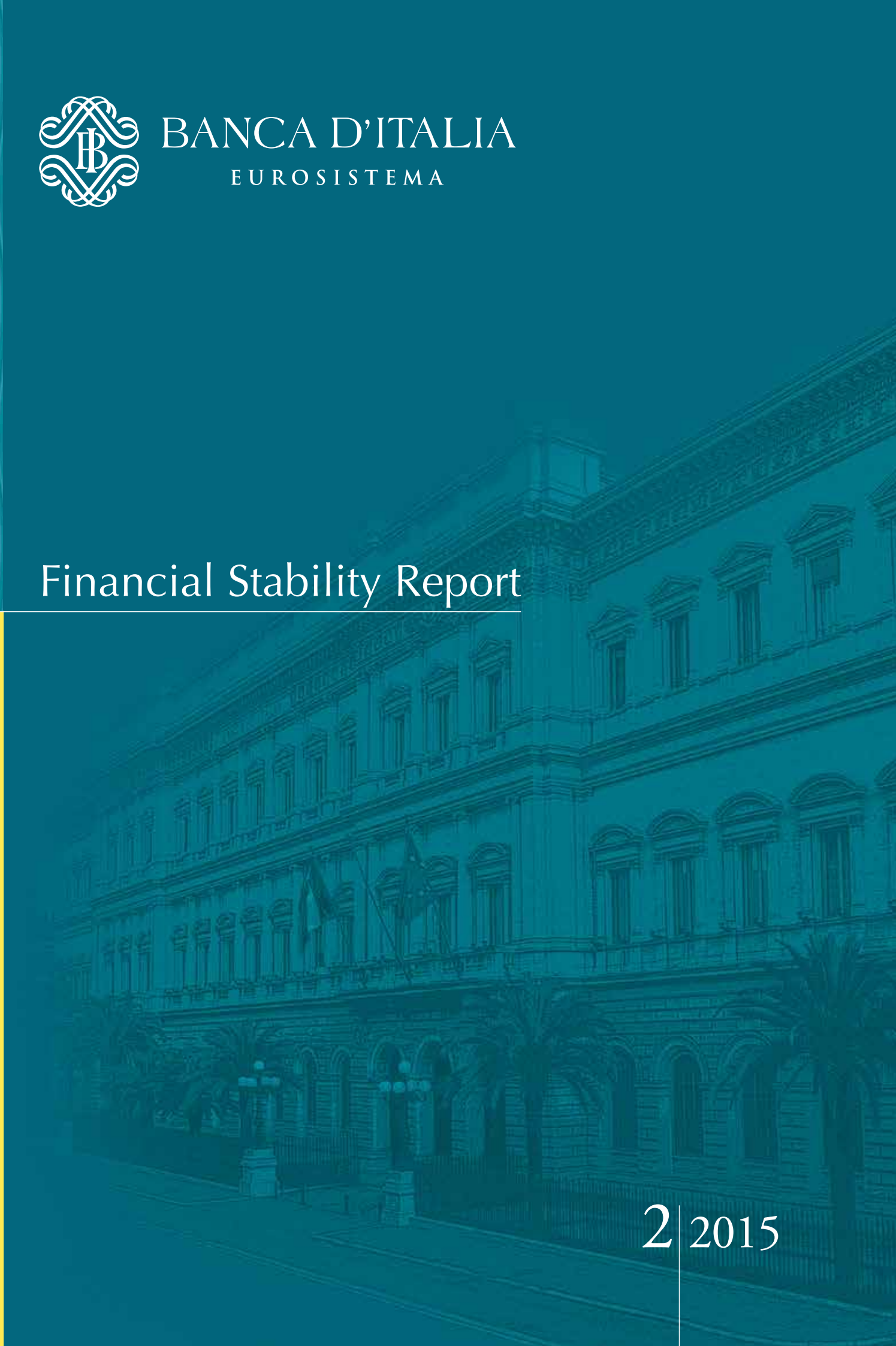
BANCA D'ITALIA
EUROSISTEMA

Financial Stability Report



November 2015

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Number 2 / 2015
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CONTENTS

BOXES

SYMBOLS AND CONVENTIONS

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

OVERVIEW

Global risks are on the rise

The international environment is growing more uncertain. The slowdown in China and the other emerging economies has affected the global outlook for growth and could generate tensions in the financial, commodities and foreign exchange markets.

In the euro area the strains abate

In the euro area, the uncertainty deriving from the situation in Greece has subsided. The recovery in economic activity and the unconventional monetary policy measures are helping to limit the risks. Inflation remains unusually low, however, and reducing public and private sector debt is more difficult.

In Italy the economic recovery is contributing to stability

The strengthening of the economy has reduced the risks to financial stability in Italy. Bank loan supply conditions are improving steadily and bank lending is expected to start growing again in 2016. As a proportion of GDP, credit to the private sector is well below its long-run average values. The sustainability indicators for the public finances remain generally favourable.

Property prices stop falling

The stock of unsold houses is still large, but the situation in the real estate sector is gradually firming up. Property prices have stopped declining, and the leading indicators point to further improvement in the coming months.

