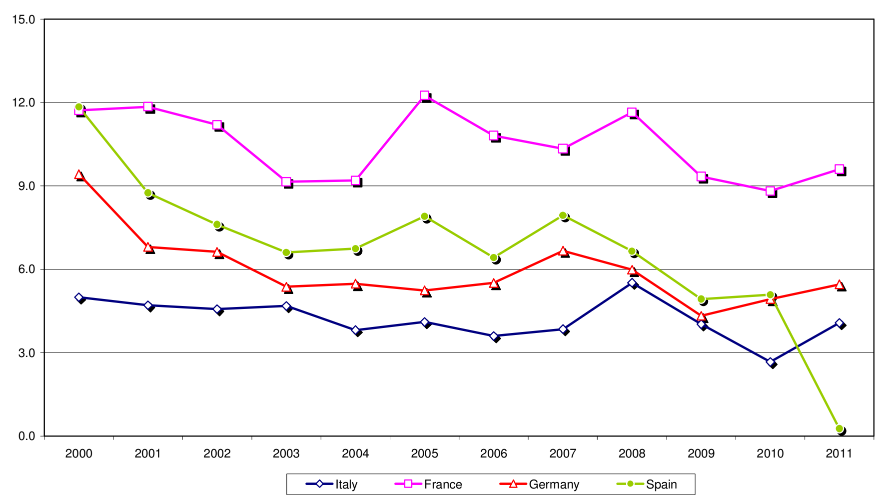
Figure 3 Bank lending flows/GDP



Source: Our processing of Eurostat – Financial Accounts

In actual fact, the negative trend in credit flows is also linked to demand factors, as can be seen from the trend in investments (which in this case include all investments in tangible and intangible fixed assets in relation to the balance sheet total), which slowed dramatically from 2008 onwards, remaining at very low levels at least for the following two years in all countries (Figure 4).

Figure 4 Corporate investment trends in Europe (in percentage of total balance sheet)



Source: Our processing of BACH data set

The extent of financial constraints for the various size categories of company and concerns about the difficulty in accessing finance can be analysed with the aid of the six-monthly "Survey on the access to finance of SMEs in the Euro area (SAFE)" conducted by the European Central Bank. The data presented in the report were collected through a survey of companies in the Euro area. The companies in the sample were selected randomly from the Dun & Bradstreet database of firms. The sample was stratified by firm size class, area of business and country. The total Euro area sample size was 7,510 firms, of which 6,960 had fewer than 250 employees. Table 5 enables us to evaluate the importance of "Access to finance" as a key concern.

Table 5 Percentage of firms reporting "Access to finance" as their principal concern

		2009H1	2009H2	2010H1	2010H2	2011H1	2011H2	2012H1	2012H2
Italy									
Large			18.2	14.4	15.5	17.1	27.5	19.9	15.0
SMEs		14.7	20.4	13.7	16.1	14.2	19.0	23.4	18.4
	Micro	19.8	19.6	12.7	14.7	13.2	17.2	24.6	16.6
	Small	9.6	22.4	17.7	19.7	16.9	21.7	20.5	22.4
	Medium	2.7	20.1	10.7	15.4	13.8	22.4	22.9	19.9
Total			20.0	13.8	15.9	14.8	20.8	22.7	17.7
France									
Large			5.1	10.7	4.2	11.4	18.4	11.1	9.6
SMEs		18.6	11.4	12.2	13.0	16.1	13.4	13.2	13.1
	Micro	19.3	16.5	15.5	18.1	22.7	15.2	13.8	14.5
	Small	15.3	7.0	12.5	13.3	13.5	13.0	14.0	11.8
	Medium	21.7	9.0	6.8	5.2	9.6	11.1	11.4	11.9
Total			8.8	11.6	9.5	14.3	15.4	12.4	11.8
Germany									
Large			13.9	7.1	8.5	6.3	2.8	11.3	8.4
SMEs		15.3	18.1	11.2	12.0	11.0	11.0	9.5	8.5
	Micro	11.5	22.6	13.1	12.5	9.6	13.8	12.0	10.7
	Small	18.9	15.5	13.9	14.0	14.1	10.2	10.1	7.4
	Medium	15.4	16.1	6.5	9.2	9.2	8.9	6.4	7.3
Total			16.5	9.7	10.6	9.2	8.0	10.2	8.4
Spain									
Large			24.7	21.6	19.3	15.3	25.6	25.8	21.1
SMEs		26.0	34.1	23.3	25.0	24.4	29.2	27.2	25.1
	Micro	22.1	30.6	23.8	22.9	25.0	30.5	26.5	23.9
	Small	28.2	39.7	23.5	27.6	21.8	27.0	29.1	27.1
	Medium	33.0	34.9	21.4	26.9	26.7	28.5	26.2	25.9
Total			31.7	22.8	23.5	22.1	28.3	26.8	24.0

Source: Our processing of microdata/data set from the Survey on the access to finance of SMEs in the Euro area (SAFE)

For the majority of countries, "Access to finance" as a concern peaked in 2009H2; after that it declined or remained stable for most Euro area SMEs, except for Italy, where recently, in 2012H1 this concern peaked at a level even higher than in 2009H2. Moreover, for Italy the situation improved in the last period surveyed for all size classes except small firms, for which it peaked during that period. In absolute terms, access to finance is a matter of greatest concern for Spanish SMEs, followed by Italian ones.

