



BANCA D'ITALIA  
EUROSISTEMA

# Financial Stability Report

April 2012

Number

3



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EUROSISTEMA

# **Financial Stability Report**

**Number 3 April 2012**

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# CONTENTS

OVERVIEW	5
<b>1</b> MACROECONOMIC RISKS AND INTERNATIONAL MARKETS	<b>7</b>
1.1 The main macroeconomic and financial risks	7
1.2 The housing markets	15
<b>2</b> THE FINANCIAL CONDITION OF HOUSEHOLDS AND FIRMS	<b>16</b>
2.1 Households	16
2.2 Firms	17
<b>3</b> THE BANKING AND FINANCIAL SYSTEM	<b>20</b>
3.1 The market's assessment of Italian banks	20
3.2 Credit	21
3.3 Bank funding, liquidity risk, refinancing risk	28
3.4 Interest-rate risk and market risk	32
3.5 Banks' capital and profitability	32
3.6 Crisis management procedures	34
3.7 Insurance companies	34
3.8 Exchange traded funds in Italy	35
<b>4</b> MARKETS, EUROSISTEM REFINANCING AND PAYMENT INFRASTRUCTURES	<b>37</b>
4.1 The liquidity market	37
4.2 Italian banks' recourse to Eurosystem refinancing	39
4.3 The government securities market	41
4.4 The market in credit default swaps	43

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## BOXES

The dynamic of Italy's public debt	9
The international investment position of some euro-area countries	11
Moratoria on firms' debt: forbearance risk?	18
The recent trend in residents' deposits	28
Italian banks' foreign fund-raising	29
LCH.Clearnet SA's margin initiative	38
Measures to expand collateral in Eurosystem operations	41

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**Starting from this issue, the third, the Bank of Italy's Financial Stability Report will be released on a six-monthly basis**

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## SYMBOLS AND CONVENTIONS

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Unless indicated otherwise, figures have been computed by the Bank of Italy.

In the following tables:

- the phenomenon in question does not occur
  - .... the phenomenon occurs but its value is not known
  - .. the value is known but is nil or less than half the final digit shown
  - :: the value is not statistically significant
  - () provisional; estimates are in italics
-

## OVERVIEW

### **The risks to financial stability ease ...**

*The massive injections of liquidity by the European Central Bank and national governments' measures to counter the euro-area crisis halted the downward spiral of increased sovereign risk, banking system difficulties and the deteriorating economic situation, which in the last part of 2011 threatened to become systemic.*

### **... but do not disappear**

*In April, tensions re-emerged, signalling that risks are still serious. The advanced countries' economic and financial prospects are clouded by fears concerning public finances and the robustness of world growth. The recent agreement to increase the intervention capacity of intergovernmental mechanisms to support euro-area economies in difficulty has allayed but not eliminated investors' concerns.*

*In the euro area, market turmoil resurfaces rapidly as soon as fears arise concerning the effectiveness of the measures for fiscal consolidation and economic growth. Worries about the severity and duration of the recession are aggravated by concerns about the lending capacity and soundness of banks, which are nevertheless strengthening their capital.*

### **Italy makes significant progress to improve its public finances ...**

*In Italy, the fiscal consolidation measures taken since mid-2011, the provisions curbing pensions and progress with reforms to raise the economy's growth potential have restored confidence in the sustainability of the public finances. The improvement on the government securities market has been significant, although in recent weeks it has been partially eroded by the resurgence of strains, which originated outside Italy. Our simulations, which assume that the government's measures are fully effective, show that the debt-to-GDP ratio would begin to fall in 2013 even if the cost of the debt rose and growth were lower than expected.*

### **... but is affected by contagion and the recession**

*The yield spread between Italian and German government bonds is nevertheless still large, owing in part to speculation that has driven German interest rates down to exceptionally low levels.*

*In the current phase of cyclical weakness and market volatility it is essential to forge rapidly ahead with the vast programme of structural reforms that can influence expectations of future growth, without which it would be more difficult to strengthen the fiscal consolidation process and seize the opportunities offered by the global economic recovery.*

### **The leverage of Italian households and firms is low**

*In Italy, the private sector's financial condition remains balanced. But, households and firms are feeling the effects of the recession and the strains in loan supply. The problems have been circumscribed by the measures that the Government has introduced in the last two years to support indebted households and firms and by the agreements among the organizations representing banks, firms and consumers. A high percentage of the firms that have benefited from loan moratoria have subsequently returned to making regular repayments.*

### **The strains in lending conditions are abating ...**

*The contraction in bank lending towards the end of 2011 reflected the credit supply constraints arising at the time from the instability of the sovereign debt market; the resulting pressures on bank liquidity prompted intermediaries to tighten their lending policies, thereby accentuating the deceleration in lending caused by the fall in the demand of households and firms. The dynamic of lending is also affected by the worsening of credit quality.*

*Recent signs suggest that the tensions in lending conditions are subsiding: rates on loans to firms have turned downwards; and the quarterly Bank*

*Lending Survey for Italy signals an improvement in lending standards in the early months of 2012.*

**... reflecting the reduction in banks' refinancing risk ...**

*These developments reflect the decline in sovereign risk in the first quarter of 2012 and, above all, the intervention of the Eurosystem, which has greatly reduced banks' refinancing risk in the medium term. Italian banks now have the liquidity needed to meet maturing liabilities and finance the economy, and they also have an ample stock of additional collateral. In recent surveys conducted by the Bank of Italy the major domestic banks have indicated that they plan to use some of the funds obtained from the ECB to revive lending to households and firms.*

*The improvements in lending standards should be able to impact, with the usual lags, on the actual growth of lending. Progress in returning to normality will depend on the situation in the sovereign debt market, the functioning of the international capital market and the trend of economic activity. Our projections indicate that lending should pick up again in the final part of 2012. The flow of new bad debt in relation to lending is expected to start falling in the second half of 2012.*

**.... but it is necessary to reactivate the wholesale funding markets**

*However, central bank financing cannot represent a permanent source of fund-raising. It is essential that banks maintain access to the international wholesale funding markets. The positive signs of a revival in bond issuance in the first few months of the year have faded with the resurgence of sovereign debt strains.*

**The exposure towards countries in difficulty is low, that towards Italian sovereign debt increases**

*The Italian banking system is one of the least exposed towards the euro-area countries in difficulty, both directly and indirectly (via claims on foreign banks themselves exposed to these countries).*

*In the first two months of this year Italian banks began buying Italian government securities again after the pause in the last part of 2011. Nearly*

*60 per cent of the purchases were made by small and medium-sized banks, which took a very small share of the medium-term financing disbursed by the ECB.*

**It is essential to continue strengthening banks' capital, while not restricting credit to the economy ...**

*The capital of the main Italian banking groups has been increased further: their core tier 1 ratio has risen to 9.3 per cent. The capital strengthening is proceeding as part of the European Banking Authority initiative, with account taken of the need not to restrict lending to the economy.*

**... and maintaining their profitability**

*The outlook for banks' profitability remains uncertain. It should benefit from the easier fund-raising conditions, but the recession could slow down lending and prolong the deterioration in the quality of banks' assets. Beyond the short term banks must continue to take steps to achieve further large efficiency gains.*

**The government securities market continues to function regularly**

*Government securities have been placed regularly, even in the difficult conditions at the end of 2011. From January to April 2012 the average cost of issues fell significantly compared with the fourth quarter of 2011 owing to the decline in the risk premium and the rebalancing of issues towards the short and medium term. The residual life of the debt (6.8 years) nonetheless remains one of the longest in the euro area.*

*By the middle of April, 40 per cent of the issues of public securities scheduled for the whole of 2012 had already been made. The liquidity of the secondary market for government securities has improved: bid-ask spreads have come down by half from the record levels of the end of 2011, and the size of quotations has increased again. In the first part of 2012 non-residents have continued to make net disposals of Italian government securities; however, for the first time for several months, they have made significant net purchases of short-term paper.*



# 1 MACROECONOMIC RISKS AND INTERNATIONAL MARKETS

## 1.1 THE MAIN MACROECONOMIC AND FINANCIAL RISKS

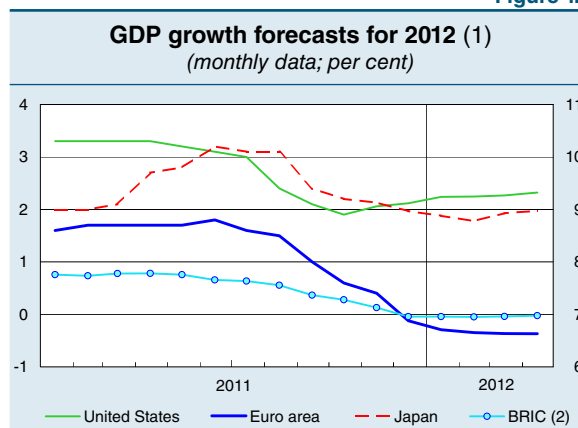
**The risks to financial stability ease ...** The financial instability that emerged in the summer and worsened in the autumn of 2011 eased in the first few months of this year, mostly in response to the progress made in managing the crisis in the euro area. The outlook for world economic growth gradually stabilized (Figure 1.1), limiting expectations of recession to the countries hit hardest by the debt crisis (see *Economic Bulletin*, April 2012). New tensions surfaced in April.

**... thanks to monetary policy measures ...** In the euro area, in late 2011 and early 2012 the massive injection of medium-term liquidity by the European Central Bank (ECB) and its easing of the eligibility requirements for collateral interrupted the negative spiral between mounting sovereign risks, bank funding problems and deteriorating economic conditions, which were taking on a systemic nature. Euro-area banks' medium-term financing risk declined sharply, most notably for credit institutions in the countries under the greatest pressure from the debt crisis. The risk premiums on bank funding diminished. In the first few months of 2012 the banks of vulnerable countries (such as Italy and Spain) resumed issues of unsecured medium-term bonds on international markets (Figure 1.2.a). Market indicators show that fears of catastrophic events subsided (Figure 1.2.b).

**.... and the progress of policies in the euro area ...** A contribution to improving the market climate also came from the agreement reached at European level for strengthened fiscal policy cooperation (the "Fiscal Compact"). Meanwhile, the countries under stress adopted fiscal adjustment packages. These actions and the ECB's measures brought down the interest rates on government securities, narrowed the yield spreads with respect to Germany (except for Spain, whose spreads widened at the longer maturities; Figure 1.2.c), and weakened the interdependence among sovereign risk premiums in the euro area (Figure 1.2.d). The fears of a disorderly default by Greece were dispelled following the agreement reached in March. Sovereign spreads widened again in April, partly reflecting the decline in yields on German Bunds to exceptionally low levels.

**... especially in Italy** In Italy, the fiscal consolidation measures introduced in the second half of 2011, the measures affecting the pension system and the progress on reforms aimed at boosting the economy's growth potential have helped restore the markets' confidence in the sustainability of the public debt (see the box "The dynamic of Italy's public debt"). The improvement on the

Figure 1.1

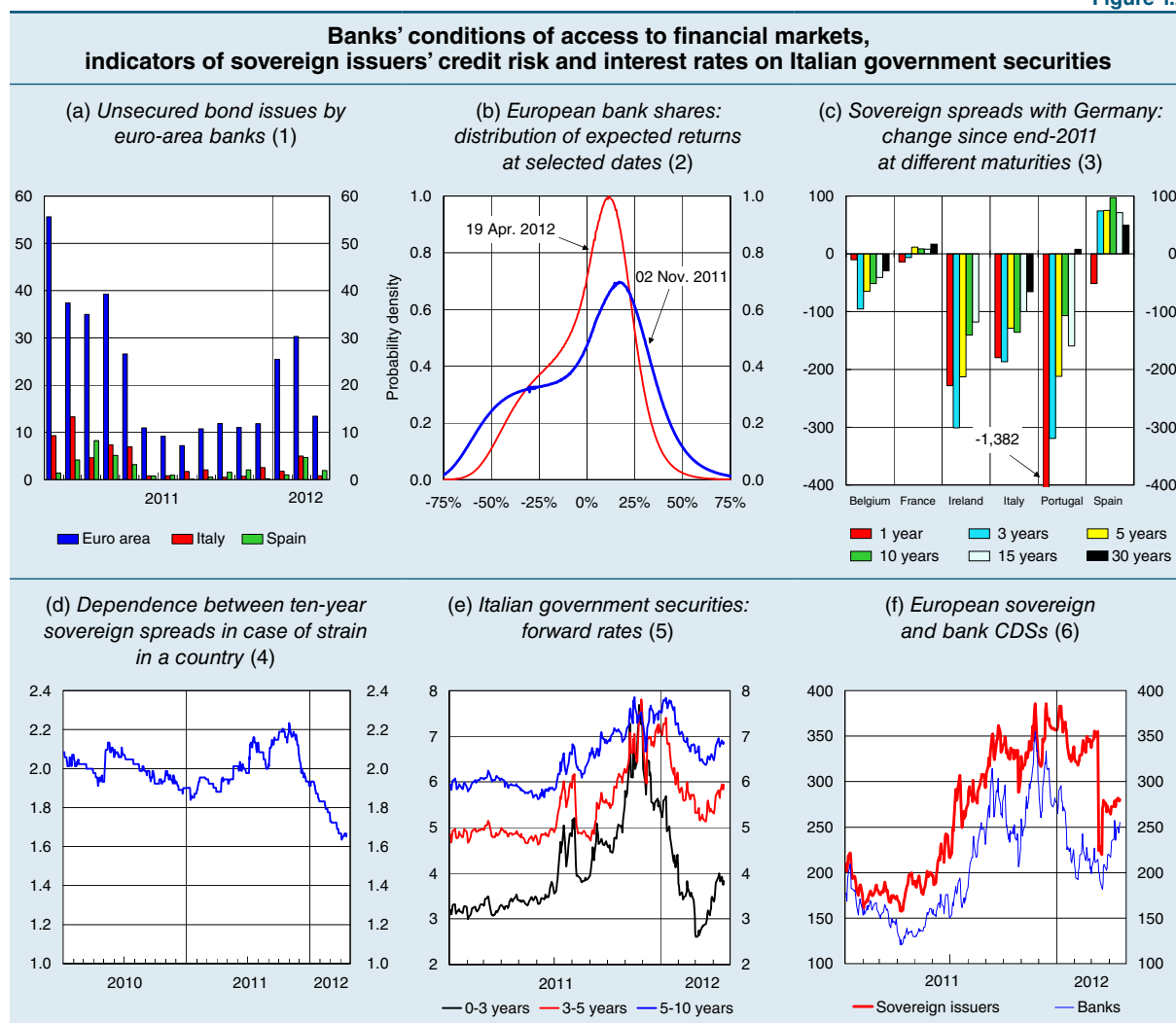


Source: Based on Consensus Economics data.

(1) Forecasts made in the months shown on the horizontal axis. – (2) Right-hand scale; average of the forecasts for Brazil, Russia, India and China, weighted on the basis of each country's GDP in 2010 at purchasing power parity.



Figure 1.2



Sources: Based on Bloomberg and Thomson Reuters Datastream data.

(1) Monthly data in billions of euros. Bonds not backed by collateral or government guarantees. – (2) Per cent. Probability distribution of the expected 30-day returns (for a risk-neutral investor), estimated on the basis of the prices of options on the Stoxx Europe 600 Banks index of bank shares. – (3) Changes in the interest rate spreads with Germany between the end of 2011 and 19 April 2012, in basis points. For Ireland the data for the 30-year maturity are not available. – (4) Number of countries, of the seven considered. The indicator is based on interest-rate spreads vis-à-vis Germany (for the 10-year maturity) of seven euro-area countries (Belgium, France, Greece, Ireland, Italy, Portugal and Spain). Its value is the expected number of countries that would register an increase in the spread greater than the 95th percentile of its distribution (estimated on the 2 previous years) if an increase in the spread of that magnitude occurred in at least one of the other countries considered. – (5) Daily data, per cent. Interest rates implied by the zero-coupon curve of Italian government securities at the 3-year spot maturity and at the 2-year and 5-year forward maturities starting, respectively, three and five years forward. – (6) Basis points. iTraxx indices for baskets of CDSs on sovereign and financial issuers (mainly banks). The downward spike in the index for sovereign issuers in March 2012 was due to the dropping of Greece's CDSs from the basket.

government securities market was pronounced, and it was only partially eroded by the resurgence of strains in April, which originated outside Italy. As credibility was recouped, the decline in yields, initially limited to the shorter maturities, gradually extended to the more distant horizons (Figure 1.2.e).

#### The risks remain significant ...

Despite the progress achieved, the risks for the global financial system remain significant, and they resurface rapidly as soon as fears arise concerning the effectiveness of the programmes for adjustment of the public finances and economic growth. The increase in sovereign debt premiums registered in the euro area in April swiftly affected the banks, whose share prices and CDSs worsened once again (Figure 1.2.f).

## THE DYNAMIC OF ITALY'S PUBLIC DEBT

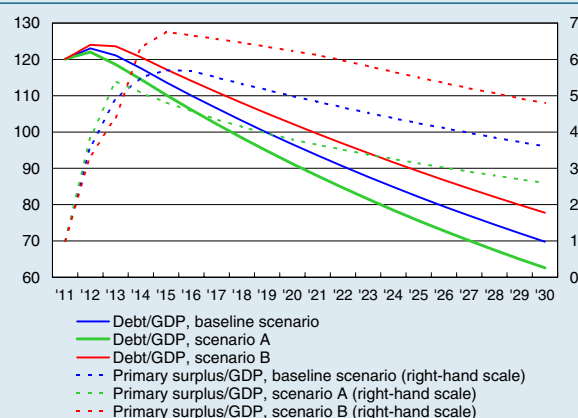
Since mid-2011 Italy has enacted three public finance corrections, with structural effects that increase year by year starting in 2012 and amount to €80 billion (4.8 per cent of GDP) in 2014. The measures involving pensions will have an increasing impact in the following years as well; the Ministry for the Economy and Finance estimates that with respect to the previous trend the reform of December 2011 alone will reduce the pension expenditure-to-GDP ratio by a total of some 20 percentage points in the years through 2040.

An accounting exercise based on our own simulations, which assumes that the measures will have full effect, shows that the ratio of public debt to GDP would begin to come down already in 2013, with no additional measures, even if the rates on government securities issues were to rise compared with current levels and economic growth were to be lower than expected (see the figure). Subsequently the achievement of budget balance as required by the new European rules<sup>1</sup> – which presupposes a growing primary surplus over the next few years – would accentuate the fall in the debt-to-GDP ratio.

Our baseline scenario adopts the Government's estimates for economic growth, the average interest rate on the debt, and the primary budget surplus until 2015.<sup>2</sup> For later years, we assume maintenance of a balanced budget along with constant average cost of the debt and GDP growth rate at their 2015 levels. In this scenario the debt-to-GDP ratio (about 123 per cent in 2012) comes down to 121 per cent in 2013 and to less than 100 per cent in 2019. Consistent with this debt trend, the primary surplus needed to maintain budgetary balance is 5.7 per cent of GDP in 2015, falling to 5 per cent in the current decade and to 3.5 per cent during the 2020s, roughly in line with its average in the fifteen years preceding the crisis and nearly 2 percentage points less than the surplus achieved in the second half of the 1990s.

To see how these trends would be altered by variations in growth and interest rates, we have analysed two alternative scenarios.<sup>3</sup> Scenario A is more favourable: issue rates are 1 percentage point below the baseline scenario starting in 2012; the economic growth rate is half a point higher, reaching 1.7 per cent starting in 2015 (thanks in part to structural reforms). Scenario B is adverse: both variables behave worse

Public debt and primary budget surplus as per cent of GDP, various forecasting scenarios



<sup>1</sup> For Italy, a balanced budget would ensure compliance with the debt rule (introduced as part of the “six-pack”) under a broad range of economic growth assumptions. The rule requires countries with debt-to-GDP ratios higher than 60 per cent to make an average yearly correction, calculated over a three-year horizon, equal to one twentieth of the overshoot each year.

<sup>2</sup> Economic and Financial Document for 2012. The growth rate, negative in 2012 (-1.2 per cent), turns positive to 0.5 per cent in 2013, 1.0 per cent in 2014 and 1.2 per cent in 2015. The average cost of the debt rises gradually from 4.4 per cent this year to 5 per cent in 2015 (the interest rate on 3-month bonds would rise from 1.0 per cent in 2012 to 4.9 per cent in 2015, the rate on 10-year bonds from 5.4 per cent to 6.2 per cent). The primary surplus, rising from 3.6 per cent this year to 5.7 per cent in 2015, produces a reduction in net borrowing to 1.7 per cent of GDP in 2012 and 0.5 per cent in 2013 and a substantially balanced budget both in 2014 and in 2015. These estimates differ from those of the IMF (see Table 1.1), owing chiefly to the latter's different economic growth forecasts (contraction of 1.9 per cent this year and 0.3 per cent in 2013 according to the IMF).