The risks for households diminish …

The increase in disposable income and the low level of interest rates are strengthening households' already sound financial condition. The vulnerability of the financially weakest has also diminished, and debt remains low in spite of a sharp upturn in home mortgage loans.

… and the number of vulnerable firms declines

The improvement in firms' financial situation is now spreading to the more fragile businesses; profit margins are up slightly. In a macroeconomic environment of recovery consistent with our latest projections, the share of financially vulnerable firms will fall significantly in 2016. Risks could stem from an unfavourable turn in macroeconomic conditions or a sudden rise in interest rates.

Liquidity conditions in the Italian markets relax

After the tensions that arose during the summer as a consequence of the events involving Greece's sovereign debt and the fall of share prices in China, liquidity conditions in Italy's financial markets have eased again. However, the high volatility of recent months could also reflect structural changes under way in international markets. At the end of August the Italian financial marketplace successfully migrated to the new TARGET2-Securities settlement platform, which will facilitate trading between market participants based in different European countries and permit more efficient allocation of capital.

Eurosystem asset purchases do not affect the orderly functioning of the Italian government securities market

The Eurosystem's public sector purchase programme has proceeded without distorting the price formation mechanism in the market for Italian government securities, thanks notably to the manner in which the purchases have been conducted – distributed over time and covering the entire spectrum of maturities – and to the securities lending programme that the Bank of Italy started in May.

The situation of Italian banks improves …

The gradual improvement in economic activity has

been reflected in banks' balance sheets. The deterioration in credit quality slowed over the summer months and should continue to moderate in 2016. While still weak, banks' profitability appears to be picking up, and their capital strengthening has continued, owing in part to capital increases in the first half of the year. The common equity tier 1 ratio of the top five groups rose to 11.8 per cent in June, nearly on a par with the other large European banks.

… and their exposure to interest rate risk is reduced

The exposure of the major Italian banking groups to interest rate risk is quite limited, and in the first half of the year it decreased further. Market risks, after increasing during the summer months, have now fallen back to low levels. Funding conditions remain favourable.

The market for impaired loans has yet to develop

The slowdown in the flow of new non-performing loans has not yet been accompanied by any decrease in the very large stock, which is a legacy of the long recession. This also reflects the difficulty of creating a robust secondary market for impaired loans in Italy, transactions in which have been restricted to date to the large groups. The recent reforms regarding credit recovery procedures and the tax deductibility of loan write-downs and write-offs could help to speed up the resolution of cases of insolvency.

Italian insurers can cope with low interest rates

The prospect of a protracted situation of low yields has put pressure on the European insurance industry. For Italy, the exercises conducted by the insurance supervisor Ivass indicate that Italian insurers as a whole can cope with a scenario of low interest rates over a prolonged period, thanks to the matching between the durations of assets and liabilities. Their capital position has strengthened, thanks among other things to good earnings.

No significant risks emerge in the asset management industry

In the asset management industry, which is expanding rapidly, the risks to financial stability are limited owing to the prudent investment strategies of the harmonized funds operating in Italy. Alternative funds, which invest in riskier assets and can leverage their investments, account for only a modest share of total assets under management and are subject to supervisory controls. Real estate investment funds still exhibit vulnerabilities, given the sharp fall in the value of their assets and their poor operating results; the direct exposure of banks and other intermediaries to these funds is limited.

1 MACROECONOMIC RISKS

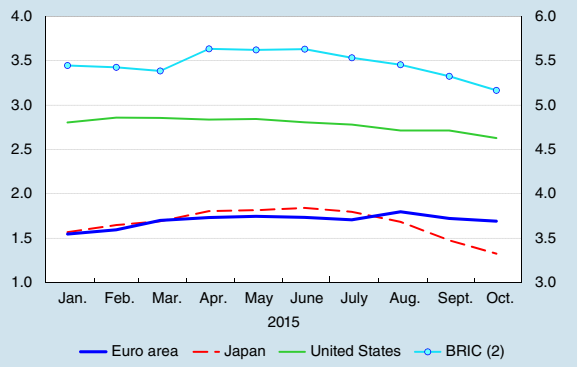
1.1 GLOBAL RISKS AND EURO-AREA RISKS

Risks associated with a slowdown in the Chinese economy are on the rise

The improvement in the economic outlook for the euro area has attenuated the risks to financial stability (Figure 1.1). However, the international scenario is becoming increasingly uncertain due to the intensification of the slowing of the Chinese economy. According to estimates of the main international organizations, the slowdown in the growth of China's GDP will have significant repercussions on the economies and financial systems of emerging countries, while the impact on the advanced economies is expected to be modest.[1] These estimates are subject to downside risks arising from growing cross-border integration. The deceleration of the Chinese economy could also have more serious consequences if it were to be accompanied by turbulence in the financial, commodities and foreign exchange markets (see the box 'The slowdown in China and the repercussions for the world economy', *Economic Bulletin*, No. 4, 2015).