Financing constraints therefore appear to be particularly tight for Italian firms. Similar indications are obtained from an assessment of the net percentage of respondents reporting an increase (+) or decrease (-) in their need for bank loans over the preceding six months (Table 6).

Table 6 SMEs' need for bank loans – Net percentage of respondents reporting an increase (+) or decrease (-) over the preceding 6 months

	2009 H1	2009 H2	2010 H1	2010 H2	2011 H1	2011 H2	2012 H1	2012 H2
Germany	9%	13%	0%	0%	-3%	1%	-6%	-4%
Spain	12%	19%	6%	6%	5%	8%	4%	5%
France	6%	7%	1%	16%	12%	8%	10%	6%
Italy	19%	28%	8%	12%	12%	19%	15%	12%

Source: Our processing of microdata/data set from the Survey on the access to finance of SMEs in the Euro area (SAFE)

Regarding needs for external financing in all the largest Euro area countries, except for Germany, on balance SMEs reported an increased need for bank loans, particularly during the second half of 2009. The net percentage of SMEs reporting an increased need was especially high in Spain and above all in Italy, which may be linked to the high net percentage of SMEs in Italy reporting a steep decline in profitability.

Table 7 Availability of bank loans - Net percentage of respondents reporting an increase (+) or decrease (-) over the preceding 6 months

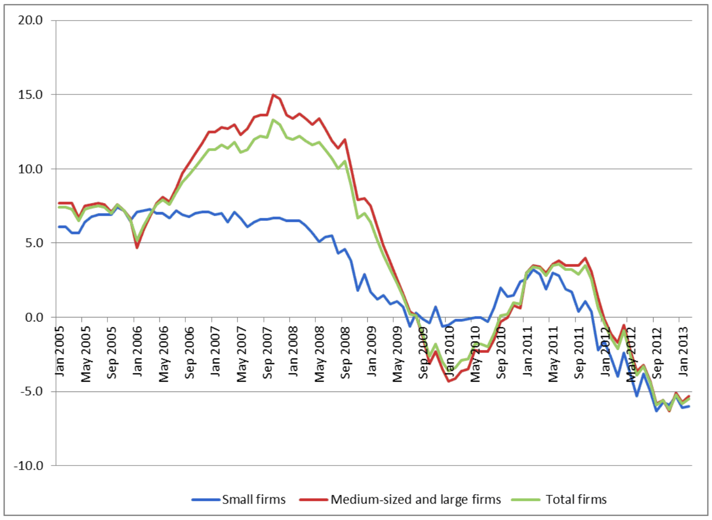
	2009 H1	2009 H2	2010 H1	2010 H2	2011 H1	2011 H2	2012 H1	2012 H2
Germany	-24%	-32%	-8%	-2%	-6%	-1%	-1%	7%
Spain	-51%	-48%	-16%	-20%	-17%	-26%	-30%	-17%
France	-19%	-14%	-2%	-13%	-14%	-19%	-21%	-18%
Italy	-26%	-29%	-6%	1%	-9%	-27%	-27%	-7%

Source: Our processing of microdata/data set from the Survey on the access to finance of SMEs in the Euro area (SAFE)

On balance, SMEs in all the Euro area countries show a (in some cases considerable) deterioration in the availability of bank loans (in the form of new loans or the renewal of existing loans). For all the periods (Table 7), Spanish SMEs report the lowest availability, with French SMEs experiencing fewest problems until 2010. From 2010H2 the net percentage of French SMEs reporting a deterioration in the availability of bank loans increased. In Italy the situation partially improved from 2010H1 until 2011H2 and then deteriorated drastically. The net percentage of German SMEs reporting a deterioration in the availability of bank loans significantly decreased from 2010 H1 onward.

Turning to the Italian situation, Figure 5 confirms the results of the survey.

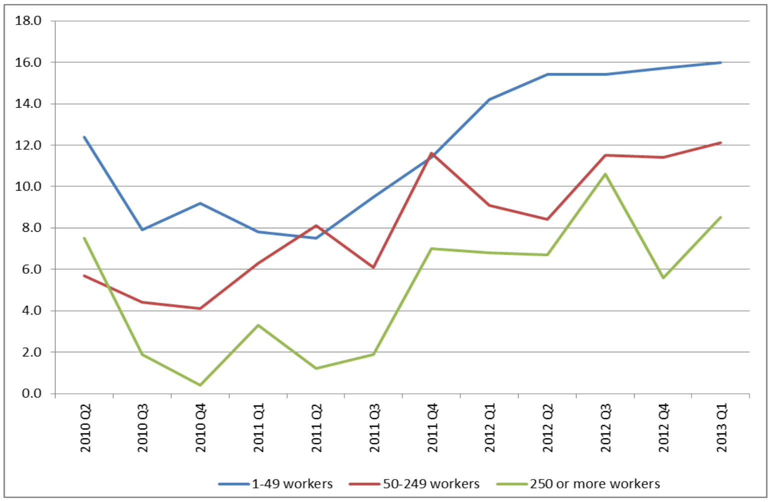
Figure 5 Access to credit in relation to size of Italian firm (3 months percentage variations)