<sup>3</sup> Given the current average residual maturity of the Italian public debt, in both exercises an increase (decrease) of 1 percentage point in the market interest rates is assumed to raise (lower) the average cost of the debt by 0.2 points the first year, 0.3 points the second and 0.4 points the third. The complete alignment of the cost of the debt to the new level of interest rates takes about ten years. It is further assumed, to calculate the primary surplus in 2012 and 2013, that an increase (decrease) of 1 percentage point in the growth rate raises (lowers) the primary surplus by 0.5 percentage points of GDP.

than in the baseline, with new government securities' yields 1 percentage point higher and economic growth half a point lower (0.7 per cent from 2015).<sup>4</sup> In Scenario A the debt ratio falls to 90 per cent in 2020 and about 60 per cent in 2030; the primary surplus needed for overall budget balance eases to under 4 per cent in 2020 and about 2.5 per cent in 2030. In Scenario B the debt ratio still comes down, but more slowly, not falling below 80 per cent until 2030; the primary surplus remains larger than 6 per cent until 2021 and then diminishes to 4.8 per cent by 2030.

<sup>4</sup> Scenario B thus postulates GDP trends this year (-1.7 per cent) and next (zero growth) quite similar to the IMF forecasts for 2012 and 2013 but 0.5 points lower in the medium term (0.7 as against 1.2 per cent).

Table 1.1

Financial sustainability indicators (per cent of GDP, except as specified)										
	Budget deficit (1)			Primary surplus (1)			Public debt (1)			
	2011	2012	2013	2011	2012	2013	2011	2012	2013	
Italy	3.9	2.4	1.5	1.0	3.0	4.0	120.1	123.4	123.8	
Germany	1.0	0.8	0.6	1.6	1.0	1.3	81.2	78.9	77.4	
France	5.2	4.6	3.9	-2.6	-2.2	-1.5	85.8	89.0	90.8	
Spain	8.5	6.0	5.7	-6.1	-3.6	-3.0	68.5	79.0	84.0	
Greece	9.1	7.2	4.6	-2.2	-1.0	1.8	165.3	153.2	160.9	
Portugal	4.2	4.5	3.0	-0.4	0.1	1.5	107.8	112.4	115.3	
Ireland	13.1	8.5	7.4	-9.7	-4.4	-1.8	108.2	113.1	117.7	
Euro area	4.1	3.2	2.7	-1.1	-0.5	0.1	87.2	90.0	91.0	
UK	8.3	8.0	6.6	-5.1	-5.3	-4.0	85.7	88.4	91.4	
US	9.6	8.1	6.3	-7.3	-6.1	-4.4	102.9	106.6	110.2	
Japan	10.1	10.0	8.7	-9.1	-8.9	-7.5	229.8	235.8	241.1	
	Characteristics of public debt (2)			Sustainability indicators			Private sector debt at Q3 2011(6)		External positions at Q3 2011	
	Share maturing plus deficit in 2012	Average residual life of government securities in 2012 (years)	Share held by non-residents in 2011 (per cent of public debt)	S2 indicator (3)	Vulnerability indicator (4)	IMF indicator (5)	Households	Non-financial firms	Current account balance (7)	Net international investment position (8)
Italy	28.7	6.9	43.7	2.3	0.41	3.4	45.4	82.0	-3.6	-23.3
Germany	8.9	6.3	51.6	5.0	0.18	2.3	60.2	69.8	6.0	35.6
France	18.2	7.0	59.0	5.5	0.32	6.6	56.0	105.8	-2.4	-11.1
Spain	20.9	5.9	42.6	12.0	0.52	10.0	82.2	135.9	-3.8	-91.9
Greece	....	10.4	58.4	....	0.60	10.7	61.2	66.4	-9.9	-92.2
Portugal	26.7	5.6	50.6	....	0.61	8.1	92.8	154.3	-7.9	-102.7
Ireland	15.3	6.4	59.1	15.2	0.48	12.2	119.6	168.8	0.6	-95.3
Euro area	....	....	....	6.4	....	....	65.8	102.0	-0.2	-13.1
UK	14.8	14.2	27.3	9.6	0.41	11.3	97.6	105.4	-2.3	-11.1
US	25.8	5.1	28.7	....	....	17.6	88.3	76.9	-3.1	-17.0
Japan	59.1	5.9	6.6	....	....	18.9	66.7	99.8	2.6	52.5

Sources: IMF, Eurostat, ECB, European Commission, Istat, and national financial accounts and balance-of-payments data.

(1) The outturn data for European countries in 2011 are from Eurostat News Release Euroindicators, 23 April 2012. The outturn data for non-European countries for 2011 and the forecasts for 2012 and 2013 for all countries are from IMF *Fiscal Monitor*, April 2012, in order to ensure international comparability. The IMF forecasts for Italy are different from the Government's official estimates (see the box "The dynamic of Italy's public debt"). – (2) Data from IMF *Fiscal Monitor*, April 2012. – (3) Increase in the primary surplus/GDP ratio (with respect to 2010) needed to satisfy the general government intertemporal budget constraint, given demographic and macroeconomic projections. The estimate takes account of the level of the debt, the outlook for economic growth, changes in interest rates and future primary surpluses, which are affected by the trend of age-related expenditure. The data are taken from the European Commission's evaluations of the stability and convergence programmes presented in 2011, which update the figures given in the *Sustainability Report 2009*. – (4) Index built from a broad set of budget and macro-financial variables: a value above the threshold level (estimated, on the basis of past episodes, at 0.51) signals the possibility of a budget crisis. European Commission provisional estimates in *Public Finances in EMU 2011*. – (5) Increase in the primary surplus/GDP ratio that must be achieved by 2020 (and maintained for a further decade) in order to bring the debt/GDP ratio down to 60 per cent by 2030. The value includes the projected increase in health and pension expenditure between 2011 and 2030. – (6) Loans and securities. For Ireland, data as at Q2 2011. – (7) Period from Q4 2010 to Q3 2011. – (8) For the United States, end-2010 data.

**... and reflect the precarious state of public finances ...**

Worries about public finances loom large among the factors clouding the prospects for the international economic and financial system. In the advanced countries, despite the improvements in deficits in 2011 and the forecasts of further gains this year and next, the high debt level counts: according to the International Monetary Fund, the debt-to-GDP ratio will continue to rise, driven up mainly by the sluggishness of economic activity (Table 1.1). This makes investors highly sensitive to the evolution of real economic activity. The IMF's forecasts for Italy are more pessimistic than the Government's estimates and the latest projections of the Bank of Italy and the European Commission.

In the euro area, uncertainty as to the effects of the adjustment plans adopted by the countries benefiting from financial assistance programmes, in particular Greece and Portugal, remains a source of market instability. The agreement at the European summit in March to expand the intervention capacity of the intergovernmental mechanisms of support to the economies in difficulty (the European Financial Stability Facility and the European Stability Mechanism) has mitigated but not dispelled investors' unease.

**... the fragility of growth ...**

Additional risks stem from a possible weakening of the global recovery. If the rise in oil prices, partly due to geopolitical events, should worsen, this could dampen demand and drive up consumer prices, posing a dilemma for monetary policies. The advanced countries are faced with the need to reduce the levels of private as well as public debt at a time when central banks are left with very little room for manoeuvre. In the United States, there are mixed signs regarding the state of the housing market: the supply overhang is diminishing and price expectations are firming up, but mortgage delinquency rates remain high as do new foreclosures. In China and the other emerging economies, the shift of demand towards private consumption is still slow.

In the euro area, the uncertainty about the depth and duration of the recession is accentuated by global investors' persistent fears for the soundness of the banks, despite the capital strengthening that is under way. Concern also continues to focus on the large foreign debtor positions that some countries have owing to their prolonged loss of competitiveness. However, for several countries, Italy among them, the international investment position adjusted to take account of the underestimation of foreign assets is markedly better than the official figure (see the box "The international investment position of some euro-area countries").

#### THE INTERNATIONAL INVESTMENT POSITION OF SOME EURO-AREA COUNTRIES <sup>1</sup>

A country's international investment position – the difference between its assets and liabilities vis-à-vis non-residents – is an important indicator of the sustainability of its financial balances. For example, the three euro-area countries subject to financial assistance programmes all have large net debtor positions. And the international investment position has now acquired considerable importance within the European Union. Together with the current account balance and other indicators, in fact, starting this year it will be used by the Commission to assess whether there are macroeconomic imbalances in member countries and to decide possible corrective measures (Excessive Imbalance Procedure).

However, in all likelihood the official international investment position figures of some countries are distorted. From the accounting standpoint, a country's external liabilities should equal the sum of assets vis-à-vis that country reported by all the other countries. In the official statistics, however, this identity does not hold. Specifically, the total value of external portfolio liabilities (shares, investment fund units and debt securities) is systematically greater than the sum of the assets reported

<sup>1</sup> For the methodology used here, see V. Pellegrini and E. Tosti, "Alla ricerca dei capitali perduti: una stima delle attività all'estero non dichiarate dagli italiani" [Finding lost capital: an estimate of undeclared assets held abroad by Italians], Banca d'Italia, *Questioni di Economia e Finanza*, No. 97, July 2011.

In order to estimate the true international investment position of the various countries, the discrepancies are used here to adjust each one's foreign assets for under-reporting. Assuming that the discrepancies are due entirely to under-reporting, they are divided among the investor countries by two criteria. Criterion 1 assigns to each country a percentage of the other countries' discrepancies equal to its share of the claims on them in relation to its total external assets worldwide. Criterion 2 assigns to each country a percentage of the worldwide discrepancy equal to its share of world GDP.<sup>2</sup> A third estimate assumes that the discrepancies are due in equal measure to underreporting of assets and overestimation of liabilities (Criterion 3).<sup>3</sup>

Of the other euro-area countries, for Spain the adjustment is of about the same number of percentage points of GDP as for Italy; for France and Germany, slightly more. For France, the adjusted investment position is practically in balance, while that of Germany, structurally positive, increases considerably.

	Italy	Germany	France	Spain
Official int'l investment position	-24.0	38.4	-10.0	-89.4
Estimated adjusted position: criterion 1	-17.3	51.1	3.1	-85.0
criterion 2	-18.2	46.8	-1.6	-80.9
criterion 3	-16.4	45.2	0.5	-81.9

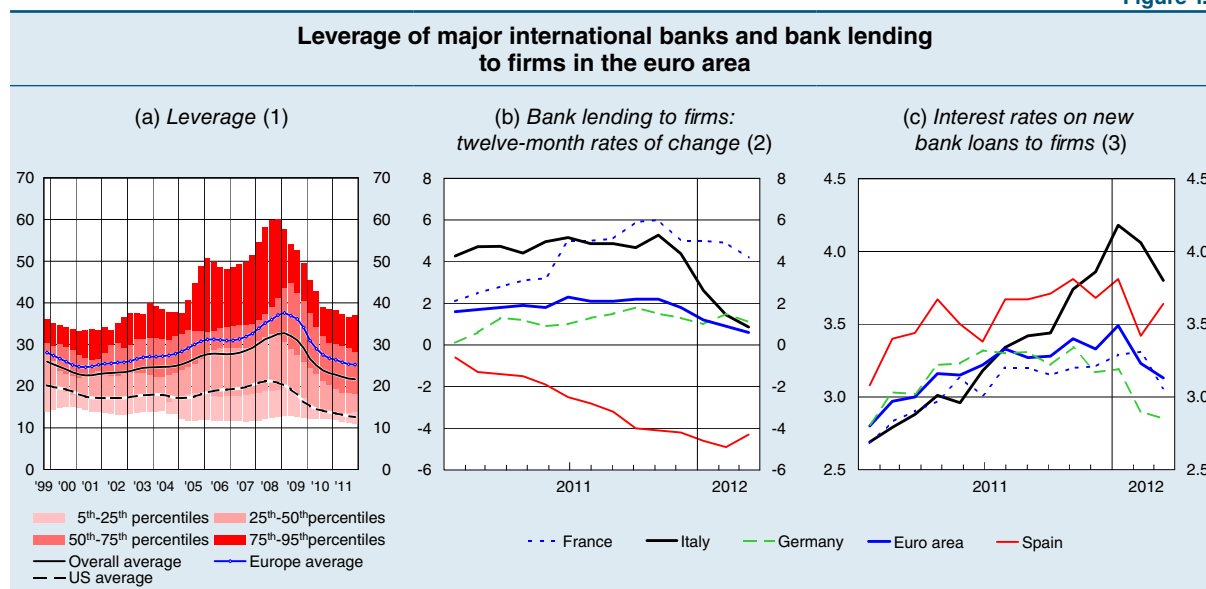
<sup>2</sup> Let  $D^i$  be the monetary value of the country  $i$ 's discrepancy and  $A_j^i$  the value of country  $j$ 's assets vis-à-vis country  $i$  (say, the debt securities issued by residents of country  $i$  held by residents of country  $j$ ). By Criterion 1 the unreported assets of country  $j$  are estimated as  $\sum_{i \neq j} D^i \frac{A_j^i}{\sum_i A_j^i}$ ; by Criterion 2, as  $\frac{GDP_j}{\sum_i GDP_j} \sum_i D^i$ .

<sup>5</sup> In the absence of errors and omissions, the accounting identity (*current account balance plus capital account balance*) = *-(financial account balance)* should hold. Barring value adjustments, the cumulative current account and capital account balances combined should be near the international investment position.

## ... and strains in bank lending

The leverage ratio of the largest international banks has been declining since the end of 2008 (Figure 1.3.a); in recent months bank lending to firms has decelerated sharply in a number of euro-area countries (Figure 1.3.b). The actions of the ECB

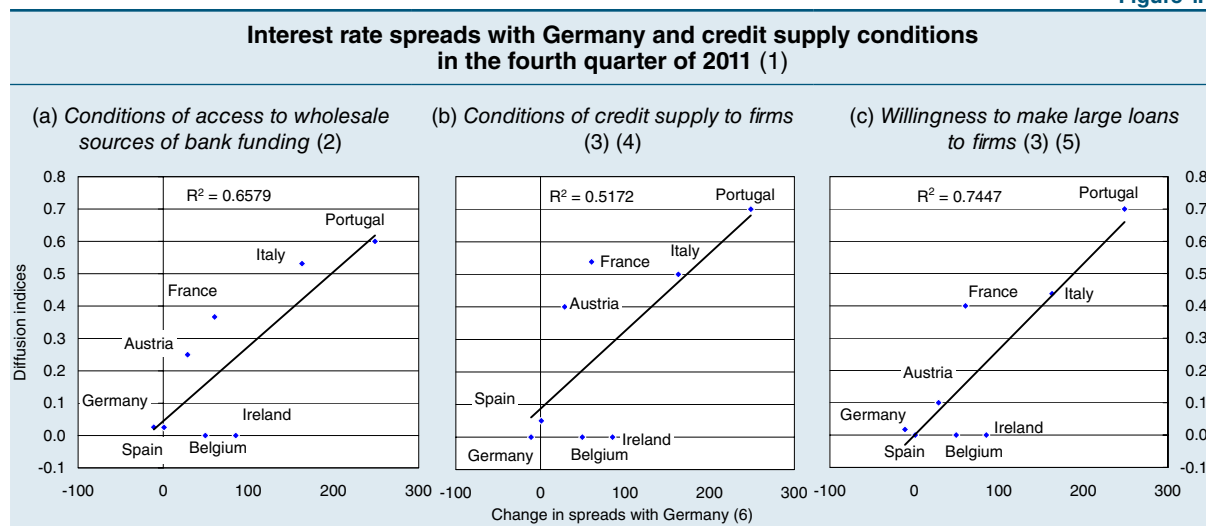
Figure 1.3



Sources: Based on Bloomberg, Bank of Italy and ECB data.

(1) Quarterly data. Ratio of total balance-sheet assets to shareholders' equity. The different shades of red correspond to differences between the percentiles shown in the legend. Sample of major international banks (for some banks not all the balance-sheet data are available). The sample consists of large European and US financial institutions that engage in various kinds of banking activity, including at international level: Banco Santander, Bank of America, Barclays, BNP Paribas, Citigroup, Crédit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, ING, Intesa Sanpaolo, JPMorgan Chase, Morgan Stanley, Royal Bank of Scotland, Société Générale, UBS and UniCredit. – (2) Monthly data; per cent. Loans are adjusted for the accounting effect of securitizations. – (3) Monthly data; per cent. The data on interest rates refer to transactions in euros and are gathered and processed using the Eurosystem's harmonized method.

Figure 1.4



Sources: Based on Bloomberg data and the Eurosystem's quarterly bank lending survey (BLS) for the euro area.

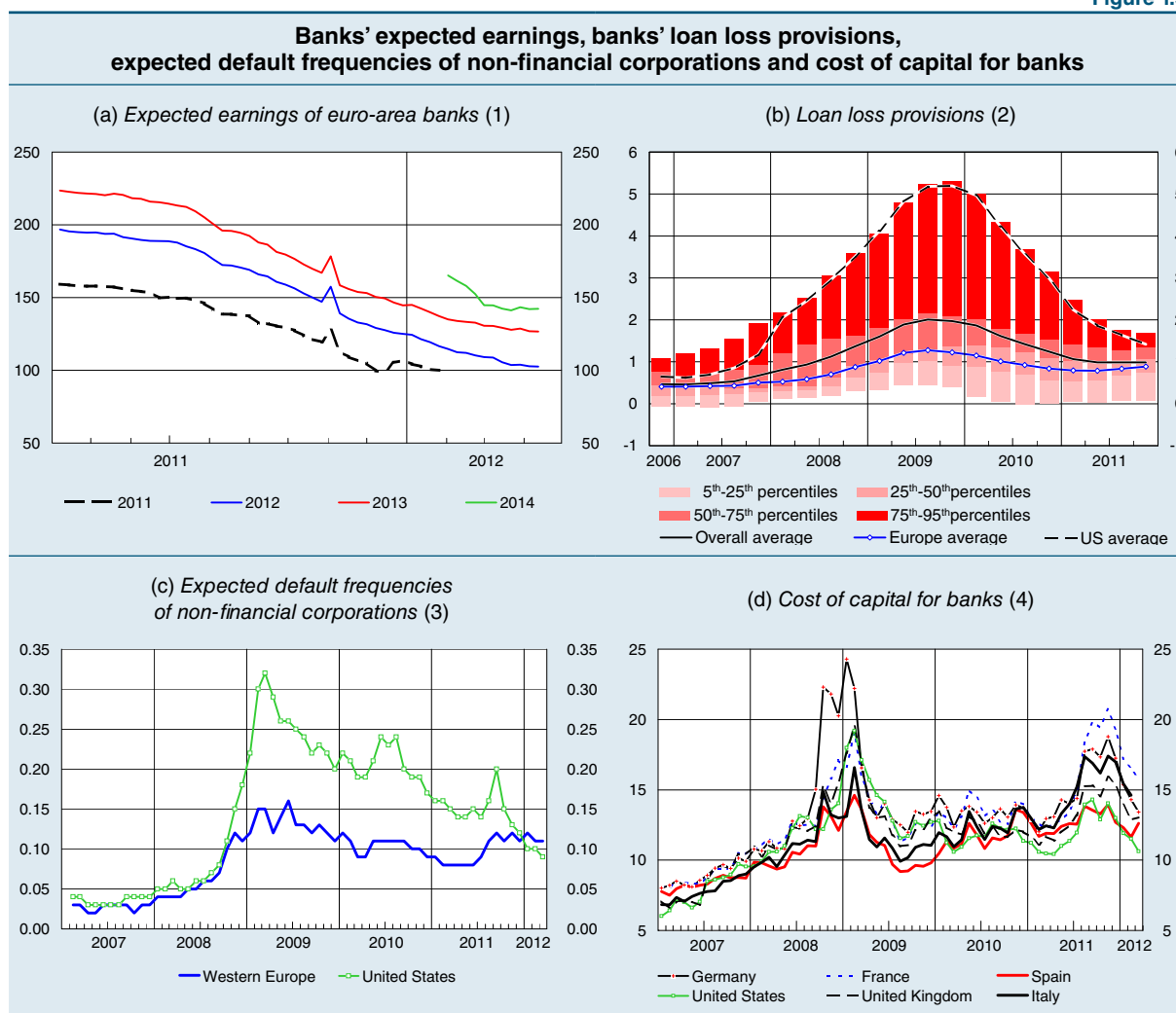
(1) The diffusion indices are constructed by weighting the responses of the banks as follows: 1 = tightened considerably, 0.5 = tightened somewhat, 0 = remained basically unchanged, -0.5 = eased somewhat, -1 = eased considerably. The range of variation of the index is from -1 to 1. The charts also show a trendline and the related R-squared. – (2) Positive (negative) values of the diffusion indices indicate tighter (easier) conditions of access to wholesale funding sources than in the previous quarter. – (3) For France, percentage balance of replies instead of diffusion index. – (4) Positive (negative) values of the diffusion indices indicate tighter (easier) bank credit supply conditions than in the previous quarter. – (5) Positive (negative) values indicate a decrease (increase) in banks' willingness to grant large loans. – (6) Basis points. Change in the fourth quarter of 2011 in the interest rate spread between the ten-year government bond and the corresponding German security. For Germany, change in the sovereign CDS spread.



have kept the deleveraging process from getting out of control and generating depressive effects on credit supply, financial asset prices and the real economy.

Credit supply conditions and the growth in bank lending could be subject to significant pressures in opposite directions in the future. On the one hand, the reduction in sovereign risk premiums in the early months of this year could help to improve the terms of loan supply, given the relation observed in the past between the two variables (Figure 1.4), and have positive effects (with the usual lag of one or two quarters) on the actual growth in lending,<sup>1</sup> particularly in the economies hit hardest by the government debt crisis. Signs of a reduction in the cost of loans to firms began to emerge in a number of countries in January (Figure 1.3.c).

Figure 1.5



Sources: Based on Bloomberg, Thomson Reuters Datastream and Moody's KMV data.

(1) Weekly data. Indices: last forecast for 2011=100. – (2) Quarterly data. Four-quarter moving sum of quarterly data expressed as a percentage of total loans. The different shades of red correspond to differences between the percentiles shown in the legend. Sample of major international banks (listed in note 1 in Figure 1.3; for some banks not all the balance-sheet data are available). – (3) Monthly data, per cent. Expected default frequencies (EDF), calculated on the basis of the price and volatility of the shares of the companies to which they refer, measure the probability that the market value of assets will be lower than that of liabilities at a one-year horizon. – (4) Monthly data, per cent. For each country, average of the estimates of the cost of capital in real terms using three different models (cyclically adjusted earnings yield, beta model, and the dividend discount model).

<sup>1</sup> See P. Del Giovane, G. Eramo and A. Nobili, "Disentangling Demand and Supply in Credit Developments: A Survey-Based Analysis for Italy", *Journal of Banking and Finance*, 10, 2011.



**European banks still face difficulties in terms of funding ...**

On the other hand, several factors can work to slow the growth in credit. European banks are still faced with worse wholesale funding conditions than before the sovereign debt crisis. This is an impediment to the objective of expanding their more stable sources of funding and reducing their reliance on the central bank.

**... profitability ...**

Banks' balance sheets are also weighed down by low profitability, reflected in the continual downward revision of expected earnings (Figure 1.5.a), and the need to set aside more loan loss provisions (Figure 1.5.b) in view of a possible increase in bad debts due to the recession and the consequent deterioration in borrowers' creditworthiness (Figure 1.5.c).

**... and capital**

Lastly, banks are under considerable pressure to strengthen their capital, from both the markets and the supervisory authorities (the European Banking Authority has asked some large intermediaries to raise their capital ratios). Given low profitability, large loan losses and the high cost of equity capital (Figure 1.5.d), this could lessen their capacity to finance the economy.

## 1.2 THE HOUSING MARKETS

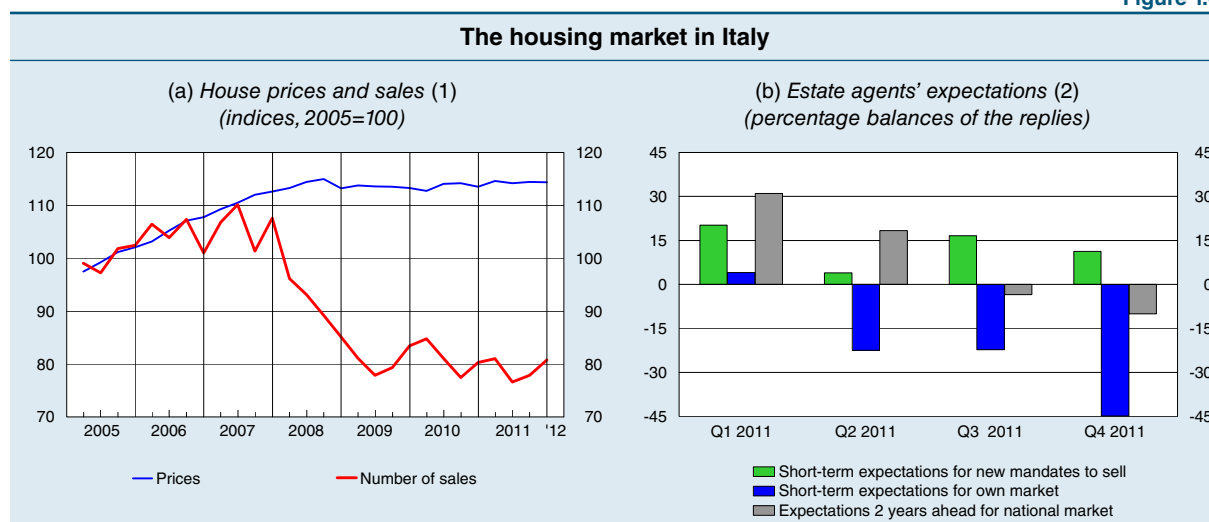
**House price trends diverge among euro-area countries**

In the euro area property prices are mainly declining (most markedly in Spain) or only rising slightly, but in Germany, after years of stability, there has been a sharp increase in house prices in the main cities.

**In Italy the picture remains stationary**

The property sector situation in Italy is unchanged. At the end of 2011 investment in construction staged a partial recovery while the number of house sales fluctuated around very low levels (Figure 1.6.a); house prices remain stable. The leading indicators do not point to any improvement in the next few months. Construction firms' confidence has started to slip again. The downward trend in production in the industrial sectors supplying the main inputs to construction has continued, with fluctuations; the fresh fall in the number of building permits granted at mid-2011 indicates the likely continuation of the phase of weak investment in the months that followed. According to the quarterly housing market survey conducted by the Bank of Italy, Tecnoborsa and the Agenzia del Territorio in January, real-estate agents' expectations of a fall in house prices have intensified, while expectations of new mandates to sell have moderated (Figure 1.6.b). Estate agents' medium-term expectations have also deteriorated slightly.

Figure 1.6



Sources: Based on Bank of Italy, Agenzia del Territorio, *Il Consulente Immobiliare* and Tecnoborsa data.

(1) Seasonally adjusted quarterly data. – (2) Quarterly data from the survey conducted by the Bank of Italy, Tecnoborsa and the Agenzia del Territorio. Balances between the percentages of replies indicating a situation that is improving or worsening. Short-term expectations for new mandates to sell and for agents' own market refer to the quarter following the one indicated. For the national market the time horizon is two years ahead.

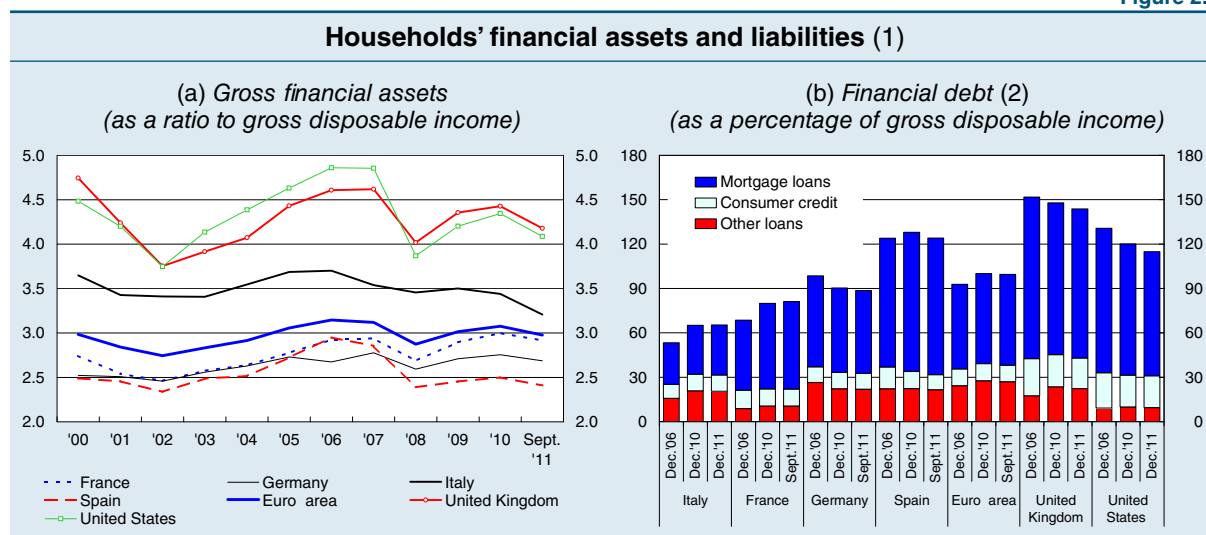
## 2 THE FINANCIAL CONDITION OF HOUSEHOLDS AND FIRMS

### 2.1 HOUSEHOLDS

#### Italian households' wealth declines

In the first nine months of 2011 Italian households' net wealth declined. As elsewhere in Europe the fall was concentrated in the financial component, above all owing to the decline in the market prices of gross financial assets (Figure 2.1.a); by contrast, real assets remained stable. Total net wealth is close to eight times disposable income, a high level by international standards.

Figure 2.1



Sources: Bank of Italy and Istat for Italy; Eurostat and ECB for the other euro-area countries; Central Statistical Office and Bank of England for the United Kingdom; Federal Reserve System – Board of Governors and Bureau of Economic Analysis for the United States.

(1) The data refer to consumer and producer households, except for the United States, for which they refer only to consumer households. – (2) For the fourth quarter of 2011, provisional data. The data include bad debts.

#### Indebtedness is moderate, especially in low-income households

Italian households' financial debts remain low in relation to disposable income compared with the other main economies (Figure 2.1.b).

The financial crisis is altering the profile of indebted households. The Bank of Italy's Survey on Household Income and Wealth shows that between 2008 and 2010 the already modest share of indebted households contracted further (from 26.5 to 24.1 per cent). The percentage of low-income households with a mortgage also fell (among those in the lowest-income quartile the proportion fell by half, to 4.8 per cent). This trend mainly reflects the credit supply strains seen in recent years (the proportion of households failing to obtain at least some of the credit requested rose from 23 to 28 per cent) and, in addition, the contraction in the demand for loans. Taken together with the absence of housing bubbles, it also goes some way to explaining the relatively low volume of household loan defaults.

**Low interest rates  
and support measures  
curb financial  
vulnerability ...**

Households' financial vulnerability is being contained by the low level of interest rates on existing mortgages, among which those linked to short-term interest rates make up some 70 per cent of the total stock. In 2011 the debt-service burden appears to have remained stable at 11 per cent of disposable income; this year a modest increase is forecast, reflecting the expected fall in disposable income and small increase in interest rates.

Further support to household solvency has come from the public and private measures adopted since 2009 and, in particular, from the moratorium on mortgages (effective until June of this year) agreed by the Italian Banking Association and the main consumer organizations.<sup>1</sup> Between February 2010 and January 2012, this agreement enabled 60,000 households to suspend repayments amounting to 1 per cent of the loans granted in the same period; while the macroeconomic impact may be limited, in difficult times the moratorium provided important support to the beneficiary households, which received financial relief estimated at around 25 per cent of their disposable income. The measure also appears to have improved the creditworthiness of the participating households: some 62 per cent of those behind on payments prior to the suspension resumed regular payments at the end of the moratorium period.

The effects of the government measures were more limited. Last year the Government renewed those launched in 2009 (the solidarity fund for mortgages for first-time home buyers and the fund for newborns), and simultaneously activated new measures (guarantee funds for young, low-income couples and student loans). The solidarity fund for first-time home buyers, with a capital endowment of €20 million for 2011, contributed to the interest payments of 5,000 households whose mortgage loan repayments had been suspended; on renewal last December, a further €20 million was allocated for 2012 and 2013. At the same time the fund for newborns was extended until 2014; between 2010 and 2011 this fund disbursed loans totalling €116 million to 21,000 households (0.2 per cent of total loans to households).

**... but do not eliminate  
the risks associated  
with weak income  
growth**

In the months ahead the risks for the financial conditions of households will mainly come from weak growth in income, which derives in turn from the unfavourable economic outlook and could exacerbate loan repayment problems.

## 2.2 FIRMS

**Firms' profitability  
declines, their  
external funding  
requirement increases**

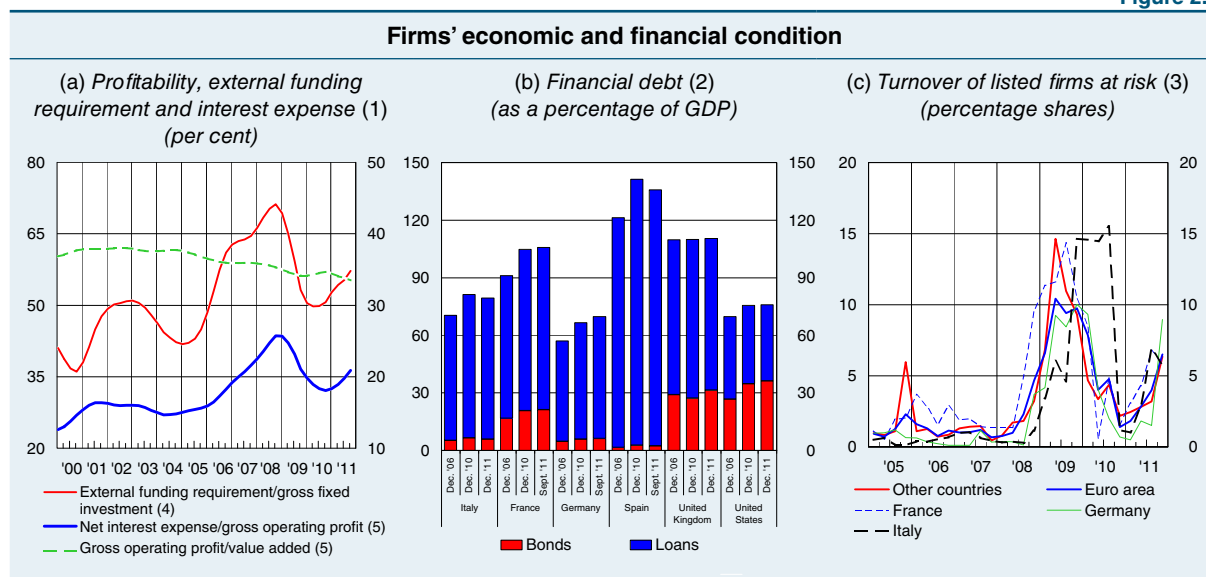
The new cyclical downturn has affected firms' profits. Gross operating profit fell further in 2011 to 33.5 per cent of value added, the lowest since 1995 (Figure 2.2.a). Firms' financial conditions also deteriorated: the ratio of net interest expense to gross operating profit rose by 2 percentage points, while the external funding requirement increased again, owing above all to a decline in self-financing (see *Economic Bulletin*, April 2012). Overall there was a contraction in new bank loans, a parallel increase in factoring, and an increase in bad debts.

**Corporate debt is  
stable**

By international standards, Italian firms' debt remains relatively low in relation to GDP (Figure 2.2.b), although the gap with the other countries is narrowing; their leverage (financial debt over financial debt plus equity) was 45.8 per cent in 2010, a figure comparable to the euro-area average (42.2 per cent). The leverage of Italian firms increased in 2011 (to 48.5 per cent in September).

<sup>1</sup> See L. Bartiloro, L. Carpinelli, P. Finaldi Russo and S. Pastorelli, 'Access to credit in times of crisis: measures to support firms and households', Banca d'Italia, *Occasional Papers No. 111*, January 2012.

Figure 2.2



The tensions that have arisen in recent months are being propagated through the economy by the lengthening of the time to settlement of commercial transactions (from 83 days in the first half of 2011 to 89 days in the second).<sup>2</sup> The problem is aggravated by the very substantial volume of general government payments pending. The number of bankruptcies rose last year, by 7.4 per cent.

#### Among listed firms, the signs of deterioration prevail

The leverage ratio of Italian listed non-financial corporations also increased in 2011, to 55.4 per cent. The share of total turnover accounted for by firms defined as at risk (loss-making and heavily indebted) is in line with the euro-area average (Figure 2.2.c; the increase in the share in Germany reflects the large size of a firm judged to be at risk in the fourth quarter of 2011).

#### The main risk comes from the weakness of the economy

The principal risks for firms’ profitability and financial condition are the possibility of further cyclical deterioration and the persistence of credit supply strains. However, these difficulties could be attenuated by the Government’s support measures, such as the reinforcement of the Central Guarantee Fund, the new simpler mechanism for the liquidation of claims on general government entities, and the new moratorium on repayment of the principal on loans to small and medium-sized firms (see the box “Moratoria on firms’ debt: forbearance risk?”).

### MORATORIA ON FIRMS’ DEBT: FORBEARANCE RISK?

To support firms during the recession, measures have recently been taken allowing debtors meeting the requirements to suspend repayment of part of the loans they have contracted. Such measures can

<sup>2</sup> Data from Cerved Group, Payline survey.

trigger “forbearance risk,” delaying the emergence of bad debts and the consequent rectification of banks’ balance sheets, with repercussions on financial stability and resource allocation. However, the measures taken in Italy since 2009 have limited the potential undesirable effects of debt moratoria while nevertheless producing substantial advantages for the beneficiary firms.

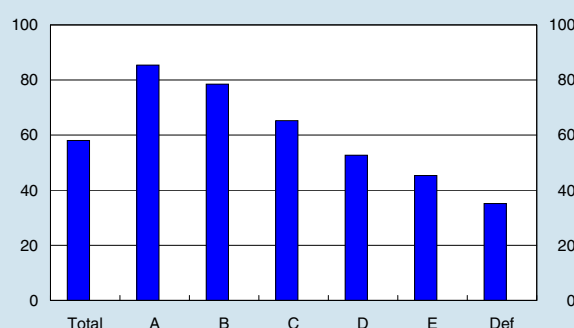
**The moratorium of 2009.** – In August 2009 the Ministry for the Economy and Finance, the Italian Banking Association and business associations signed an agreement allowing for the suspension of principal repayments on some forms of debt held by small and medium-sized enterprises (SMEs). Over the next two years 225,000 applications were accepted and the moratorium was applied to debt totalling €65 billion (three quarters of it in the form of mortgages). It is estimated that the agreement resulted in the suspension of some €15 billion in loan repayments.

In the course of inspections at five mid-sized and large banking groups the Bank of Italy gathered detailed data on the firms that made use of debt moratoria, including some not covered by the agreement.<sup>1</sup> The inspections found that following the suspension, regular payments were resumed in respect of loans worth 60 per cent of the total value covered by the moratorium. The highest proportion (85 per cent) was recorded among the firms that had been financially soundest to begin with; for the weakest firms, the rate was 35 per cent (see the figure). Therefore, overall, the forbearance risks were limited.

**The new moratorium.** – In February 2012 a new agreement for temporary debt relief for troubled firms was signed (“New measures on credit to SMEs”).<sup>2</sup> The measures are also designed to foster recapitalization of small businesses through loans earmarked for that purpose.

Like its predecessor, the February agreement – which is restricted to firms with good business prospects and without serious irregularities in debt repayments – will provide support for firms in the current difficult phase. The new eligibility requirements are stricter. First, the firm must be up to date in loan repayments at the time when it applies for the suspension, not at some earlier date as under the 2009 moratorium. Second, access is denied to firms whose repayment record is substandard, whereas under the old agreement judgment on this account was left to the bank. Finally, the new provision covers exposures overdue or overdrawn beyond 90 days, not 180 days as in the previous accord. The exclusion of loans that took advantage of the previous moratorium further restricts the number of potential beneficiaries.