Source: Banca d'Italia, Financial Stability Report n. 5, April 2013

In recent months bank lending has been contracting at a similar pace among all sizes of firm. Access to credit continues to be tighter for smaller businesses, since their capacity to tap alternative sources of finance is lower. Medium-sized and large firms dealt with the credit squeeze by means of large bond issues. Signs of a credit crunch can be inferred from the high percentage of smaller firms declaring that they had not obtained the credit requested (Figure 6).

Figure 6 Share of credit-rationed firms (per cent)

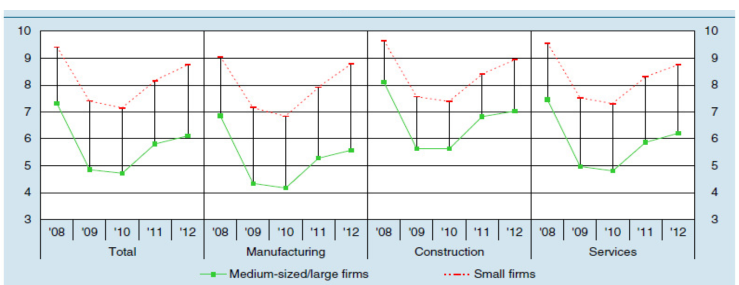


Source: Banca d'Italia, Financial Stability Report n. 5, April 2013

Figure 6 shows the percentage of manufacturing firms reporting that they had applied to a bank or financial company for credit within the last three months and been refused. From the graph it is clear that access to credit continues to be tighter for smaller businesses. The percentage of the latter declaring that they had not obtained the credit requested was considerably higher than in the larger size classes.

Another important point is the cost of funding for the different categories of firms. Figure 7 describes the trend in interest rates on banks' loans to firms in Italy by firm size and area of business. It clearly emerges that SMEs, especially those in manufacturing, pay an increasing higher cost than larger corporations.

Figure 7 Interest rates on loans in relation to firm size (percent)



Source: Banca d'Italia 2013, Annual Report 2012, Figure 14.9

In contrast with previous years, the reduction of bank credit affected not only companies in fragile financial conditions but also those with sounder balance sheets (Table 8); for these latter companies the reduction largely, but not only, reflects the replacement of credit with bond issues. Small firms felt the effects of credit restrictions the most.

Table 8 Trends in lending by creditworthiness^ of firms in Italy: 12-month percentage change

	Sound	Vulnerable	Risky
Dec 2010	4.1%	1.5%	-6.5%
Dec 2011	4.1%	1.0%	-5.4%
Dec 2012	-3.1%	-1.7%	-7.2%

^ The data refer to a sample of some 340,000 firms, distributed among the different risk classes on the basis of to their Z-scores (assigned by CERVED on the basis of a number of balance-sheet indicators). Firms are defined as "sound" with Z-scores of 1 (high safety), 2 (safety), 3 (high solvency), and 4 (solvency); "vulnerable" with Z-scores of 5 (vulnerability) and 6 (high vulnerability); and "risky" with Z-scores of 7 (risk), 8 (high risk) and 9 (very high risk)

Source: Banca d'Italia, Financial Stability Report n. 5, April 2013

The analysis therefore reveals signs of a credit crunch not only for SMEs but also for sound corporations, perhaps indicating a structural problem within the Italian banking system, where intermediaries may be less specialised and not sufficiently equipped to assess the creditworthiness of companies, especially those operating in the most innovative sectors.

The crisis should finally provide the opportunity for opening up new channels of financing, as an alternative to bank credit.

5. THE EXIT STRATEGIES

In many European countries the restoration of a satisfactory flow of financing to firms, especially SMEs, is the essential precondition for escaping from the current recession. Credit crunch exit strategies are at the centre of the debate and of policy makers' attention, at both the national and the international levels. Italy is a special case for a number of reasons: the particularly high importance of bank lending, the relative underdevelopment of a number of aspects of the financial system affecting firms' ability to access capital markets (Panetta 2013), high general government's commercial debts to companies, and last but not least banks' difficulties arising from a sharp increase in NPLs and the consequent need for higher loan provisions, in a situation of squeezed margins.

Given this situation, it must be taken as read that in the short term the Italian banking system is not capable of restoring the flow of credit companies need. It is thus clear that the slackening of financial constraints for firms, and for SMEs in particular, will have to pass through alternative channels, as the July 2013 IMF Mission also stated. Therefore, supported by a wide-ranging debate, the policy makers[3] have been focusing for some time on measures to develop these channels, including tailor-made legislation. Some actions have already been taken and others are in the pipeline.

One initial measure is the repayment of the public sector's debt to Italian businesses, estimated at around 90/100 billion Euro. In the last years, the excessive public sector deficit was one of the main causes for the delay in these repayments. Repayments have now been scheduled over two or three years and

[3] Reference can be made to the countless articles on this topic that have recently appeared in the press. First and foremost, see http://www.ilsole24ore.com/.

this has been made possible, above all, by Italy's exit in June 2013 from the infraction procedure for excessive public sector deficit (the country has been below the critical 3 per cent deficit/GDP ratio since the start of 2013). Since 2013 repayments are due by 60 days, thanks a new EC legislation.

Below we offer an overview of financial channels which may be used as an alternative, or in addition, to bank lending and the measures intended to encourage their development. We will then provide a more detailed discussion of the opportunities and obstacles relating to the birth and expansion of the bond market for SMEs (corporate bonds and securities generated through the securitisation of credit to SMEs).

1. Bond market. The Italian government's "Decree for Growth" (Decree Law 83/2012, art. 32) eliminated a number of fiscal and other constraints which discouraged the issue of corporate bonds by unlisted firms. The decree related to the so called "mini bonds", or financing bills/commercial papers (CP) at 1-36 months (previously 3-12) and bonds with duration of at least 36 months. It envisages the involvement of a sponsor intermediary to provide assistance to issuers, market making and liquidity, certify the firm's latest financial statements and place the bonds with "qualified investors" (as defined by art. 100 of the Consolidation Law on Financial Institutions). The issuer is able to benefit from a number of tax breaks typical of corporate bonds, and write off the interest paid against tax. The first issues by unlisted medium-large firms were large in size and in some cases acted as drivers for subsequent take-overs, as in the case of Cerved, acquired by CVC funds in February 2013. There are still significant barriers to the issue of instruments of this kind by smaller-sized firms, due to problems on both the demand and the supply sides, to be described in greater detail below.
2. The "Fondo di Centrale di Garanzia (FCG)", or SME Guarantee Facility. The FCG, which has been in operation for more than ten years, is a public facility backed up by Government guarantees which provides guarantees to banks and intermediaries on lending to financially sound SMEs in all areas of business. It has been beefed up with effect from 2009 with an increase in Government resources and the gradual expansion of the categories of eligible beneficiaries to include firms in temporary difficulty (Bartiloro et al., 2012). However, many operators are unaware of its existence and it is underused. One possible way of extending its operations would be to enable the FCG to provide guarantees to investors in corporate bonds: this might encourage foreign investors, now already interested in the mini bond business, to increase their involvement in Italy.
3. Cassa Depositi e Prestiti (CDP). The CDP ("Bank for Savings and Loans") is a joint stock corporation principally owned by the Ministry of Economy and Finance (MEF) (80.1 per cent) and by a group of banking foundations (18.4 per cent). Most deposits are in the form of post-office savings accounts. Since 2009 it has been providing medium and long-

term loans to SMEs through the banking channel in accordance with clearly defined ceilings; since 2010, with other private investors, it established a private equity fund for SMEs (Fondo Italiano d'Investimento). Its operations to support SMEs could be reinforced both through participation in funds with the specific mission of investing in bonds issued by SMEs or the relative securitised instruments, and through the provision of guarantees on these securities.

4. The European Investment Bank (EIB) and European Investment Fund (EIF). Lines of intervention are in operation on specific EU programmes to aid SMEs: loans, guarantees and equity financing. For the medium and long term (2014-20 programme), the European Commission has put forward proposals for a new generation of both short and medium-long term financial instruments for SMEs, also involving loans, guarantees and equity financing. Italy's level of use of these facilities is relatively low compared to France and Germany and it is in this area that action is necessary in the immediate term.

   The European Commission and EIB are also working on risk sharing instruments (European Commission and the European Investment Bank Group, 2013). The aim is to combine the lending capacity of the EIB and the European Investment Fund as well as resources from national promotional banks to finance special activities in EU priority areas (Draghi, 2013). Another hypothesis is the purchase of asset-backed securities by the Commission and the EIB, with the added aim of revitalising the market in these instruments.
5. Securitisation and covered bonds to guarantee bank lending to SMEs. The aim is to revitalise a market which has traditionally been underdeveloped in Italy but which has also been seriously penalised everywhere by the sub prime crisis. At the European level, there is the need for regulation on the aspects hindering the recovery of the ABS market, with measures to promote transparent, useful securitisation to benefit companies in general, including SMEs. The aim is to establish a uniform framework with other instruments with regard to aspects such as risk, rating and duration (Draghi, 2013). In relation to these instruments, two aspects require monitoring in the immediate term: firstly, the scope for banks to use them for refinancing with the ECB. In the case of Italy, the second aspect is the provision of a specific system of guarantees to encourage institutional investors to buy bonds the underlying instruments of which are bank loans to small and medium enterprises. In Italy, work is underway on a proposal to amend law 130 of 1999 on securitisation, to favour the development of instruments of this kind.
6. New credit intermediaries. The reference here is to credit funds, widely developed in a number of contexts, including the USA. These funds provide credit to SMEs further to due diligence, and then securitise the credit for retail sale. Funds' capital would have to be underwritten by institutional investors. Typically, credit funds form part of the shadow

banking system, and before they can be introduced, legislation is required to establish the relevant regulatory perimeter. Legislation is currently being drafted on this, and if approved quickly it could have a high impact on the financing of businesses, by directing institutional deposits towards this area.