**Share of loans with regular repayments after moratoria (1)**  
(percentages)



Source: L. Bartiloro, L. Carpinelli, P. Finaldi Russo and S. Pastorelli, “Access to credit in times of crisis: measures to support firms and households”, Banca d’Italia, *Occasional Papers No. 111*, January 2012.

(1) Ratio of the value of loans returning to regular repayment after the end of the suspension period to the total amount of loans benefiting from the moratorium. Risk classes are increasing from A (minimum) to E (maximum). Defaults (Def) include loans to borrowers that had been classified by the lending bank as past-due or substandard prior to the moratorium.

<sup>1</sup> Some banks had granted borrowers a repayment suspension before the moratorium went into effect and some extended it to firms not meeting its formal eligibility requirements.

<sup>2</sup> The new agreement is patterned after the old one. It provides for: (a) suspension of 12 months for principal repayments on loans, 12 months for real estate leasing instalments and 6 months for other leasing; (b) mortgage extension for up to 2 years for unsecured loans and 3 years for collateralized loans (excluding firms that benefited from the analogous measure introduced by an agreement in February 2011); and (c) the extension for up to 270 days of the due date for advances on credits missing repayment instalments.

# 3 THE BANKING AND FINANCIAL SYSTEM

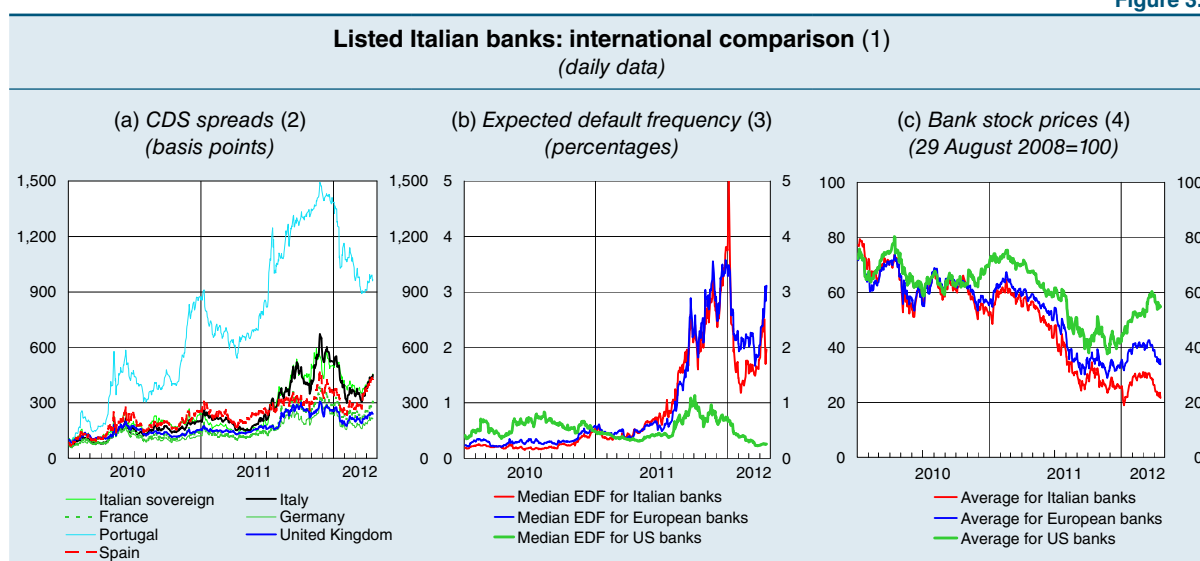
## 3.1 THE MARKET'S ASSESSMENT OF ITALIAN BANKS

**Market-based indicators point to an improvement but conditions remain fragile**

In recent months the European Central Bank's action, the fiscal measures taken by the countries affected by the financial tensions and the agreement signed in Europe to strengthen fiscal cooperation (the Fiscal Compact) have helped ease the financial strains in the euro area.

There has been a marked improvement for Italian banks, which had previously suffered the effects of the turmoil in the sovereign debt market. The fear that individual banks could default, inferred from market indicators, has been allayed (Figures 3.1.a and 3.1.b); stock market valuations of banks have improved (Figure 3.1.c). Systemic risk indicators have also made progress: the joint probability of distress (JPoD)<sup>1</sup> for Italian banks has fallen significantly.

Figure 3.1



Sources: Based on data from Bloomberg and Moody's KMV.

(1) Panel (a) refers to the following banks: for Italy, UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena; for France, BNP Paribas, Société Générale and Crédit Agricole; for Germany, Deutsche Bank and Commerzbank; for Portugal, Banco Espírito Santo and Banco Comercial Português; for the United Kingdom, Barclays, Royal Bank of Scotland, HSBC and Lloyds; for Spain, Santander and Banco Bilbao Vizcaya Argentaria. Panels (b) and (c) refer to the following samples of banks: for Italy, UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena; for Europe, UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, BNP Paribas, Société Générale, Crédit Agricole, Dexia, Deutsche Bank, Commerzbank, ING, Banco Santander, Banco Bilbao Vizcaya Argentaria, HSBC, Barclays, Royal Bank of Scotland, Lloyds, UBS and Credit Suisse; for the United States, Citigroup, JPMorgan Chase, Bank of America, Goldman Sachs and Morgan Stanley. – (2) Senior debt on 5-year CDSs. – (3) The expected default frequencies (EDFs), calculated on the basis of the price and volatility of the shares of the intermediaries to which they refer, measure the probability of assets having a lower market value than liabilities over a one-year horizon. – (4) Average share prices are calculated in reference to price indices; closing price at 29 August 2008=100.

<sup>1</sup> The JPoD estimates the likelihood that several banks find themselves in difficulties at the same time. For the calculation methodology, see the box "Indicators of interdependence between banks" in *Financial Stability Report*, November 2011.



The signs of tension which re-emerged in the weeks bridging March and April widened the spreads on Italian banks' securities, putting downward pressure on their market-to-book ratio again. The rapid deterioration of the market indicators in this phase, together with the release of macroeconomic data on the euro area that were less favourable than expected, reveals the fragility of the gains made.

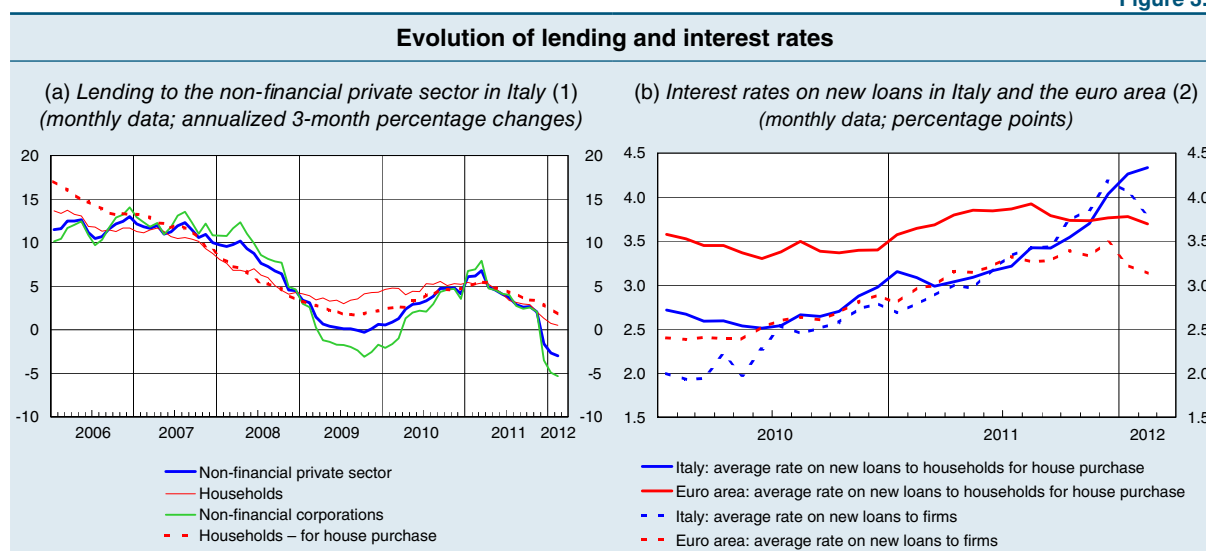
## 3.2 CREDIT

### *Finance to the economy*

#### **The deceleration in credit reflects both demand-side and supply-side factors**

The financial market strains of recent months are affecting credit. Lending to the non-financial private sector has contracted (Figure 3.2.a). In part, this reflects flagging demand: firms' requests for loans are restrained by the sluggishness of investment, while households' demand reflects the trend in employment and the weakness of the housing market.

**Figure 3.2**



Sources: Based on Bank of Italy and ECB data.

(1) The percentage changes are calculated net of reclassifications, exchange rate variations, value adjustments and other variations not due to transactions. Lending includes an estimate of loans not recorded in banks' balance sheets because they have been securitized. Where necessary the data have been seasonally adjusted. – (2) The interest rates refer to transactions in euros and are gathered and processed using the Eurosystem's harmonized method.

However, lending to firms has also been significantly curbed by the deterioration in credit supply conditions. This is signalled by bank lending rates, which have risen above the euro-area average (Figure 3.2.b), and by empirical analyses and cyclical indicators, including surveys of banks and firms (see the box "Credit supply and demand in Italy", *Economic Bulletin*, April 2012). The sharp slowdown in lending recorded in December was due in part to the instability that had emerged in previous months in the Italian government securities market and the consequent strains on bank liquidity, which prompted intermediaries to tighten their lending policies in that phase.

#### **The credit slowdown is less abrupt for financially sounder firms**

The dynamic of lending is also being affected by the deterioration in credit quality. Disaggregated data indicate that the contraction in 2011 was concentrated among the riskiest firms, against strongly positive growth rates (nearly 6 per cent year on year) for firms with sounder financial conditions



(Figure 3.3). Given the increase in bad debts recorded at the end of the year, this suggests that banks are trying to avoid a further deterioration in their own balance sheets and at the same time to ensure support for creditworthy customers.

#### Lending by smaller banks continues to expand

The contraction of 2.8 per cent in lending by the five largest banking groups (net of repos and bad debts) in the twelve months ending in February was partly counterbalanced by an expansion of 1.4 per cent in lending by smaller intermediaries, although this too has slowed and could be affected in the future by a weakening of these banks' balance sheets due to the performance of credit risk and profitability.

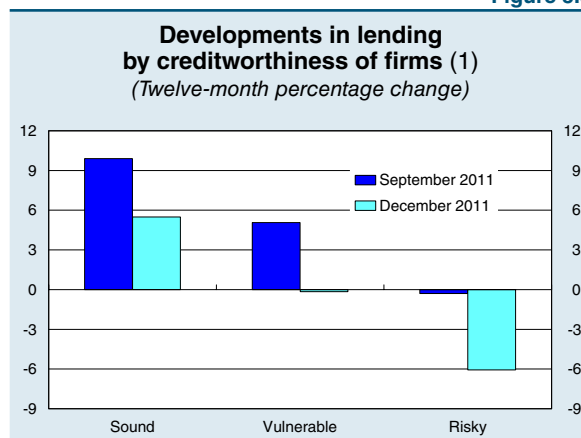
#### Lending should pick up in the final part of 2012

The measures taken by both national and international authorities have improved credit supply conditions. On the basis of the latest data, the interest rates on loans to firms turned downwards (Figure 3.2.b). In addition, in recent surveys conducted by the Bank of Italy the major banks have indicated that they intend to use some of the funds obtained from the central bank to revive lending to households and firms. The quarterly Bank Lending Survey for Italy points to a clear improvement in lending standards in the first quarter of this year (Figure 3.4).

The improvements in lending policies should be able to affect the actual growth of lending in the coming months. A return to normality will be possible provided that yields on sovereign securities continue to come down and conditions in the capital markets to improve. And in any case it will be gradual, given the weakness of economic activity and the pressures, coming from several sources, on the banks to increase their capital ratios.

Our estimates, consistent with the projections for the main macroeconomic variables, indicate that lending to non-financial corporations will continue to decelerate through most of 2012 (Figure 3.5.a), owing to the lagged effect of the deterioration in supply conditions at the end of last year and the slowdown in investment. The subsequent recovery is expected to reflect a gradual strengthening of economic activity and the associated increase in firms' external funding needs. The rate of increase in

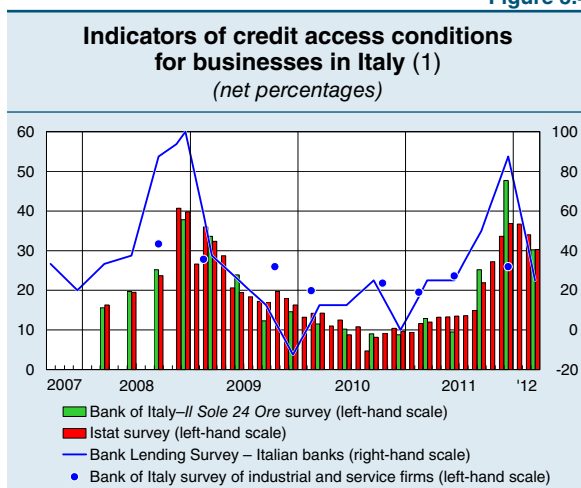
Figure 3.3



Sources: Central Credit Register and Cerved Group.

(1) The data refer to a sample of some 340,000 firms distributed among the different risk classes according to their Z-scores (assigned by Cerved on the basis of firms' 2010 annual accounts). 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).

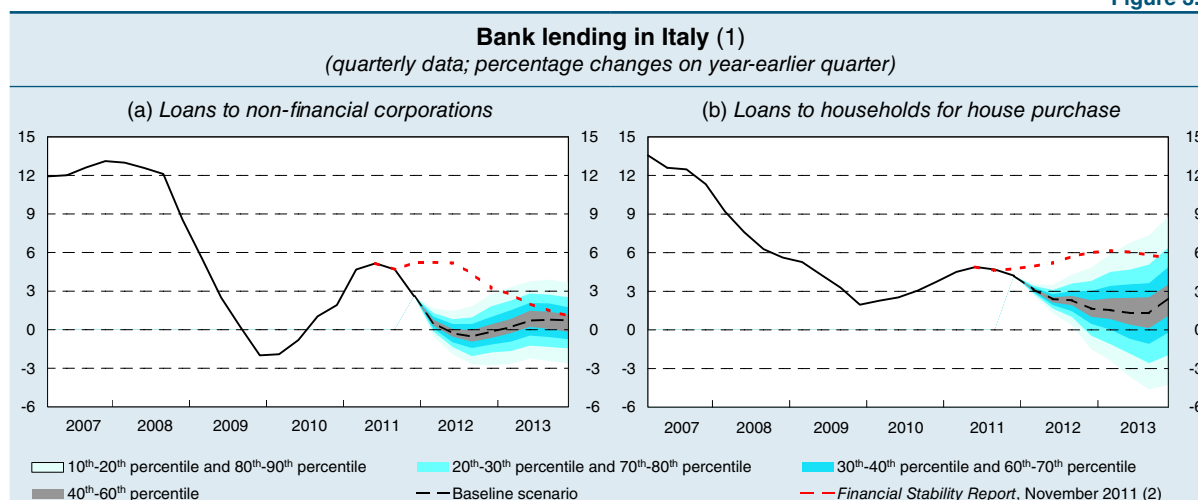
Figure 3.4



Sources: Based on Bank of Italy, Bank of Italy-II Sole 24 Ore, and Istat data.

(1) A fall in the indicators denotes an improvement in credit supply conditions; they are net percentages calculated as the difference in percentage points between the percentages of replies indicating a worsening of credit access conditions and the percentage of those indicating an improvement.

Figure 3.5



(1) Loans include an estimate of those not entered in banks' financial statements because they have been securitized. The probability distribution of the forecasts (which makes it possible to assess the size of the risks associated with the baseline forecast) was calculated on the basis of stochastic simulations performed with random extractions from the distribution of the shocks of the Bank of Italy's quarterly econometric model. The distribution is shown graphically by percentile classes. – (2) Baseline scenario.

lending to households for house purchases is likely to diminish this year, though remaining positive, and to pick up in 2013 (Figure 3.5.b).<sup>2</sup>

These forecasts assume that credit market conditions will gradually return to normal in the first half of this year. The impact of the sovereign debt crisis on the amount of funds supplied by banks is likely to die out in the middle of the year, reflecting the effects of the Eurosystem's extraordinary liquidity measures, which should feed through with about the same speed as in the period following the failure of Lehman Brothers. The impact of the crisis on lending rates is likely to be more persistent, moderating the dynamic of lending over the entire forecasting horizon.

**The forecasts are subject to considerable uncertainty**

The forecasts are characterized by a high degree of uncertainty. Overall, the risks are tilted slightly to the downside. The pace of lending could be negatively affected by a possible worsening in macroeconomic conditions. Further, the strains in bank funding now allayed by the extraordinary Eurosystem interventions could

surface again, prompting banks to maintain a restrictive stance; a deterioration in credit quality and the resulting pressures on banks to defend their capital ratios could work in the same direction. These effects could be partly offset by a more rapid fading of the constraints on credit supply than is assumed here, partly in connection with the exceptional nature of the measures adopted by the Eurosystem.

### Credit quality

**The quality of loans to firms worsens**

The deterioration in the real economy is affecting the quality of loans to businesses. The flow of bad debts in relation to total lending to non-financial enterprises has turned upwards (Figure 3.6), especially for construction firms. Leading indicators

do not point to an improvement in the months ahead (Figure 3.7): the indicator of loan quality based on the movement of loans between the different classes of quality is stationary, the probabilities of default within one year have increased, if only slightly, and the share of loans to borrowers in temporary difficulty

<sup>2</sup> The dynamic of bank lending in 2012 estimated here differs from the projection published in the previous issue of the *Financial Stability Report*. The change is largely explained by the aggravation of the sovereign debt crisis in the last quarter of 2011 and the sharp downward revision of the projected growth in investment and disposable income.

has started to grow again. For households, by contrast, the flow of bad debts has remained unchanged in relation to outstanding loans.

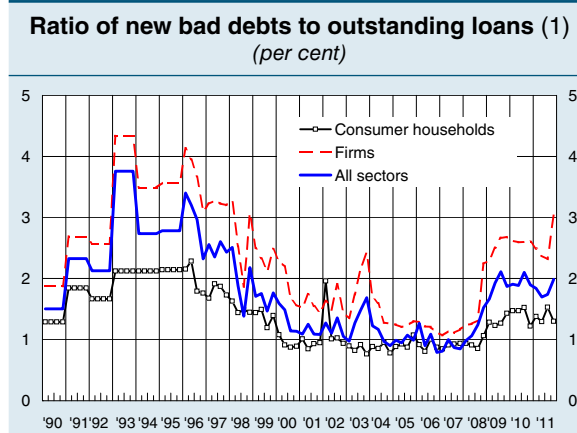
### The flow of bad debts is likely to turn downwards in the second half of 2012

According to our estimates, the flow of new bad debt as a ratio of total lending to firms will begin to decrease gradually in the second half of 2012 (Figure 3.8.a), benefiting with the usual lags from the improvement in economic conditions. The new bad debt ratio on loans to households is likely to remain around the current level over the entire forecasting horizon (Figure 3.8.b), reflecting the stability of house prices and a modest contribution from the economic recovery.