7. Venture capital and private equity. The Italian asset management industry is underdeveloped in general and in particular with regard to specialist vehicles for financing SMEs. This situation is partly explained by the fact that many small Italian companies are family owned, and by the extreme reluctance of family-based capitalism to open up businesses' equity structures to outside investors. Another reason is companies' traditional high degree of dependence on bank lending, although the bank-firm relationship has been severely weakened during the last few years. In order to overcome this impasse, actions of various kinds are required: by policy makers, to introduce tax breaks to facilitate institutional investors (problematical due to the parlous condition of government finances); by banks and other intermediaries, the CDP and the banking foundations, to promote vehicles of this kind; and by banks, to provide services that assist companies in their entry onto the market alongside their traditional lending operations. However, none of this will be effective unless firms accept the need to open their ownership structures to outside investors.
8. Institutional investors. Compared to other countries, in Italy the role of institutional investors in the acquisition of corporate equity is very low. One of the reasons is the firm cronical reluctancy in opening equity capital to outside investors; to this end a strong cultural change is required. The reinforcement of this role, to be achieved first and foremost through regulatory changes, could have a major impact for unlisted companies in the medium term, especially through the investment of the technical reserves of insurance companies. Amendments to the regulations of their supervisory body, the IVASS, to allow this are currently on the drawing board.
9. Crowdfunding. Italy was the first European country to adopt specific legislation for the development of crowdfunding platforms (Decree Law no. 179 of 18 October 2012, known as the Growth Decree 2.0). This was followed by resolution no. 18592 dated 26 June 2013 of the Italian Stock Exchange Regulator (Consob), issuing a regulation covering equity crowdfunding (the raising of venture capital by innovative start-ups using on-line portals). These platforms are still in their infancy in Italy compared to other countries, but in the light of the new regulatory framework, the potential for the retail raising of venture capital for innovative start-ups is high.

Table 9 summarises the main aims of the instruments/actions described above and specifies their implementation status and possible short-term impact in reducing credit crunch.

Table 9 Instruments and actions for the creation/reinforcement of financing channels for SMEs other than bank loans

Targets of actions Actions/New instruments/Intermediaries	Access to ECB refinancing	Credit	Guaranties	Corporate bond	Risk capital	Implementation status	Degree of efficacy in the short term on credit crunch	Potential impact on credit crunch
Corporate bonds - Mini bonds				X		Implemented by means of the Growth Decrees, 2012 (August) and 2.0 (October)	High for medium-large firms. Low for SMEs	Very high
SME guarantee facility			X			Reinforced since 2009. Further actions awaiting approval to amend eligibility criteria and extend geographical coverage	Medium	Very high
Cassa Depositi e Prestiti		X (through banking channel)	X (in the pipeline)		X (through participation in the Fondo Italiano di Investimento) Involvement in new funds being planned	Involvement already extended. Further expansion being planned with involvement in funds investing in securities issued by SMEs and the provision of guarantees on instruments of this kind	Medium	High
EIB/EIF			X		X	Reinforcement planned at EC level. Better use by Italy required	Low	High
Credit funds		X				In the planning stage	No one	Very high
Securitisation, ABS and Covered bonds	X	X		X		Amendments on the drawing board. ECB policy on eligibility for refinancing is completely independent.	Low	Medium
Venture capital & private equity					X	Actions and measures planned	Low	Very high
Institutional investors				X	X	Actions and measures planned (Amendment of IVASS Regulations)	No one	Very high as for the technical reserves of insurance companies
Crowdfundig					X	Legislation and regulations introduced	Low	High for innovative start-ups

The majority of these actions (some of which still only exist on paper) aim to overcome the acknowledged weak points of the Italian financial system by aiming to extend the structure and complexity of markets, intermediaries and instruments, first and foremost in order to develop capital markets for SMEs, previously neglected due to the preference for traditional bank credit (Banca d'Italia, 2013b).

Below, we will assess the actions proposed for the development of equity and bond markets for SMEs, identifying the main obstacles and the specific actions to be introduced to overcome them. We will also outline the role banks may play in establishing this bank-company-market linkage, currently seriously lacking in the Italian banking system.

With the introduction of the new legislation covering the issue of commercial papers and corporate bond by unlisted firms, the volumes of bond issues by companies in this class have grown considerably. However, this only applies to medium-large firms. Mini bonds alone are unable to solve the problem of the financing flow for smaller firms, due to factors on both the demand and the supply sides, which require precise measures by a variety of players: firms, intermediaries and policy makers.

Supply

- *Obstacles*. The prerequisites for the issue of mini bonds actually exclude a large number of small firms: joint stock company status, turnover in excess of two million Euro, rating and financial statements certified by an auditing firm. To this point a relevant negative factor is the high level of opaqueness of Italian SMEs which is not comparable with other European countries.
- *Development actions*. The smaller-sized companies which make up the connective tissue of the Italian economy must realise that bank credit is a scarce resource and will continue to be so in the near future, and that they must therefore start to do everything needed to access the bond market, by meeting the requirements set out above - especially financial statement auditing and the assignment of a credit rating.

Demand

- *Obstacles*. Mini bonds may only be purchased by "qualified" investors, but in Italy there are very few investors which specialise in this type of security. Investors are generally in search of liquid securities, with credit ratings and low information-gathering costs, all lacking when the bonds are issued by SMEs that are generally smaller than the average of their European competitors. Therefore, mini bonds issued by most Italian SMEs will not be tempting for institutional investors, due to both their low liquidity and the high information costs involved.
- *Development actions*.
    - Creation of funds with the specific mission of investing in mini bonds. Some banks (e.g. Mediobanca) have already done this.
    - More active approach by Italian institutional investors. Some sectors are less developed in Italy than in other countries (e.g. pension funds). Regulatory measures would be beneficial to allow these

investors, especially insurance companies, to draw on their technical reserves to increase their investments in securities issued by unlisted firms.

- Active role of the CDP and banking foundations in the creation of funds specifically to invest in mini bonds and for direct investment.
- Active role of banks to facilitate SMEs' access to the markets.
- A segment of Borsa Italiana, ExtraMOT Pro, for the bonds and financing bills of unlisted companies, has been in operation since February 2013.

The banks' possible role requires more in-depth discussion. The development of the corporate bond market opens out excellent opportunities for banks in the advisory, underwriting and placement areas. The fees generated by these activities could potentially make a significant contribution to intermediation margins at this time of declining profitability. This requires the development of specific skills only rarely found in Italian banks. It should also be remembered that while on the one hand the development of these activities will help to restore the bank-firm relationship as part of the bank-company-market circuit, on the other hand there is the risk that the banks may be crowded out: the most suitable firms for bond issue projects are the ones with the best ratings, which are currently also the most desirable for bank loan operations.

Further, complementary actions should also be considered with regard to market instruments to simplify SMEs' access to financing. First and foremost, the revitalisation of the ABS market, to allow the rating of products deriving from banks' securitisation of tranches of SME loans. The creation of credit funds may also play an important role in the future.

6. CONCLUSIONS

Our analysis reinforces the finding that in Italy the credit available to the real economy is insufficient in terms not only of quantity but also of quality. Italian firms' heavy reliance on bank credit compared to their international competitors means that the effects of the credit crunch are even more acute. This situation is affecting the types of firms which have the greatest difficulty in accessing alternative financing channels: the smallest companies, and thus also innovative firms, which have difficulty in demonstrating their financial sustainability and are therefore considered ineligible for bank credit even at normal times, especially in the initial states of their life cycles. The situation is rendered even more dramatic by the recent indications of credit rationing even in relation to companies with sound credit ratings.

Although the Italian banking system reacted better than those of other countries during the initial phase of the financial crisis (Venturelli, 2012), proving relatively robust, the persistence of the crisis is revealing structural problems within it, including increasingly clear difficulty in selecting creditworthy firms from the rest and sustaining businesses' growth. The strict rules imposed by Basel 3 only partially justify this trend: the reasons for the situation lie a long way back, when the restructuring of the Italian banking system led to the disappearance of institutions which specialised in assessing companies' financial soundness and investment prospects. The whole scenario is aggravated by the continuing failure to develop channels of financing other than bank credit. While on the one hand the crisis has revealed the underdevelopment of the Italian financial market, the insufficient role of institutional investors, the embryonic state of the corporate bond markets and the virtual non-existence of CP markets; on the other hand, it could finally provide the opportunity for the development of these channels. This need is so pressing that when the EU confirmed the ending of the infraction procedure against Italy for the exceeding of deficit limits, its concluding recommendations included support for the creation of non-banking channels of financing.

Possible alternative sources include the new mini bond market, which requires three things if it is to take off as required: higher level of SMEs financial disclosure, investors interested in purchasing bonds of mini value and a regulatory context that facilitates the process. With regard to the first factor, the decrease of the level of opaqueness requires also a cultural and managerial change in SMEs. Turning to the second aspect, the CDP and many Italian banks and asset management firms are working to create specialised funds tasked with investing in mini bonds, which will thus be able to indirectly finance Italian companies. Finally, a new legislation for the creation of credit funds is needed. In more general terms, a solution is required to the problem of how to place the huge financing potential of the other institutional investors, especially the insurance companies, at the service of the real economy.