### The forecasting risks are balanced

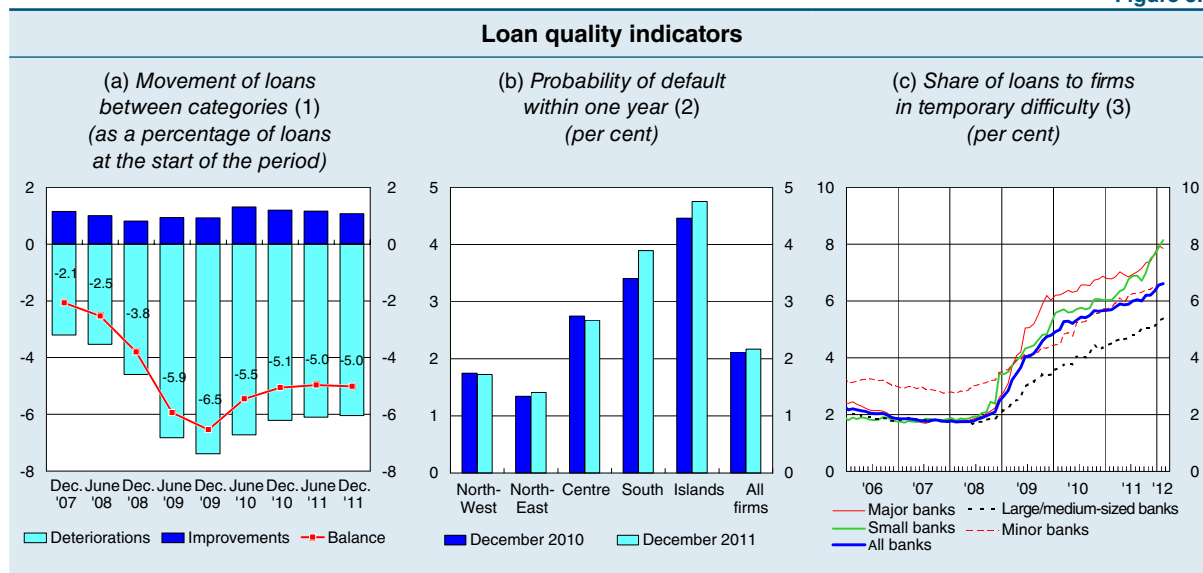
The above projections are subject to considerable uncertainty, particularly in relation to the situation of the real economy and the financial markets. Overall, the risks are balanced. A downward impulse could come from the recent renewal of some measures adopted in the past years to support bank credit, such as moratoria on loan repayments or temporary reductions of instalments. Such measures, which in the past have proved effective in mitigating the difficulties of households and firms, could help moderate the flow of new bad debt in the months ahead.

Figure 3.6



Sources: Supervisory statistical reports and Central Credit Register.  
(1) Quarterly flow of adjusted bad debts in relation to the stock of loans at the end of the previous quarter; annual data up to the fourth quarter of 1995. Seasonally adjusted where necessary and annualized.

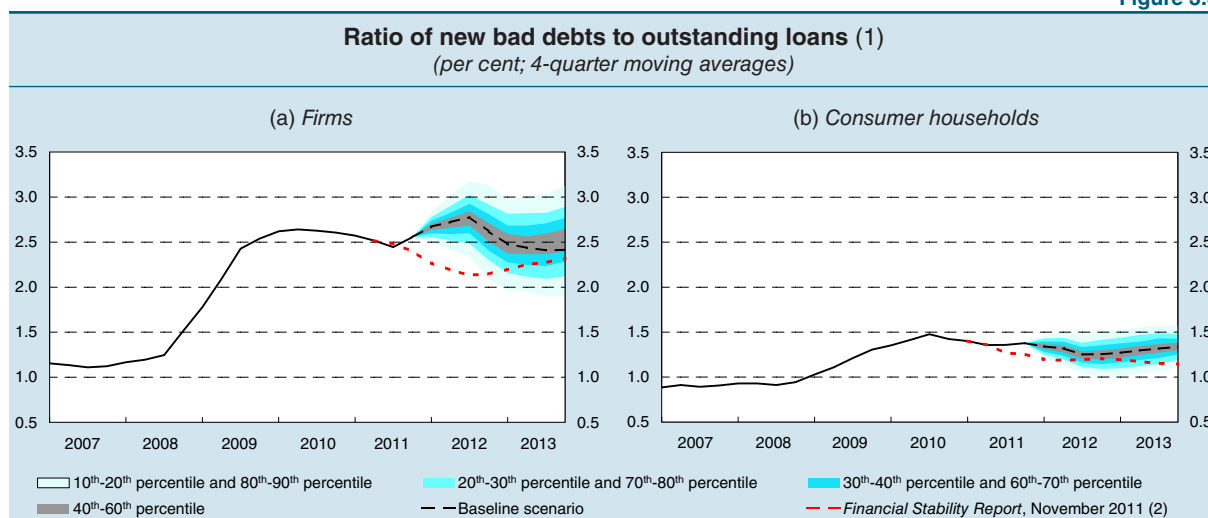
Figure 3.7



Sources: Central Credit Register and company accounts.

(1) The index considers the movements of loans to firms between the different categories (loans with no anomalies, overdrafts in breach of limits, past-due loans, restructured loans, substandard loans and bad debts). It is calculated as the balance between the percentages of loans whose quality deteriorated/improved in the 12 preceding months. – (2) The probabilities of default are estimated for some 800,000 non-financial firms on the basis of vulnerability indicators derived from company accounts and indicators of financial strain in credit relationships. – (3) Loans classified by intermediaries as substandard loans and restructured loans. The division into size classes is based on the composition of banking groups at February 2012 and total non-consolidated assets at December 2008. Major banks: banks belonging to the UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Unione di Banche Italiane and Banco Popolare groups. Large and medium-sized banks: banks belonging to groups or independent banks with total assets ranging from €21,532 million to €182,052 million. Small banks: banks belonging to groups or independent banks with total assets ranging from €3,626 million to €21,531 million. Minor banks: banks belonging to groups or independent banks with total assets less than €3,626 million. Excludes branches of foreign banks.

Figure 3.8



(1) Quarterly flow of adjusted bad debts in relation to the stock of loans at the end of the previous quarter. Seasonally adjusted where necessary. The probability distribution of the forecasts, which permits assessment of the size and direction of the risks characterizing the baseline forecast, was calculated on the basis of stochastic simulations performed with random extractions from the distribution of the shocks of the Bank of Italy's quarterly econometric model. The distribution is shown graphically by percentile classes. – (2) Baseline scenario.

#### The ratio of non-performing loans to capital increases slightly for the major groups

For Italy's five largest banking groups, in December 2011 non-performing positions (bad debts, substandard loans, restructured loans and past-due loans), after value adjustments, amounted to 65 per cent of regulatory capital, 3 percentage points more than at the end of 2010. The bad debt cover ratio (value adjustments over gross bad debts) was equal to 56.8 per cent, 6 percentage points lower than the average for the three years 2006-08: bringing it back up to pre-crisis levels would require an estimated €5.5 billion of additional allocations to provisions (0.4 per cent of the five groups' total credit exposures).

#### The incidence of banks with fragile balance sheets is low

On the basis of data for 35 banking groups (accounting for 85 per cent of lending), the indicators of credit quality are particularly unfavourable for six mostly small groups (accounting for 5 per cent of total lending). These were the only banks worse than the average for both the ratio of bad debts to outstanding loans (7.6 against 6.3 per cent) and the bad debt cover ratio (45.8 against 56.1 per cent). Their core tier 1 ratio stood at 7.8 per cent.

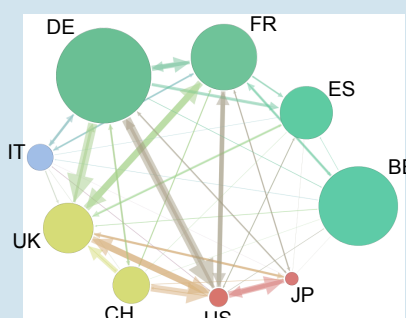
#### Exposures to sovereign risk in the euro area and foreign assets

##### Direct exposure to Greece, Ireland, Portugal and Spain is very low

The exposure of the Italian banking system to all the categories of borrowers resident in Greece, Ireland, Portugal and Spain is small (Table 3.1; it amounts to 1.6 per cent of the total exposure to euro-area residents in December

Figure 3.9

#### Direct and indirect exposure of the banks of the main industrial countries to Greece, Ireland, Portugal and Spain (1) (September 2011)



Source: BIS.

(1) The size of the spheres is proportional to the direct exposure of the banks of each country to Greece, Ireland, Portugal and Spain as a percentage of the total assets of the entire system (excluding, for Spain, loans to residents). The arrows indicate the direction of the interbank loans between the two countries joined; their thickness indicates the size of the exposure. Country code: BE = Belgium, CH = Switzerland, DE = Germany, ES = Spain, FR = France, IT = Italy, JP = Japan, UK = United Kingdom, US = United States.

Table 3.1

**Exposures of Italian groups and banks to residents  
of euro-area countries by sector of counterparty (1)**  
(billions of euros at 31 December 2011)

	Public sector	Banks	Financial companies	Households and non-financial firms	Total	As a percentage of the total exposures reported to the BIS (2)
Italy	272.0	122.8	99.1	1,516.3	2,010.1	78.9 (3)
Germany	37.7	39.2	10.5	94.2	181.6	14.4
Austria	11.1	9.3	1.8	55.8	78.1	39.4
France	1.8	19.9	4.3	7.4	33.4	3.8
Spain	4.7	4.3	4.3	8.3	21.6	4.3
Luxembourg	0.4	5.3	9.4	4.1	19.2	5.2
Netherlands	0.1	4.1	5.9	6.0	16.1	2.7
Ireland	0.4	3.2	8.1	0.4	12.1	3.8
Portugal	0.4	1.1	0.3	0.8	2.5	1.8
Greece	0.6	0.1	0.1	0.9	1.7	2.0
Other (4)	4.2	2.2	1.2	17.5	25.1	3.8
<b>Total</b>	<b>333.4</b>	<b>211.4</b>	<b>144.9</b>	<b>1,711.7</b>	<b>2,401.4</b>	

Source: Consolidated supervisory reports for banking groups and individual reports for banks not belonging to a group.

(1) Exposures to "ultimate borrowers", gross of bad debts and net of writedowns. BancoPosta and CDP are excluded. The data include securities acquired by some groups under structured (or long-term) repo contracts, long-term operations that for the whole of their duration generate a return proportional to the differential between the remuneration of the underlying securities and the financing cost. These transactions (usually backed by specific guarantees in favour of the counterparties of the Italian banks) are of limited overall importance for the purpose of quantifying the exposure to Italian sovereign debt, given their small amount (about €10 billion). – (2) As a percentage of the total foreign exposures to each country in September 2011, reported to the BIS by a large group of international intermediaries. – (3) Exposure of Italian banks to resident clients; the difference with respect to 100 is given by the lending of foreign groups and banks to Italian clients, via establishments in Italy and cross-border transactions. – (4) The item comprises Slovenia, Slovakia, Belgium, Finland, Cyprus and Malta.

2011); within this aggregate, sovereign risks are negligible (scarcely a tenth of the total). Among the European banking systems Italy's is one of the least exposed to these four countries (Figure 3.9). Like those of the other major countries, the Italian banking system is indirectly exposed by way of claims on foreign banks that are themselves exposed to Greece, Ireland, Portugal and Spain. This exposure (whose size is shown in the figure by the thickness of the arrows linking countries) is much smaller than in other countries: Italian banks' have 4 per cent of the total interbank exposure of the nine banking systems shown in the figure, compared with an average of 11 per cent.

**The exposure to Italian sovereign debt, unchanged in 2011 ...**

At the end of December 2011 the total exposure of the Italian banking system to the domestic public sector amounted to €272 billion, 10 per cent of total assets, and was held mainly in the form of government securities (€211 billion), while the share of loans was small. The total exposure of the five biggest banking groups was €164 billion; €116 billion of the total was in the form of securities, about a quarter of which were classified as trading book assets. The exposure of Italian banks to the domestic public sector by way of CDSs continues to be negligible.

**... increases in the opening months of 2012**

In the first two months of 2012 the banks operating in Italy bought Italian government securities, bringing to a halt the disposals made in the last part of 2011 in response to the instability in wholesale funding markets (Figure 3.10). The net purchases amounted to €45 billion and they were mostly allocated to the banking book. Taking account of the rise in market prices since the beginning of the year (corresponding to about €13 billion), the value of the banks' stock of government securities grew by about €58 billion compared with the end of December. The purchases made by the ten biggest banking groups amounted to €20 billion; the remaining purchases were made by the other groups and small and medium-sized banks not belonging to groups.

Italian banks' purchases of government securities in the first two months of 2012 appear to have been driven mainly by the reduction in sovereign risk and the prospect of capital gains, which in effect

materialized in the period. They appear to have depended only in part on the amount of longer-term refinancing obtained from the ECB. In the first place it was mainly the biggest groups, which were less active buyers, that participated in the first three-year operation. In addition, more than one third of the net purchases involved BOTs with a maturity at issue of one year or less, so that at least in part the investments were temporary and ready, if necessary, to be liquidated in order to provide funds for the very large bond redemptions falling due in the coming months and furnish resources to serve a possible recovery in the demand for credit.

**Exposure remains substantial to Central and Eastern European countries, where GDP continues to grow ...**

Outside the euro area, Italian banks do substantial business with the Central and Eastern European countries, which the IMF expects to continue to grow in 2012, albeit at a slower pace (with a more favourable outlook for Poland). There is no sign of significant change in Italian banks' exposures to these countries (Figure 3.11).

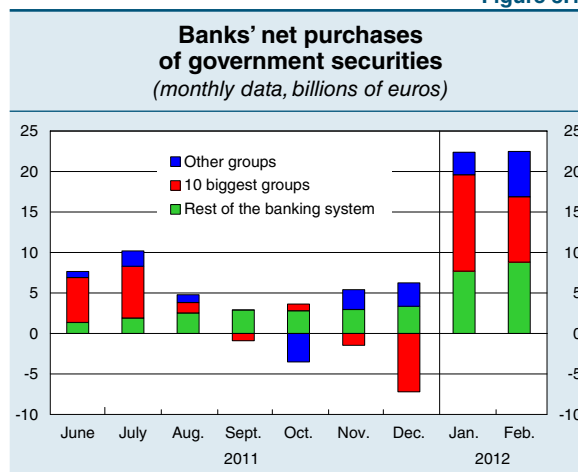
**... but with elements of financial fragility ...**

The main risks in this area are related to the deterioration in loan quality, not least owing to the high proportion of loans not denominated in the local currency (about 50 per cent for the two largest Italian banking groups). The potential risks of a massive and simultaneous withdrawal of the foreign banking groups from the countries of Central and Eastern Europe are attenuated by the so-called Vienna Initiative, which was confirmed in March by the leading financial institutions and international banks. In particular, principles have been established for cooperation between local and foreign supervisory authorities to facilitate international transfers of banks' liquidity and capital and prevent measures adopted by individual national authorities from having repercussions on the stability of other countries' financial systems.

**... with respect to which Italian banks are adopting prudent policies**

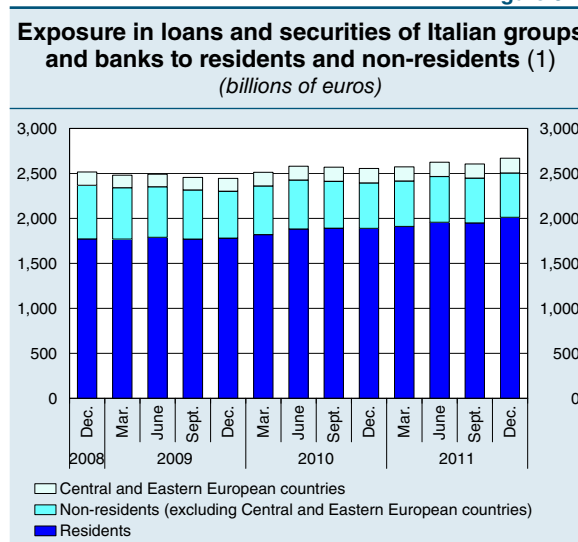
In response to the increase in the quantity of impaired assets in the Central and Eastern European countries (to 9.8 per cent of total exposure in December 2011, from 8.6 per cent a year earlier), the two largest Italian banks (which have a significant volume of assets in the area) further increased their total value adjustments in relation to their outstanding loans (to an average of 189 basis points in December 2011, against 151 in June); at the end of 2011 their provisions were equal to 46 per cent of their impaired loans (against 42 per cent at the end of 2010). The two banks followed especially prudent policies where credit risks are greatest (above all in Romania, Hungary and Ukraine).

Figure 3.10



Source: Individual reports of banks operating in Italy.

Figure 3.11



(1) Quarterly data; consolidated for banking groups, individual for banks not belonging to a group. End-of-quarter exposures in loans and securities to banking and financial counterparties, governments, households and firms; intra-group positions are not included.



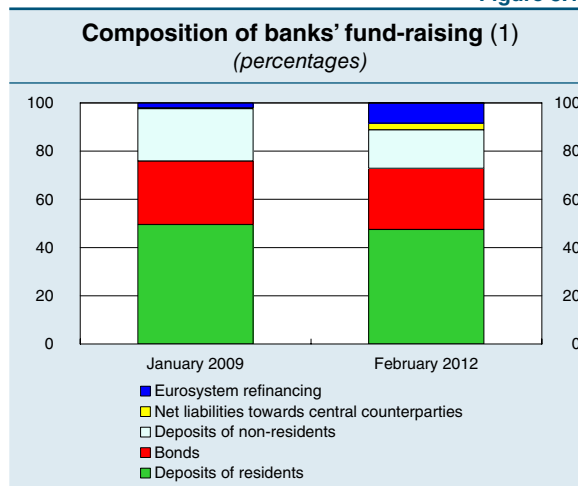
### 3.3 BANK FUNDING, LIQUIDITY RISK, REFINANCING RISK

#### Total funding continues to expand, thanks to Eurosystem refinancing

In recent months greater recourse to refinancing with the Eurosystem enabled funding to continue to grow; a positive contribution also came from the increase in bonds subscribed by households. Residents' deposits remained stable in February (see the box "The recent trend in residents' deposits"). Within this aggregate households' deposits turned upwards, after declining in January. By contrast, deposits of non-residents decreased.

At the end of February, domestic deposits accounted for 47.5 per cent of Italian banks' funding excluding the domestic interbank component, bonds for 25.3 per cent and liabilities towards the ECB for 8.4 per cent (Figure 3.12). The remainder consisted in foreign liabilities, whose amount has fluctuated significantly in recent months (see the box "Italian banks' foreign fund-raising").

Figure 3.12



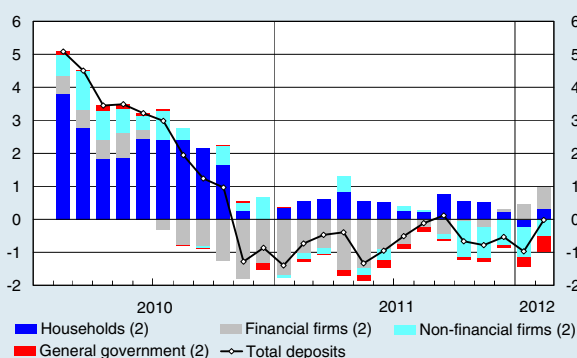
#### THE RECENT TREND IN RESIDENTS' DEPOSITS

In February, growth in residents' deposits returned to nil, after recording slightly negative values in previous months (see the figure). The trends of the various components diverge somewhat, partly in connection with extraordinary factors. Household deposits expanded moderately, but the contribution of non-financial firms was negative, although slightly higher than in the last months of 2011, when the effects of the marked tightening of credit supply conditions were felt. There are some indications that firms have decreased their deposits of liquid funds in response to the reduced availability of loans as seen in both the survey conducted by the Bank of Italy in collaboration with *Il Sole 24 Ore* and in the positive correlation (calculated on bank-level data) between the reduction in deposits and the reduction in loans to firms.

The contribution of general government deposits was slightly negative in 2011. The figure for February 2012 reflects an outflow of more than €4 billion, broadly explained by the reinstatement of the single Treasury account, which is centralizing all the bank deposits of general government

#### Bank deposits in Italy, by holding sector (1)

(12-month percentage changes and contributions)





entities at the Bank of Italy. The effects of the provision, undertaken in the context of measures to consolidate the public finances (Decree Law 1/2012 of 24 January 2012), will continue until April (for an estimated €5 billion more).

After contributing to the decline in residents' deposits for most of 2011, the deposits of financial enterprises, which are highly volatile, accelerated from December, partly thanks to extraordinary operations. In particular, there were increases in the current account deposits held by central counterparties, in connection with the increase in the margins on transactions in Italian government securities in the last months of 2011, and in those held by insurance companies in relation to the reorganization of one of the main intermediaries.

## ITALIAN BANKS' FOREIGN FUND-RAISING

At the end of 2011 Italian banks' gross foreign liabilities (excluding those to the Eurosystem) amounted to \$870 billion (21 per cent of their total liabilities; Figure A.a). Foreign fund-raising is the almost exclusive preserve of the bigger banks; among the 50 largest, the ratio of foreign to total fund-raising varies widely, with the proportion of the median bank equal to 3 per cent (Figure A.b).

Until the summer of 2011 Italian banks had had a net foreign debtor position of about \$100 billion (just above 2 per cent of their liabilities). As the sovereign debt crisis worsened, their net liabilities fell sharply and by the end of 2011 their net foreign position had turned slightly positive (Figure A.c).

The swiftness of this change reflects the characteristics of foreign fund-raising, such as the prevalence of short-term loans – subject to frequent renewals – raised from foreign banks and other financial institutions, which typically adjust their exposures promptly as market conditions change. Another factor was the denomination in foreign currency of part of the funds raised; this calls for management of the exchange rate risk, which becomes particularly onerous at times of market turmoil. In line with these assessments, the change in Italian banks' net foreign position in recent months has mainly involved their gross fund-raising from banks and financial companies (Figure A.d) at maturities of less than one year (Figure A.e) and in currencies other than the euro (mainly US dollars and pounds sterling; Figure A.f). Foreign fund-raising from households and firms has fallen moderately and has increased in relation to total fund-raising (to 40 per cent). These developments highlight the need, with a view to containing banks' funding risk, to ensure adequate diversification of the sources of funds and careful management of maturity transformation and foreign exchange exposure.

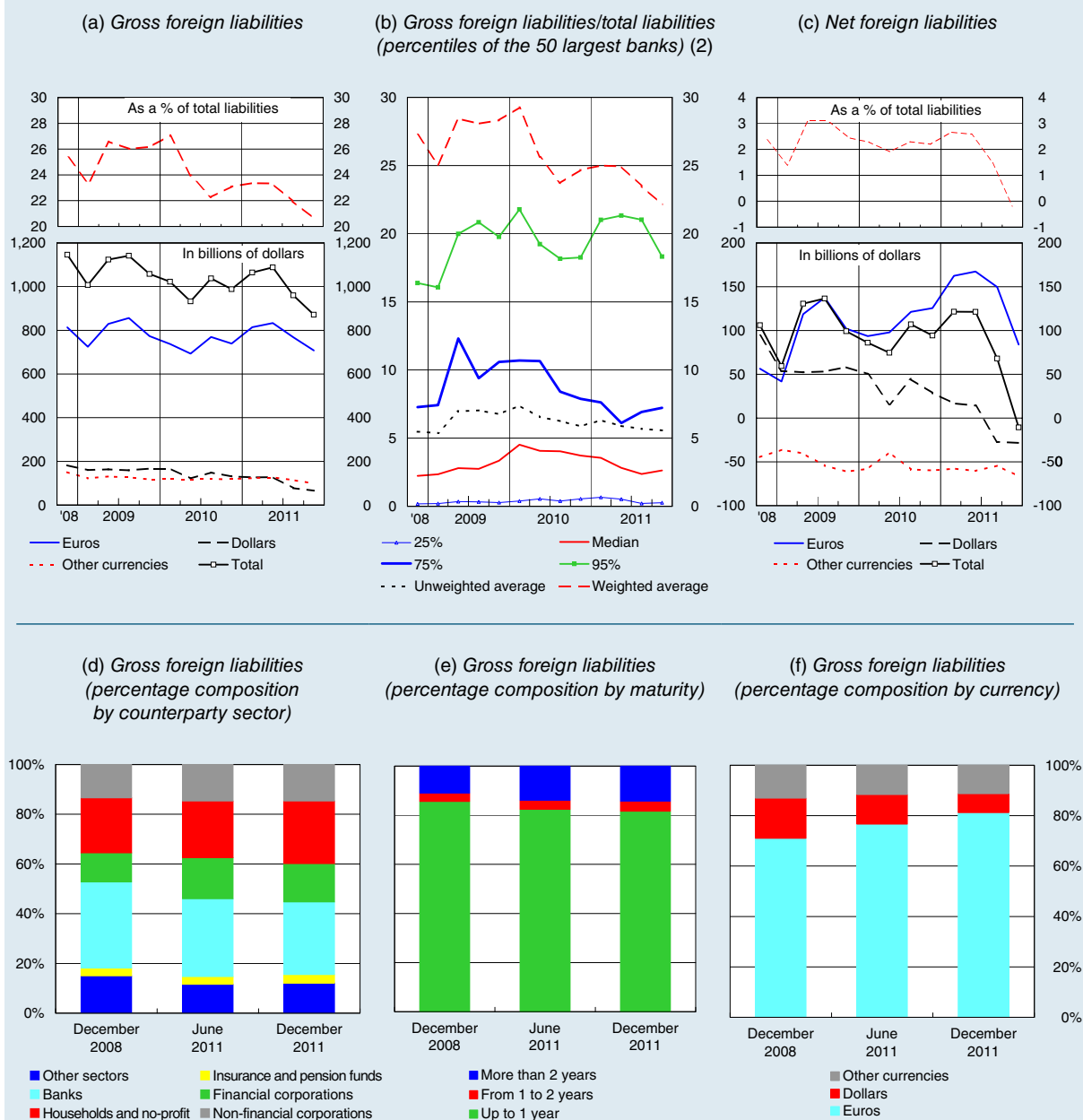
Comparison with the banking systems of the other advanced countries, exclusively with reference to loans granted to banking counterparties,<sup>1</sup> shows that Italian banks' gross foreign interbank

<sup>1</sup> The Bank for International Settlements (BIS) statistics on the cross-border exposures of national banking systems on a consolidated basis (*Detailed tables on preliminary locational and consolidated banking statistics at end-September 2011*, January 2012, Table 9) show estimates for the banks of each country of their claims on foreign banks. These statistics make it possible to estimate the gross liabilities towards foreign banks as the sum of the corresponding claims reported by the banks of all the other participating countries. The estimate of gross liabilities calculated in this way for the Italian banking system is comparable with that shown in Figure A.d. The discrepancy between the two measures is small and mainly due to: (a) the fact that the BIS data derive from a sample survey (with the participation of 24 countries representing a large proportion of global cross-border exposures); (b) the failure, in the BIS data, to allocate some items to the Italian groups (in the "ultimate risk" tables of the BIS the exposures of foreign branches are generally allocated to the country of the parent bank while those of subsidiaries are transferred to the parent bank only if this has issued an explicit guarantee; and (c) the adoption of different methods for the valuation of corresponding items (for example, if the creditor enters a loss, in whole or in part, while its counterparty continues to value the debt at its nominal value).

liabilities are relatively small (Figure B); their net liabilities are also among the smallest, but in this case the gap with respect to the other countries is less wide.

**Figure A**

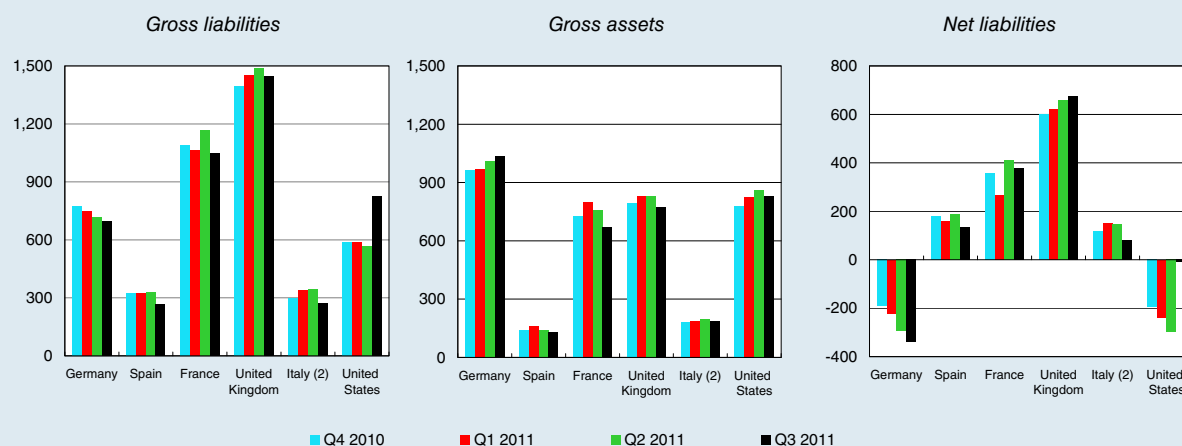
**Italian banks: gross liabilities, gross assets and net liabilities towards foreign counterparties (1)**  
(quarterly data)



(1) The analysis refers to Italian banking groups (on a consolidated basis) and individual Italian banks; accordingly, it does not refer to subsidiaries and branches of foreign banks. – (2) Percentage ratio of gross foreign liabilities to total liabilities. The data refer to the 50 largest Italian banks in terms of total assets at the end of 2011. The figure shows the quarterly time series of the averages (weighted by total assets and unweighted), the median and the percentiles corresponding to the thresholds indicated in the legend.

Figure B

**Banks of the advanced countries: gross liabilities, gross assets and net liabilities towards foreign banking counterparties (1)**  
(billions of dollars)



Source: Based on BIS data.

(1) Data based on the consolidated exposures of national banking systems in BIS, *Detailed tables on preliminary locational and consolidated banking statistics at end-September 2011*, January 2012, Table 9. Gross liabilities are estimated; for the estimation methodology, see the footnote in this box. – (2) For the sake of comparability with the other countries, the data for the Italian banks are also taken from the BIS sample.

**The cost of funding declines slightly**

Recourse to refinancing with the Eurosystem enabled banks to reduce overall funding cost slightly, from 1.7 per cent in June 2011 to 1.6 per cent this February. The reduction determined by the low cost of refinancing with the central bank was offset by the increase in the rates on term deposits and bonds.

**Refinancing risks are significantly lower ...**

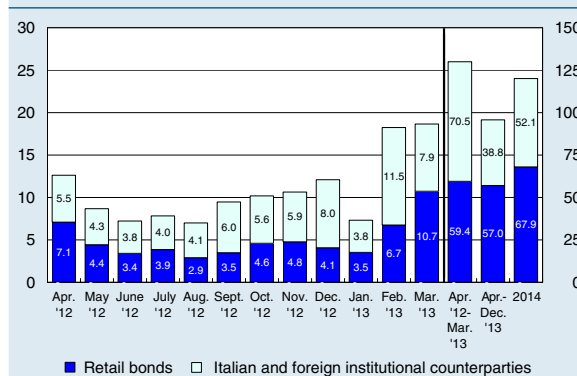
Italian banks hold sufficient liquidity to roll over the liabilities maturing and to finance the economy. For the 32 Italian banking groups subject to weekly liquidity monitoring by the Bank of Italy, the maturities of bonds placed with institutional investors are fairly evenly distributed over the next 12 months (Figure 3.13). The funds raised via the two three-year refinancing operations conducted by the ECB can cover these maturities in full for the next two years. The same applies to the five largest banking groups.

**... but wholesale funding must be reactivated**

Central bank financing cannot, however, be a permanent source of funding. It is vital that banks maintain access to fund-raising in international wholesale markets both at the short and at the medium-long term. In the early months of this year, despite having obtained

Figure 3.13

**Maturities of bank bonds by holder (1)**  
(billions of euros)



Source: Data from a sample of 32 banking groups sent to the Bank of Italy as part of its periodic monitoring of banks' liquidity position.

(1) Updated to 31 March 2012. The data do not include government-guaranteed bonds under Decree Law 201/2011.

abundant long-term liquidity with the Eurosystem, four banks made international bond issues of €6 billion, in most cases with longer maturities than in the longer-term refinancing operations. The subsequent return of sovereign debt tensions and the accompanying deterioration in wholesale market conditions contributed to a new contraction in issues.

**The liquidity position is greatly improved**

The short-term liquidity position of Italian banks has eased considerably (Figure 3.14), reaching levels above those seen before the financial crisis. A risk to the Italian banking system's funding capacity currently stems from potential new downgrades of domestic banks and their bond issues.

### 3.4 INTEREST-RATE RISK AND MARKET RISK

**The exposure to interest-rate risk is limited**

Italian banks' exposure to interest-rate risk remains low. The data on a sample of eleven large banks that use internal models to quantify the effects of movements of the risk-free interest-rate curve show that the change in the value of assets and liabilities produced by a parallel shift of  $\pm 200$  basis points over the entire curve (proxied by the curve of swap rates) would have a significantly smaller impact than the threshold established by the Basel Committee (20 per cent of regulatory capital). In most of the cases considered, the unfavourable scenario is represented by a rise in the yield curve.

**The increase in market risk slows**

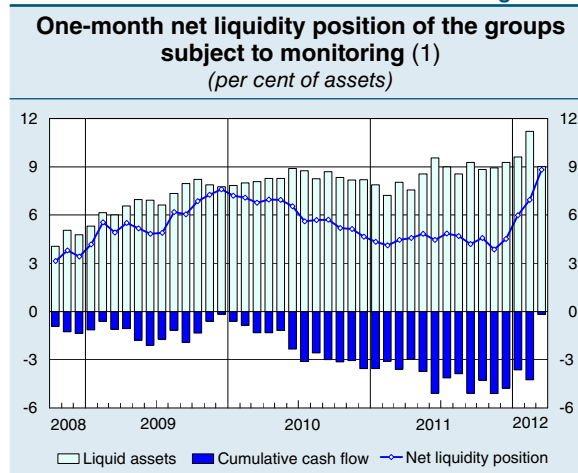
Although the banks have not significantly increased their exposure in terms of financial instruments, from mid-2011 their exposure to market risk (assessed on the basis of VaRs which the banks calculate for the securities held for both trading purposes and as a liquidity reserve) has risen as a consequence of the increased volatility of the financial markets. This trend eased in the early months of 2012 as a result of an abatement of tensions in the markets.

### 3.5 BANKS' CAPITAL AND PROFITABILITY

**Italian banks' capital strengthening proceeds**

The capital base of the fourteen main listed banking groups has been strengthened, above all through substantial injections of fresh capital; in some cases there was a contribution from retained earnings. The core tier 1 ratio of the groups rose to 8.8 per cent at the end of 2011; taking account of the capital increase carried out this year by UniCredit, the ratio rises further, to 9.3 per cent (Figure 3.15). The tier 1 ratio increased to 10.3 per cent and the total capital ratio to 13.5 per cent. The financial leverage of the fourteen groups, measured as the ratio of total balance-sheet assets to tier 1 capital, is significantly less than the average for a sample of large European banks (18 as against 33).

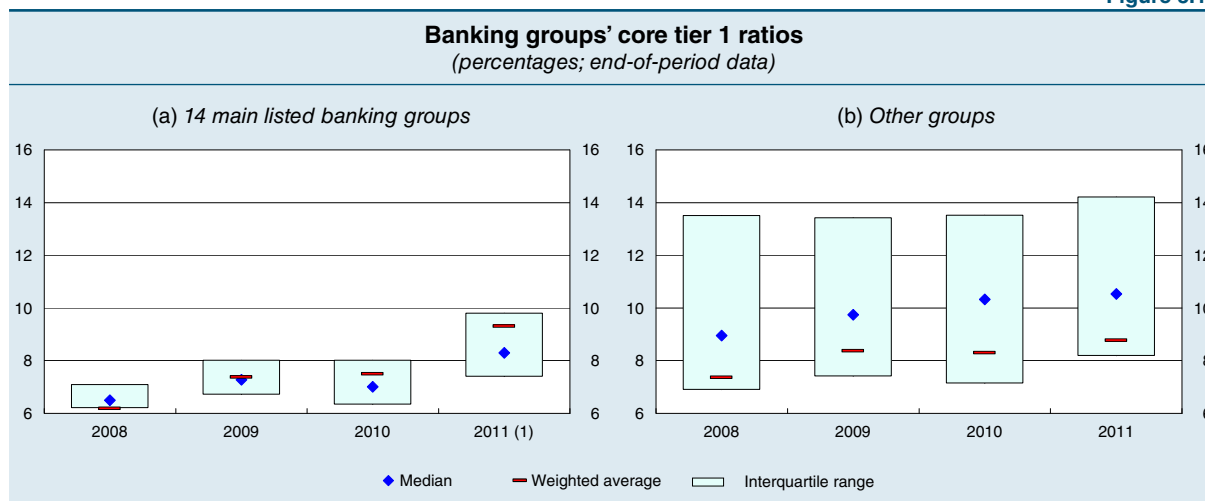
Figure 3.14



Source: Data from a sample of 32 banking groups sent to the Bank of Italy as part of its periodic monitoring of banks' net liquidity position.

(1) Averages. The net liquidity position is calculated as the sum of cumulative expected cash flows and liquid assets. The latter include: uncommitted available assets which are eligible for use as collateral with the Eurosystem (including securities under repos); banks' estimates of credits eligible for ECB refinancing but not yet pledged; available balance on the accounts with the central bank at the end of the day; the assets contributed to the Collateralized Interbank Market and not used as collateral for the funds received. The time frame is 1 month; on prudential grounds it is assumed that there is no roll-over of maturing obligations vis-à-vis institutional counterparties.

Figure 3.15



Source: Consolidated supervisory statistical reports.

(1) Includes the capital increase carried out by UniCredit at the start of 2012.

#### Italian banks' plans for the EBA do not imply a significant reduction in lending

In December 2011 the European Banking Authority requested four of the five Italian banks taking part in the capital exercise (UniCredit, Banca Monte dei Paschi di Siena, Banco Popolare and Unione di Banche Italiane) to make capital increases totalling €15.4 billion.<sup>3</sup> In January the banks submitted their plans for attaining this objective to the Bank of Italy. One (UniCredit) has already completed a capital increase that fully satisfies the requirement. The plans of the other three institutions call for a range of actions that embrace asset disposals, capital management operations, retained earnings, the validation of internal risk assessment models, and transactions involving hybrid instruments already in place. The Bank of Italy has asked them to frame their dividend and executive compensation policies to contribute to achieving the EBA's capital targets. Overall, the plans of which the Bank was apprised in April do not imply any significant cutback in lending to the economy.

#### The outlook for profitability remains uncertain

The five largest Italian banking groups made losses of around €26 billion in 2011, compared with profits of €5 billion the previous year. This result was due entirely to substantial one-off goodwill write-downs, thus adjusting balance sheets to variations in market trends in recent months and enhancing their transparency.<sup>4</sup> Net of these write-downs, none of these banks would have recorded a loss.

The outlook for banks' profitability remains uncertain. The easing of funding strains and the rise in lending rates in 2011 are helping to bolster net interest income, but the slowdown in economic activity could result in a stagnation of lending and new, protracted deterioration in banks' asset quality, which would trigger a new round of value adjustments and increases in loan loss provisions. Beyond the short term the banks need to proceed with their action for significant further gains in efficiency.

<sup>3</sup> Following a decision by the European Council in October, the EBA issued a recommendation on 8 December requesting 71 banks to constitute, where necessary, an additional capital buffer so as to bring their core tier 1 capital to 9 per cent of risk-weighted assets by June 2012, after having marked their exposures to sovereign borrowers to end-September market prices.

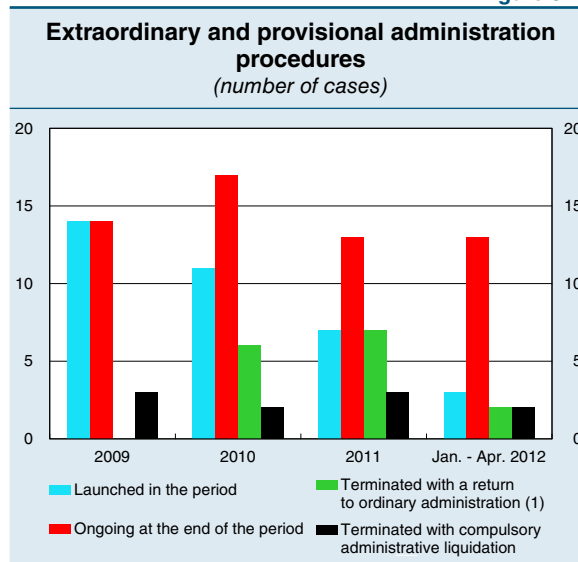
<sup>4</sup> Accounting standards require that impairments to goodwill be recorded in the income statement as a cost for the current period. They do not affect regulatory capital, which is net of goodwill.

### 3.6 CRISIS MANAGEMENT PROCEDURES

**The crises involve very small intermediaries, most of which return to ordinary administration**

Since 2009 a total of 35 intermediaries have been placed under special and provisional administration (Figure 3.16): 28 banks, one parent company of a banking group, four asset management companies, one securities investment firm and one electronic money institution, compared with nine in the previous three-year period. The mostly small-sized intermediaries concerned account for 1.1 per cent of the banking system's loans. The increase in the number of bank crises can be ascribed above all to regulatory infringements and breaches owing to shortcomings in corporate governance and in controls on lending (leading to a deterioration of risk safeguards), often accompanied by violations of the anti-money-laundering obligations and correct bank-client relationships.