In view of the complexity and variety of the measures and instruments which must be brought into play in an approach of cooperation rather than competition, the directing role of the national policy makers (MEF-Ministry for Economy and Finance and MISE-Ministero per lo Sviluppo Economico/Ministry of Economic Development) is essential, and they will need to drawn on the experience of the various foreign states where the various systems have been used most successfully in the past.

A number of countries have already implemented schemes of this kind. France established a Banque publique d'investissement in 2012 to coordinate all programmes aimed at providing credit to small companies; more recently, it launched a proposal for further extending financing to SMEs by insurance companies: it is estimated that the current 216 billion (30 more than in 2008, no less) could be increased by a further 90.

In some cases, these measures also need to link up effectively with those implemented by the European Commission and supranational organisations. Last but not least, the ECB's strategy on the characteristics ABS and covered bonds are required to meet in order to be eligible for refinancing will also be highly significant.

REFERENCES

Allen F. and D. Gale. 1995. "A Welfare Comparison of Intermediaries and Financial Markets in Germany and the US". *European Economic Review.* 39, 179–209.

Allen F. and D. Gale. 1999. *Comparing Financial Systems*. MIT Press, Cambridge.

Banca d'Italia. 2013. *Stability Review*, n. 5, April.

Banca d'Italia. 2013b. *Annual Report 201*2, Rome, May 31.

Banca d'Italia. 2013c. *La recente analisi dei prestiti deteriorati condotta dalla Banca d'Italia: principali caratteristiche e risultati*, luglio 2013.

Banca d'Italia. 2013d. Financial Stability Report. n. 5, April.

Bartiloro L., Carpinelli L,, Finaldi Russo P. and S. Pastorelli. 2012. *L'accesso al credito in tempo di crisi: le misure di sostegno a imprese e famiglie*. Banca d'Italia. Questioni di Economia e Finanza, (Occasional Papers), n. 111, gennaio.

Cosma S. and E. Gualandri (eds.). 2012. "The Impact of the Financial Crisis on Italian Banks", in *The Italian Banking System and the Financial Crisis,* (eds) in Palgrave Macmillan Studies in Banking and Finance Institutions, Hampshire, England.

Cosma S. and E. Gualandri. 2013*. The sovereign debt crisis: the impact on the intermediation model of Italian banks.* Paper presented at the annual Conference of the European Association of University Teachers in Banking and Finance, Wolpertinger, Gothenburg, 28-31 August 2013

De Mitri S., De Socio A., Russo P. F. and V. Nigro. 2013. *Le microimprese in Italia: una prima analisi delle condizioni economiche e finanziarie*, Questioni di Economia e Finanza, (Occasional Papers), Banca d'Italia, n. 162, aprile.

Draghi M. 2013. *Hearing at the Committee on Economic and Monetary Affairs of the European Parliament, Introductory statement by Mario Draghi*, President of the ECB, Brussels, 8 July 2013.

Draghi M. 2012. *The monetary policy of the European Central Bank and its transmission in the euro area, Speech by the President of the ECB*, Università Bocconi, Opening of the academic year 2012-2013, Milan 15 November 2012.

European Commission and the European Investment Bank Group. 2013. *Supporting small and medium-sized enterprises in 2012*, A joint report of EC and EIB, 02/05/2013.

International Monetary Fund IMF. 2013. *Article IV Consultation with Italy Concluding Statement of the IMF Mission,*July 4.

Neri S. 2013. "*The impact of the sovereign debt crisis on bank lending rates in the euro area*, Questioni di Economia e Finanza (Occasional Papers), Banca d'Italia, n. 170, June.

Onado M. 2013. "Credit crunch: quella regia ancora assente". *Il Sole 24 Ore*. 14 Luglio 2013.

Panetta F.2013. *Il Credito e il Finanziamento delle Imprese, Intervento del Vice Direttore Generale della Banca d'Italia*, Federazione delle Banche di Credito Cooperativo Lazio Umbria Sardegna, Roma 21 giugno 2013.

Rajan R. and L. Zingales. 2003. "*Banks and Markets: The Changing Character of European Finance". European Central Bank*, 2nd Annual Conference, Frankfurt.

Thakor A. V. 1996. "The design of financial systems: An overview". *Journal of Banking and Finance*. 20 (5), 917–948.

Venturelli V. 2012. "Main features of the Italian Financial System" in Cosma S. and E. Gualandri (eds) *The Italian Banking System: Impact of the Crisis and Future Perspectives*, Palgrave Macmillan Studies in Banking and Finance Institutions, Basingstoke, England.