Figure 3.16



The instruments of special administration or provisional administration (which limits the time that interventions may last) have been used preventively, to limit the cases of irreversible deterioration in the intermediaries' situations. Thanks to this strategy, in almost two thirds of the 25 procedures completed, the intermediaries returned to ordinary administration, at times following mergers. In the remaining cases, the procedures instead terminated in compulsory administrative liquidation.

Looking ahead, the main risks to small-sized intermediaries relate, in addition to the unfavourable macroeconomic outlook, to shortcomings in governance structures and internal controls. The Banking Supervision Department is focusing on the indicators that can flag imbalances (excessive growth in lending vis-à-vis fundraising, shortcomings in credit disbursement procedures, a high concentration of credit exposure, especially in the real-estate sector, and a high incidence of operational costs) and on corporate governance structures. The drawing up of credible adjustment plans is being encouraged and, in the most problematic cases, the designation of new and more competent governing bodies, capable of guaranteeing a break with past management.

### 3.7 INSURANCE COMPANIES

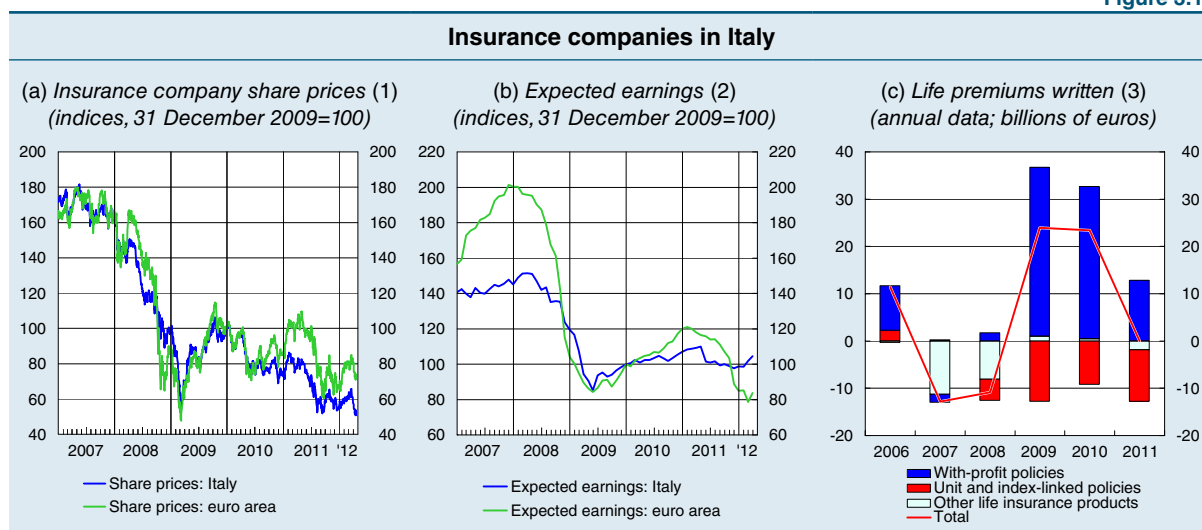
**Market indicators signal uncertain prospects**

Market-based indicators continue to signal that the outlook for insurance companies is uncertain. The sector's share index is at its lowest since 2007 (Figure 3.17.a), and financial analysts forecast stagnant earnings (Figure 3.17.b). Expected default frequencies derived from share performance have worsened.

**Earnings have been affected by the recent sovereign debt crisis ...**

The results for 2011 were affected by the market downturn in the second half of the year. In particular, performance was weighed down by sovereign risk, even though until the new European prudential rules go into effect insurers can still elect, where they have constituted unavailable reserves, not to record unrealized capital losses on government securities in the balance sheet.

Figure 3.17



Sources: Based on Thomson Reuters Datastream, IBES and ANIA data.

(1) Daily data. – (2) Average earnings per share expected for the 12 months following the reference date. Monthly data. For Italy, the data refer to the following companies: Assicurazioni Generali, Mediolanum Assicurazioni, Società Cattolica Assicurazioni, UGF Assicurazioni and Vittoria Assicurazioni; for the euro area, the data refer to the companies included in the Morgan Stanley index of the insurance sector. – (3) Premiums written less surrenders and charges in respect of claims and payments falling due.

#### ... and declining net premiums written

Profitability has also been affected by the negative technical account results of the life sector. Premiums written in 2011, net of surrenders and charges in respect of claims and payments falling due, practically fell to zero (Figure 3.17.c) owing to a decline in new policy subscriptions and increased requests to cash in policies before maturity. The decline was sharpest for policies with greater financial content and for those placed through the banking channel.

Looking ahead, the demand for life policies could be undermined by the poor state of the economy and crowding-out from bank products. In the non-life sector, premium income continued to increase, thanks above all to higher unit prices for motor vehicle liability insurance. The performance of the non-life technical accounts will depend partly on the net effects of recent reforms, designed on the one hand to curb prices by spurring competition and on the other to lower damage compensation costs, in particular for the motor liability sector.

### 3.8 EXCHANGE TRADED FUNDS IN ITALY

#### ETFs gain ground among Italian savers

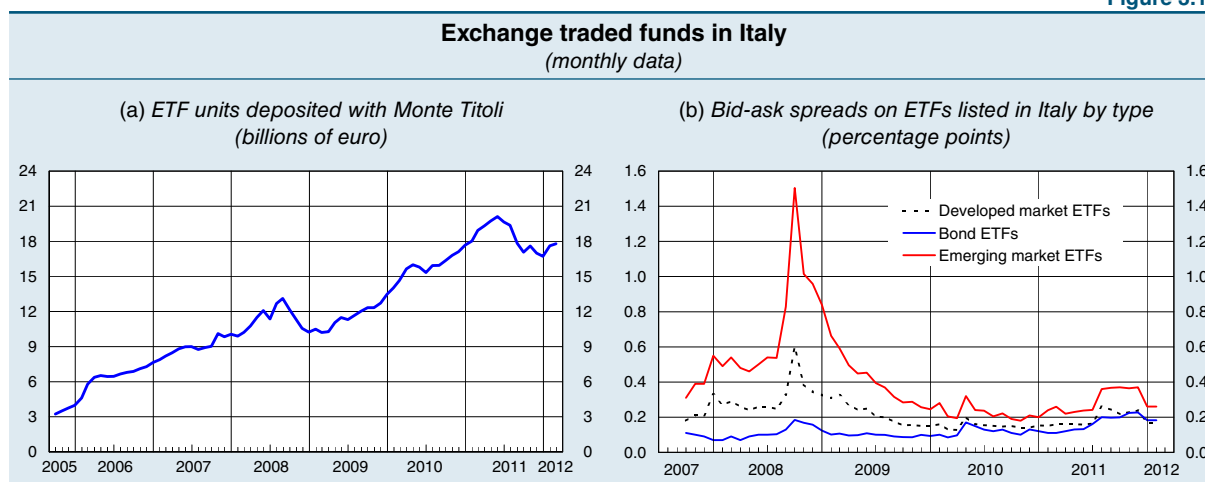
Exchange traded funds are passively managed investment funds, listed on the stock exchange, that replicate a benchmark index. Thanks to their low commissions and flexibility, ETFs have gained popularity, although to a lesser extent in Italy than elsewhere. In February 2012 their assets (with reference to the units deposited with Monte Titoli, which account for the bulk of the total) amounted to €17.8 billion (Figure 3.18.a); for the sake of comparison, this is equal to 4.1 per cent of the assets under management of open-end investment funds and Sicavs, other than the ETFs marketed in Italy. The three largest ETF management companies in Europe have a 70 per cent market share. No Italian institution manages ETFs, although a few large banks do serve as market makers for these products on the Milan Stock Exchange.

#### These instruments may carry hidden risks

ETFs can conceal risks of which investors may not be fully aware. For instance, the bid-ask spreads on ETFs are generally low, but they may widen significantly at times of market turmoil (as in the period from late 2008 to early 2009),



Figure 3.18



Source: Borsa Italiana.

especially for some types of product (Figure 3.18.b). Further, highly complex products that track their benchmark index by using derivative instruments or investing in securities other than those of the index are now also available in the Italian market. At the end of February 2012 Borsa Italiana listed 587 ETFs; 186 were physically-based and 401 were synthetic.<sup>5</sup> The volume of trading in ETFs was €4.4 billion that month, over two thirds of it in synthetic ETFs.

The various risks to investors (counterparty, liquidity, leverage and market risks) are mitigated, but not eliminated, by the European rules on investment funds (the UCITS4 Directive) and by market practices. The European Securities and Markets Authority, in a proposal for a regulation on which consultations have recently been completed, underscores the importance of distinguishing between simple and complex ETFs and between ETFs and other exchange-traded products (which, since they are securities, are not subject to the same safeguards as investment funds, such as depositaries and limits to investment concentration).

<sup>5</sup> ETFs can track their benchmark index either by purchasing the securities that make up that index (physically-based ETFs) or by purchasing a different basket of financial instruments through total return swap contracts, ordinarily with an investment bank belonging to the fund's group (swap-based or synthetic ETFs). Swap-based ETFs may be either funded or unfunded. Funded ETFs do not have a securities portfolio of their own but transfer the funds raised to an outside institution (the swapper) in exchange for the yield on the benchmark. Unfunded ETFs do have an own securities portfolio, the yield on which is exchanged for that on the benchmark index through financial contracts with the swapper.

# 4 MARKETS, EUROSISTEM REFINANCING AND PAYMENT INFRASTRUCTURES

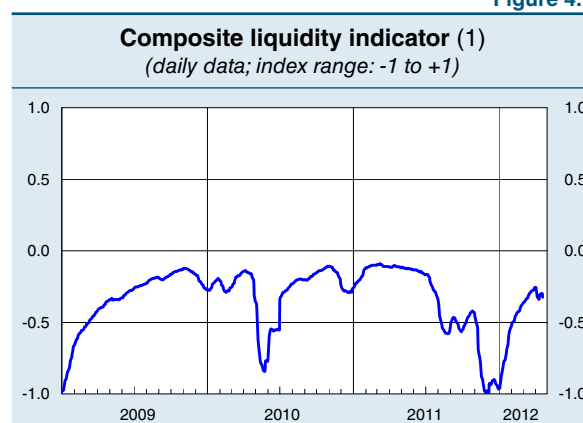
## 4.1 THE LIQUIDITY MARKET

**The liquidity of Italian markets improves** In the first few months of 2012 the liquidity of Italian markets regained the levels recorded prior to the most acute phase of the sovereign debt crisis (Figure 4.1), thanks primarily to the improvement in the government securities segment. The deterioration in the markets' liquidity in April, though relatively limited, shows that conditions remain fragile.

**Interbank market rates are back in line with those abroad ...** On the uncollateralized money market, the interest rates paid by Italian banks have come back into line with the euro-area average (Figure 4.2.a). The dispersion of the rates on overnight funds raised by Italian banks on e-MID has also diminished (the standard deviation fell from 50 to 7 basis points).

**... but money market activity remains limited** In the early months of 2012 the uncertainty pervading the markets provoked a further shift towards collateralized trading. Uncollateralized transactions on e-MID continued to shrink and in March and April were 50 per cent below their

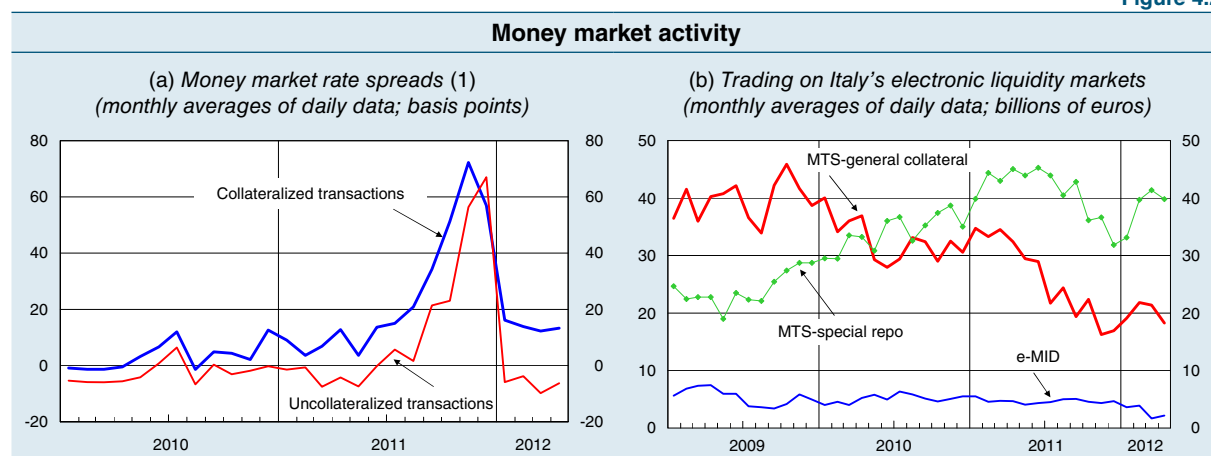
Figure 4.1



Sources: Based on Thomson Reuters Datastream, Bloomberg and Bank of Italy data.

(1) Positive (negative) values indicate higher (lower) liquidity than the average for 1999-2006; 20-day moving averages. For the method of constructing the index, see *Financial Stability Report*, December 2010.

Figure 4.2



Sources: Based on e-MID SIM S.p.A. and MTS S.p.A. data.

(1) Uncollateralized transactions: spread between e-MID and Eonia overnight rates. Collateralized transactions: spread between MTS general collateral and Eurepo tomorrow-next rates.

February level (Figure 4.2.b). According to estimates based on data from the TARGET2-Banca d'Italia gross settlement system, the pattern in OTC trading in one-day funds (net of intra-group transactions) was similar. The upturn in collateralized contracts involved both the special repo segment and the MTS general collateral segment, which had been severely affected in November by the raising of margins on Italian government securities decided by the French central counterparty LCH.Clearnet SA (see the box "LCH.Clearnet SA's margin initiative").

#### LCH.CLEARNET SA'S MARGIN INITIATIVE

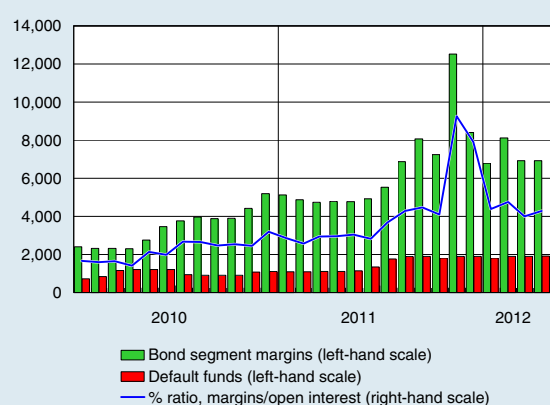
The margins deposited with the Italian central counterparty, Cassa di Compensazione e Garanzia (CC&G), increased by an average of 90 per cent in 2011 (Figure A). This was due chiefly to the increased volatility of the financial markets. Margins remained high in the first four months of 2012, but far below the peaks registered in November, when the French central counterparty, LCH.Clearnet SA, raised its requirements against positions in Italian government securities. The increase was quite substantial (500 basis points on 7-10-year maturities) and followed the widening of spreads between Italian government paper and the European benchmark securities. The decision, which was based partly on discretionary criteria, drew on the Sovereign Credit Risk Framework adopted by the institution's fellow group member, the British LCH.Clearnet Ltd, which envisages the possibility of even larger margin increases (for example 1,500 basis points for margins on securities issued by countries whose spread against AAA-rated European countries is more than 450 basis points). CC&G – linked to LCH.Clearnet SA by an interoperability agreement – raised its own margin requirements in order to maintain the connection with the French counterparty.

This very substantial increase in margins impacted on the secondary market in Italian government securities, provoking a further widening of the BTP-Bund spread (Figure B) and liquidity strains for participants in the guarantee system. The increase was notified to the markets and went into effect at the opening of trading on 9 November. The same day CC&G required the posting of intraday margins about twelve times greater than the average for the other months of 2011.

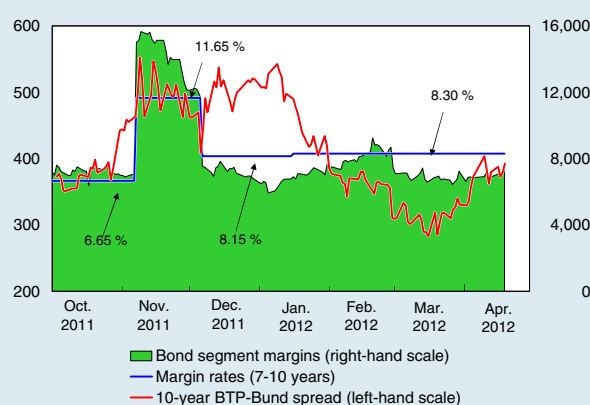
Figure A

Figure B

**Margins and default funds deposited with Cassa di Compensazione e Garanzia (1)**  
(monthly averages; millions of euros and per cent)



**BTP-Bund spread and MTS margins**  
(daily data; basis points and millions of euros)



Source: Based on CC&G S.p.A. data.

(1) Initial margins are funds or securities deposited by participants in proportion to their volume of business to cover any losses in ordinary market conditions. Default funds are mutual guarantees to be drawn on if the margins of a defaulting party prove insufficient. They are calculated to cover simultaneous default by the three intermediaries with the largest net debtor positions, and as a rule they are assessed on the basis of twice-monthly stress tests. In determining the collateral that participants must post, the CC&G uses internationally shared standards. For details, see the box "Cassa di Compensazione e Garanzia S.p.A." in *Financial Stability Report*, December 2010.

On 8 December the two central counterparties reduced their margins, but not down to the levels prevailing before the November increase. Subsequently, at the initiative of the supervisory authorities,<sup>1</sup> they began work on a shared methodology to ensure that the impact of any variations in the margin requirements on government securities would be more gradual and less procyclical. In conditions of tension, in fact, a large, sudden increase in margin requirements can exacerbate market swings, obliging dealers to supply liquidity or supplementary collateral just when these are costliest and hardest to procure. Procyclicality is one of the issues being dealt with by recent international regulatory initiatives such as the new CPSS-IOSCO principles for financial market infrastructures and the European Market Infrastructures Regulation.

<sup>1</sup> Primarily the Italian and French central banks and Consob, working in consultation with the central banks and financial market authorities of other countries involved.

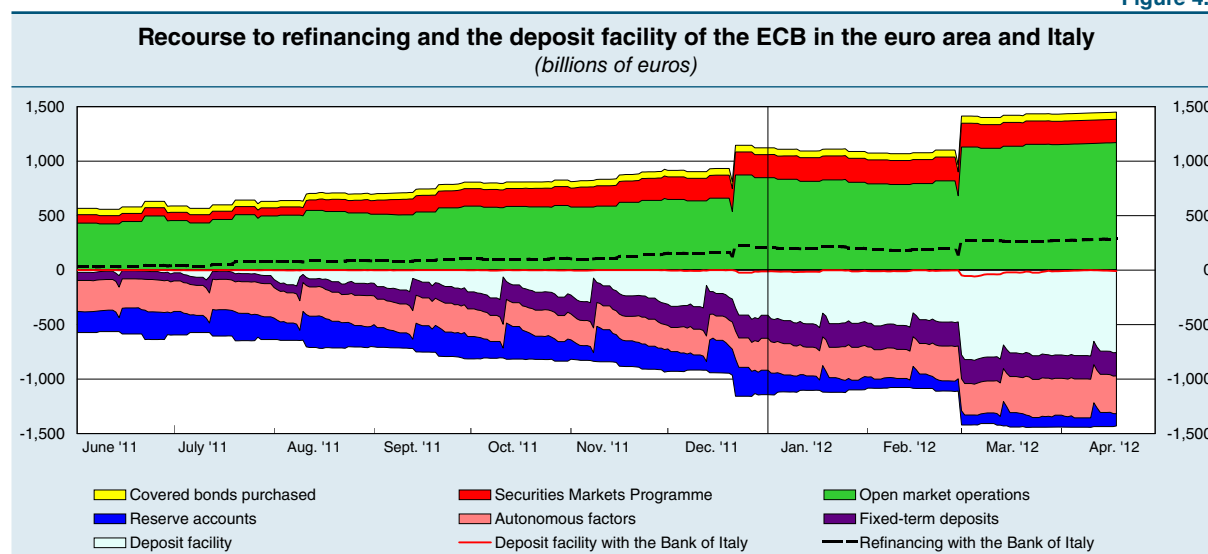
## 4.2 ITALIAN BANKS' RECOURSE TO EUROSISTEM REFINANCING

### Italian banks increase their recourse to the Eurosystem

Between December 2011 and February 2012 the Eurosystem conducted two three-year longer-term refinancing operations (LTROs) and widened the range of assets eligible as collateral (see the box “The effects of the three-year refinancing operations”, *Economic Bulletin*, April 2012). The resulting massive injection of liquidity prevented the growing difficulty of raising funds in international markets from causing a significant contraction in the supply of credit and thereby exacerbating the cyclical downturn.