Cefin CENTRO STUDI BANCA E FINANZA

www.cefin.unimore.it

CEFIN Working Papers ISSN (online) 2282-8168

40 *Efficiency and unbiasedness of corn futures markets: New evidence across the financial crisis, by Pederzoli, C., Torricelli, C. (October 2013)*

39 *La regolamentazione dello short selling: effetti sul mercato azionario italiano (Short selling ban: effects on the Italian stock market)*, by Mattioli L., Ferretti R. (August 2013)

38 *A liquidity risk index as a regulatory tool for systematically important banks? An empirical assessment across two financial crises*, by Gianfelice G., Marotta G., Torricelli C. (July 2013)

37 *Per un accesso sostenibile delle Pmi al credito (A sustainable access to credit for SMEs),* by Giuseppe Marotta (May 2013)

36 *The unavoidable persistence of forum shopping in the Insolvency Regulation*, by Federico M. Mucciarelli (April 2013)

35 *Rating Triggers, Market Risk and the Need for More Regulation,* by Federico Parmeggiani (December 2012)

34 *Collateral Requirements of SMEs: The Evidence from Less–Developed Countries*, by Elmas Yaldiz Hanedar, Eleonora Broccardo, Flavio Bazzana (November 2012)

33 *Is it money or brains? The determinants of intra-family decision power*, by Graziella Bertocchi, Marianna Brunetti, Costanza Torricelli (June 2012)

32 *Is financial fragility a matter of illiquidity? An appraisal for Italian households*, by Marianna Brunetti, Elena Giarda, Costanza Torricelli (June 2012)

31 *Attitudes, personality factors and household debt decisions: A study of consumer credit,* by Stefano Cosma and Francesco Pattarin (February 2012)

30 *Corridor implied volatility and the variance risk premium in the Italian market,* by Silvia Muzzioli (November 2011)

29 *Internal Corporate Governance and the Financial Crisis: Lessons for Banks, Regulators and Supervisors,* by Elisabetta Gualandri, Aldo Stanziale, and Enzo Mangone (November 2011)

28 *Are defined contribution pension schemes socially sustainable? A conceptual map from a macroprudential perspective,* by Giuseppe Marotta (October 2011)

27 *Basel 3, Pillar 2: the role of banks' internal governance and control function*, by Elisabetta Gualandri (September 2011)

26 *Underpricing, wealth loss for pre-existing shareholders and the cost of going public: the role of private equity backing in Italian IPOs*, by Riccardo Ferretti and Antonio Meles (April 2011)

25 *Modelling credit risk for innovative firms: the role of innovation measures*, by Pederzoli C., Thoma G., Torricelli C. (March 2011)

24 *Market Reaction to Second-Hand News: Attention Grabbing or Information Dissemination?*, by Cervellati E.M., Ferretti R., Pattitoni P. (January 2011)

23 *Towards a volatility index for the Italian stock market*, by Muzzioli S. (September 2010)

22 *A parsimonious default prediction model for Italian SMEs*, by Pederzoli C., Torricelli C. (June 2010)

21 *Average Internal Rate of Return and investment decisions: a new perspective,* by

Magni C.A. (February 2010)

20 *The skew pattern of implied volatility in the DAX index options market,* by Muzzioli S. (December 2009)

19 *Accounting and economic measures: An integrated theory of capital budgeting,* by Magni C.A. (December 2009)

18 *Exclusions of US-holders in cross-border takeover bids and the principle of equality in tender offers*, by Mucciarelli F. (May 2009).

17 *Models for household portfolios and life-cycle allocations in the presence of labour income and longevity risk*, by Torricelli C. (March 2009)

16 *Differential evolution of combinatorial search for constrained index tracking*, by Paterlini S, Krink T, Mittnik S. (March 2009)

15 *Optimization heuristics for determining internal rating grading scales*, by Paterlini S, Lyraa M, Pahaa J, Winker P. (March 2009)

14 *The impact of bank concentration on financial distress: the case of the European banking system*, by Fiordelisi F, Cipollini A. (February 2009)

13 *Financial crisis and new dimensions of liquidity risk: rethinking prudential regulation and supervision*, by Landi A, Gualandri E, Venturelli V. (January 2009)

12 *Lending interest rate pass-through in the euro area: a data-driven tale*, by Marotta G. (October 2008)

11 *Option based forecast of volatility: an empirical study in the Dax index options market*, Muzzioli S. (May 2008)

10 *Lending interest rate pass-through in the euro area*, by Marotta G. (March 2008)

9 *Indebtedness, macroeconomic conditions and banks' losses: evidence from Italy*, by Torricelli C, Castellani S, Pederzoli C. (January 2008)

8 *Is public information really public? The role of newspapers*, Ferretti R, Pattarin F. (January 2008)

7 *Differential evolution of multi-objective portfolio optimization*, by Paterlini S, Krink T. (January 2008)

6 *Assessing and measuring the equity gap and the equity*, by Gualandri E, Venturelli V. (January 2008)

5 *Model risk e tecniche per il controllo dei market parameter*, Torricelli C, Bonollo M, Morandi D, Pederzoli C. (October 2007)

4 *The relations between implied and realised volatility, are call options more informative than put options? Evidence from the Dax index options market*, by Muzzioli S. (October 2007)

3 *The maximum LG-likelihood method: an application to extreme quantile estimation in finance*, by Ferrari D., Paterlini S. (June 2007)

2 *Default risk: Poisson mixture and the business cycle*, by Pederzoli C. (June 2007)

1 *Population ageing, household portfolios and financial asset returns: a survey of the literature*, by Brunetti M. (May 2007)