The volume of Eurosystem refinancing disbursed to banks operating in Italy grew until the end of February, when it reached €273 billion (compared with €105 billion in September 2011); since then it has remained stable (Figure 4.3). In the two LTROs the Bank of Italy's counterparties obtained €255 billion (€30 billion of which was assigned to banks belonging to foreign groups).

Figure 4.3



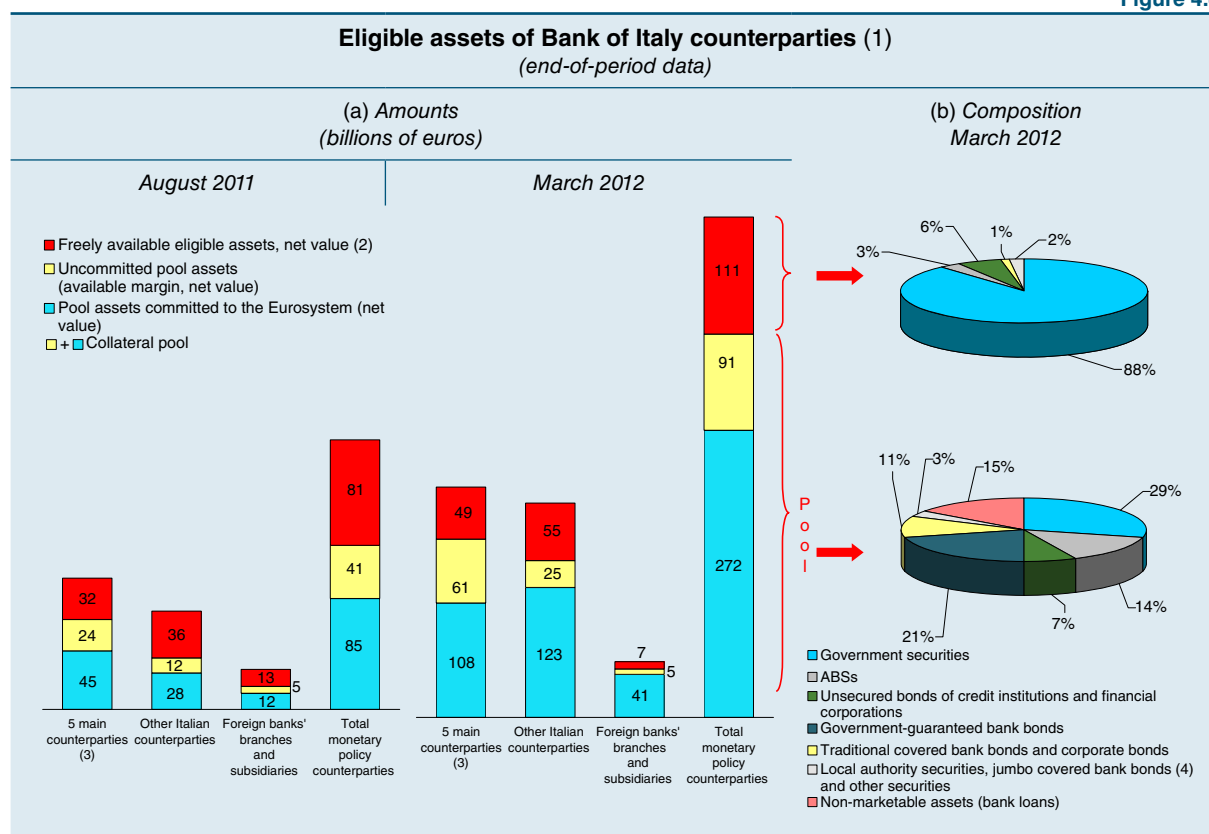
Sources: Based on ECB and Bank of Italy data.

The abundant recourse to central bank credit stems mainly from the need to refinance the large volume of bonds falling due at a time of difficult access to the markets, and from precautionary motives (see *Economic Bulletin*, April 2012). Recent Bank of Italy surveys of banks suggest that the heavy demand for liquidity in the second LTRO was also prompted by the objective of procuring funding for a resumption of lending to accompany the economy's return to growth in the coming months; overnight deposits with the Bank of Italy from March onwards, though limited (Figure 4.3), probably represent a temporary use of funds. Given the ample participation of small and medium-sized banks in the second LTRO, spurred by the widening of the range of bank assets eligible as collateral, there could also be positive effects on the supply of credit to smaller companies.

#### Freely available collateral remains substantial

Counterparties operating in Italy increased the collateral pool with the Bank of Italy. At the end of March, it amounted to €363 billion net of haircuts, of which €272 billion committed in refinancing operations and €91 billion freely available (Figure 4.4.a). At the end of March, Italian banks held, outside the pool, uncommitted eligible securities estimated at €111 billion net of haircuts. Since Eurosystem operations are currently with full allotment, if need be the banks can rapidly procure additional financing of €202 billion (over half of which refers to the five largest banks). The amount of available collateral could increase in the months to come with the full implementation of the measures extending the eligibility criteria for bank loans (see the box “Measures to expand collateral in Eurosystem operations”).

Figure 4.4



Sources: Based on supervisory statistical reports and ECB data.

(1) The amount of assets committed to the Eurosystem includes the portion covering dollar refinancing. – (2) The data for August 2011 reflect corrections made to supervisory reports after the publication of the previous *Financial Stability Report* in November 2011. – (3) Main monetary policy counterparties by volume of assets of the group they belong to. – (4) Jumbo bonds are those with an issue volume of not less than €1 billion and at least three market makers providing quotations.

The composition of the collateral pool changed in the first few months of 2012 chiefly as a result of the inclusion of government-guaranteed bank bonds (21 per cent of the total at the end of March) and the increase in the share of government securities, set against a reduction in the share of ABSs and bank loans (Figure 4.4.b).

#### MEASURES TO EXPAND COLLATERAL IN EUROSISTEM OPERATIONS

Since December 2011 the volume of eligible assets of Italian monetary policy counterparties has increased as a consequence of two measures adopted respectively by the Italian Government and the Governing Council of the ECB.

**Government-guaranteed bank bonds.** – Decree Law No. 201 of 6 December 2011 allows the Ministry for the Economy and Finance to grant, until the end of June 2012, a government guarantee for newly issued bank liabilities, against payment of a fee related to the characteristics of each issuer. The guarantees are granted on the basis of an assessment by the Bank of Italy of the capital adequacy of the issuer and its ability to fulfil the obligations entered into. At the end of March the bank bonds with a government guarantee amounted to €87 billion and were entered in the collateral pool for a total of €77 billion, net of haircuts. The securities issued by the five main banking groups amounted to €49 billion, net of haircuts.

**Extension of the eligibility criteria for credit claims.** – The Governing Council of the ECB has authorized national central banks, temporarily, to accept performing bank loans as collateral under requirements that are less strict than those normally used by the Eurosystem; specifically, the maximum probability of default has been raised from 0.4 to 1.5 per cent. The capital risk associated with the refinancing guaranteed by these loans is borne by the national central bank that authorized their use.

Following this decision, the Bank of Italy has established that, as of February 2012, the collateral pool may include loans granted by Italian banks with a probability of default of not more than 1 per cent. The choice of a threshold below the maximum allowed by the Governing Council is intended (together with the very large haircuts applied) to curb the risks run by the central bank. The assessment of issuers' creditworthiness will also be carried out, temporarily, using the Bank of Italy's internal rating system (in addition to the ordinary sources of assessments: rating agencies, banks' own internal rating systems, rating tools). Eligibility has also been extended to loans in the form of financial leases and non-recourse factoring contracts, as well as export credits guaranteed by the Export Credit Insurance Agency (SACE).

The amount of collateral potentially available under the new rules is considerable. However, at a time of ample liquidity and availability of collateral, Italian banks have so far used only a limited amount of such assets as collateral (€4.2 billion at the end of March, compared with a total volume of loans in the pool equal to €54 billion).

### 4.3 THE GOVERNMENT SECURITIES MARKET

The placement of Italian government securities proceeded regularly even in the difficult situation that marked the latter part of 2011 and became easier from January onwards. The cover ratio has held well above 1 at all auctions; for ten-year BTPs it averaged 1.4 from October through April.

#### Average issue costs decline

The average interest rate on new issues has come down significantly, to 3.01 per cent in the period between January and mid-April (compared with 5.47 per cent in the previous three months), thanks above all to a substantial decline in risk premiums

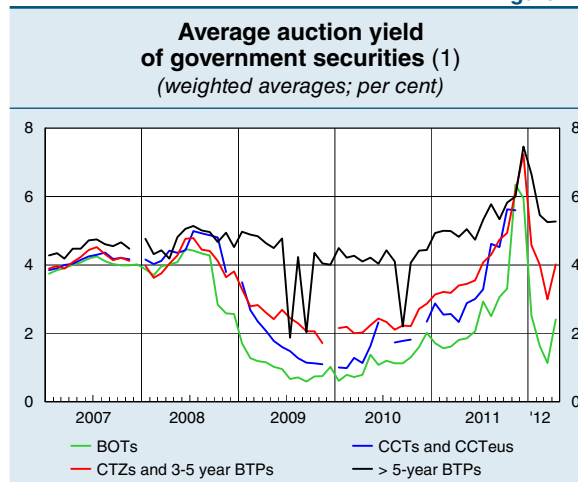


(Figure 4.5). One factor in the decline was a shift in the composition of issuance towards shorter maturities. This strategy did not significantly alter the average residual maturity of the Italian public debt (6.8 years at the end of March), which together with that of France is the longest among the main sovereign issuers in Europe.

**40 per cent of the projected issuance for 2012 is already completed**

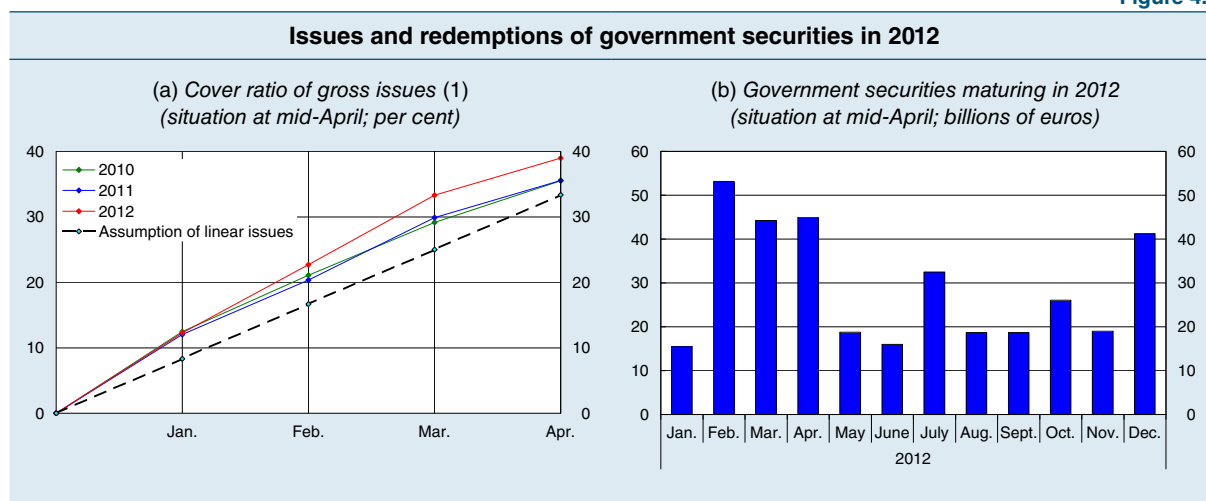
By the middle of April the Treasury had issued €170 billion worth of securities, equal to 40 per cent of the total projected for all of 2012; this was a larger share than in the corresponding periods of 2010 and 2011 (Figure 4.6.a). The monthly volumes maturing in the rest of the year are considerably smaller (Figure 4.6.b), except for December, when the Treasury ordinarily has an ample cash surplus.

Figure 4.5



(1) The breaks indicate the absence of one or more auctions or the postponement of settlement to the following month.

Figure 4.6



(1) Percentage ratio of amounts placed from January through mid-April each year to total effective gross issues that year. For 2012 total gross issues are calculated as the sum of maturing securities for redemption, the borrowing requirement forecast at the start of the year and the roll-over of BOTs issued and maturing during the year. The broken line plots the ratio on the assumption that issues are distributed uniformly over the course of the year.

**The secondary market shows signs of recovery this year**

The liquidity of the MTS secondary government securities spot market has improved (Figure 4.7). The volumes offered and traded by market makers on the screen-based trading system have turned back up to regain their levels of last summer, while the bid-ask spread has narrowed to around the average prevailing before the first half of 2011. The improvement has been attenuated by the market strains arising in March and April, but the bid-ask spread has nevertheless remained relatively low. Considering benchmark securities only, the yield spread between Italian and German rates has been reduced by more than those on other euro-area countries' securities.

Foreign investors made substantial disposals of Italian government securities in the second half of 2011, lowering their share of the outstanding debt from 47 per cent in June to 40 per cent in

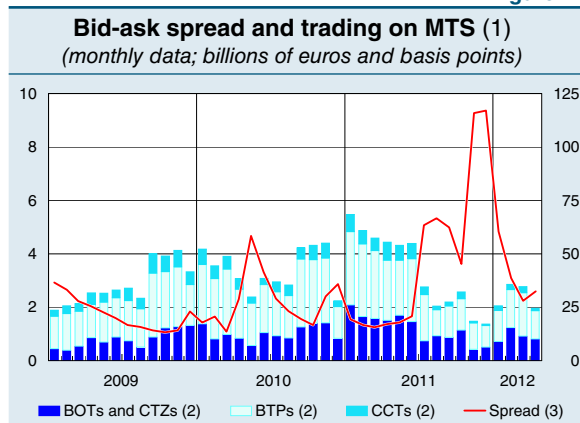
December.<sup>1</sup> The balance-of-payments figures for January and February 2012 signal that non-residents continued to make net disposals of medium- and long-term securities but for the first time in several months made appreciable net purchases at maturities shorter than one year.

#### 4.4 THE MARKET IN CREDIT DEFAULT SWAPS

**Italian banks' CDS exposure in relation to Italy's debt remains marginal ...**

At the end of March the total gross notional value of credit default swaps on Italian government securities amounted to \$333 billion, a slight increase on the end of September 2011 (\$310 billion). On average Italian intermediaries had very small gross positions and their net positions (sales of CDSs less purchases) were also very small (Figure 4.8). For the banking system as a whole the net exposures amounted to \$0.6 billion and for no bank did the net exposure exceed 0.04 per cent of total assets (0.8 per cent of core capital).

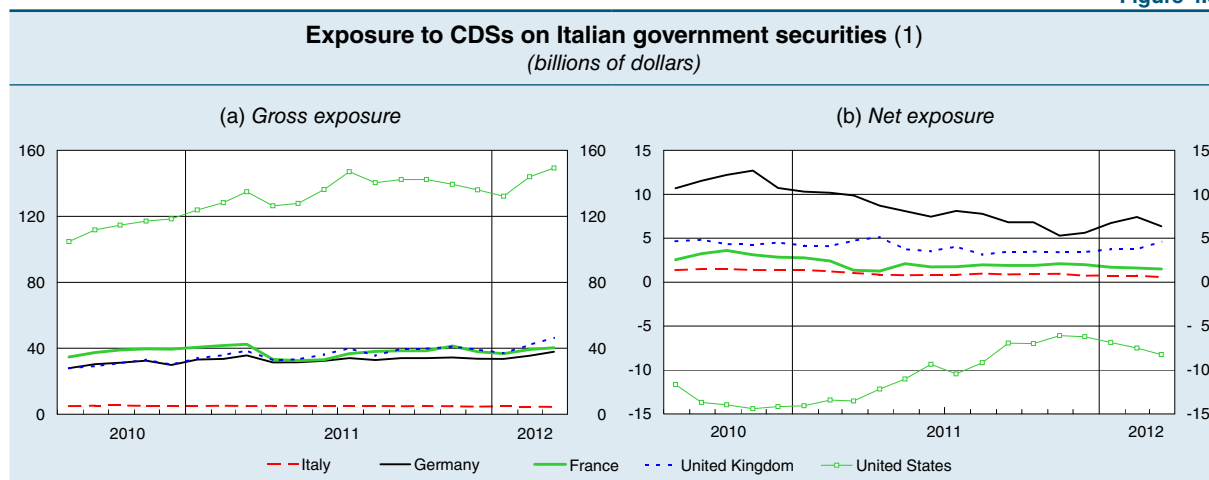
Figure 4.7



Source: Based on MTS S.p.A. data.

(1) The spread is measured as the average of the bid-ask spreads observed during the trading day for all the BTPs listed on MTS. – (2) Volumes traded on MTS, left-hand scale. – (3) Bid-ask spread, right-hand scale.

Figure 4.8



Source: Based on Depository Trust & Clearing Corporation data.

(1) CDS positions of financial companies of the countries specified. In panel (b) positive (negative) values indicate net sales (purchases) of protection against the risk of default. The net exposure of each country is calculated as the algebraic sum of the net exposures of resident ultimate parents to Italian government securities.

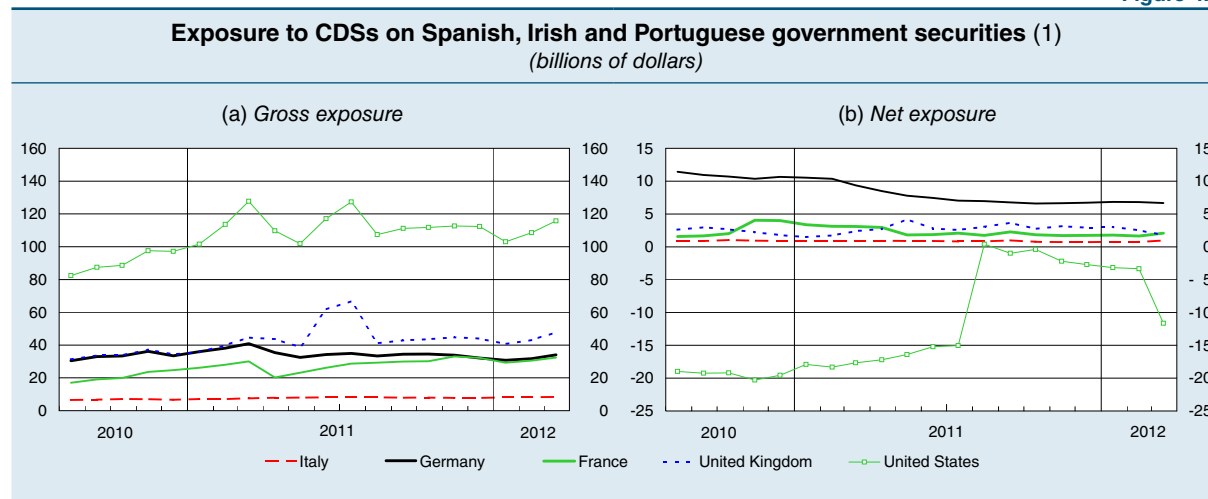
**... as does that towards Greece, Ireland, Portugal and Spain**

In March agreement was reached on the restructuring of the Greek public debt. This was followed by the exercise of the CDSs on Greek government securities, which entailed the estimated disbursement of about \$300 million by the Italian banking system. By the end of the month the net exposure to CDSs on Greek

<sup>1</sup> Net of estimated securities held on behalf of Italian investors by foreign investment funds and managed portfolios (see the box “The holders of the Italian public debt and government securities,” *Financial Stability Report*, November 2011). Gross of these holdings, the decline was from 52 per cent in June 2011 to 46 per cent in December.

government securities was virtually nil. The exposure to CDSs on Spanish, Irish and Portuguese government securities is also small (Figure 4.9). For no Italian intermediary did the net notional exposure on the government securities of these three countries exceed 0.05 per cent of total assets.

**Figure 4.9**



Source: Based on Depository Trust & Clearing Corporation data.

(1) CDS positions of financial companies of the countries specified. In panel (b) positive (negative) values indicate net sales (purchases) of protection against the risk of default. The net exposure of each country is calculated as the algebraic sum of the net exposures of resident ultimate parents to Spanish, Irish and Portuguese government securities.