Figure 1.1

GDP growth forecasts for 2016 (1)
(monthly data; per cent)



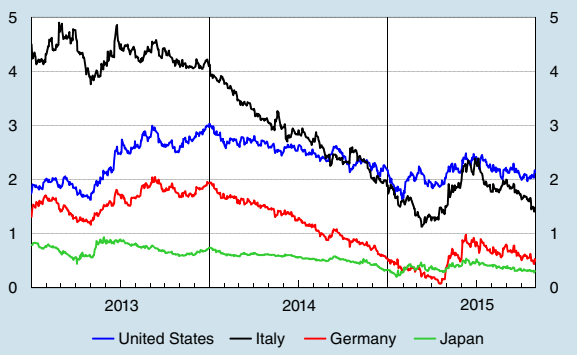
Source: Based on Consensus Economics data.
(1) Forecasts made in the months shown on the horizontal axis. – (2) Right-hand scale; average of the forecasts for Brazil, Russia, India and China, weighted on the basis of each country's GDP in 2013 at purchasing power parity.

The prospect of a hike in US interest rates also poses a risk to emerging economies

Emerging economies are also exposed to the risks associated with a possible raising of official interest rates in the United States. If the current outflow of capital intensifies, this could cause exchange rates to fluctuate widely, with repercussions on businesses in those countries, a considerable portion of whose liabilities are denominated in foreign currencies. The heightened uncertainty is being reflected in those economies' sovereign spreads, which have widened across the board since the summer.

Figure 1.2

Ten-year government bond yields
(daily data; per cent)



Source: Bloomberg.

[1] A. Ahuja and M. Nabar, 'Investment-Led Growth in China: Global Spillovers', IMF Working Paper, 12/267, 2012; OECD, *Economic Outlook*, 96, November 2014.

By contrast, the long-term interest rates in euros and yen appear to be less exposed to the effects of future rises in US dollar yields, benefiting from the unconventional expansionary monetary policies pursued by the Eurosystem and the Bank of Japan (Figure 1.2). However, euro-area interest rates could become more volatile with the reduction in liquidity in government securities markets (see the box 'Recent trend in the liquidity of euro-area government bonds).

RECENT TREND IN THE LIQUIDITY OF EURO-AREA GOVERNMENT BONDS

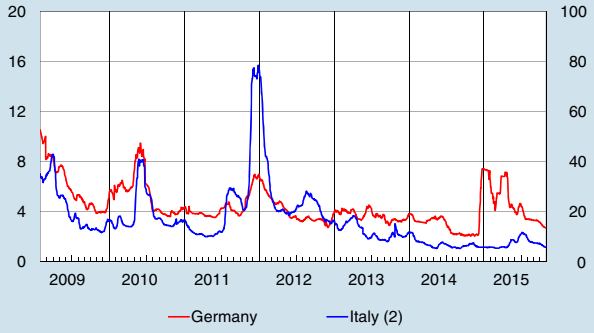
Long-term interest rates on euro-area government bonds have become significantly more volatile since the end of last year, to which the uncertainty stemming from the prolonged negotiations between Greece and the international creditors and the economic slowdown in the emerging countries have contributed. The heightened volatility could also reflect a structural decrease in liquidity on the government bond market.[1]

A security's liquidity is measured by the cost of trading, the speed of trading, and the price impact, i.e. the market's capacity to absorb large orders without significant changes in prices.

For Italian government bonds, trading costs, which are measured by the bid-ask spread, are fairly low (Figure A); for German securities, they have now dropped back to their long-term average level after increasing sharply on several occasions between end-2014 and spring 2015. The probability of very large price fluctuations occurring in a short space of time, which had increased in spring in parallel with tensions on the market for the German bund, declined again during the summer (Figure B).

Figure A

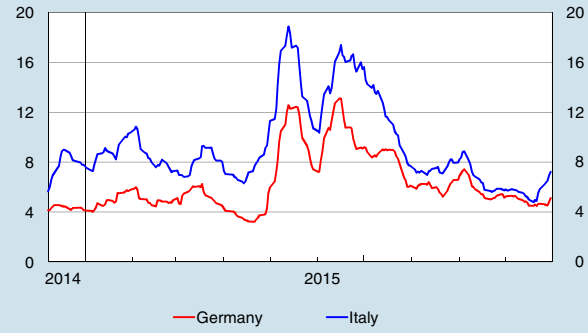
Bid-ask spread on ten-year government bonds (1)
(daily data; basis points)



Source: iBoxx.
(1) The bid-ask spreads are calculated as 2 x (Pask – Pbid)/(Pask + Pbid), where Pbid and Pask are the closing bid and ask prices of 10-year government bonds; 1-month moving averages of the 3 most recent 10-year bonds. – (2) Right-hand scale.

Figure B

Widest daily fluctuations in government bond prices (1)
(daily data; percentage points)



Source: Bloomberg.
(1) The widest daily fluctuation is defined as the 95th percentile of the absolute percentage changes in the prices of government bonds recorded every 5 minutes on one day of trading; 10-day moving averages.

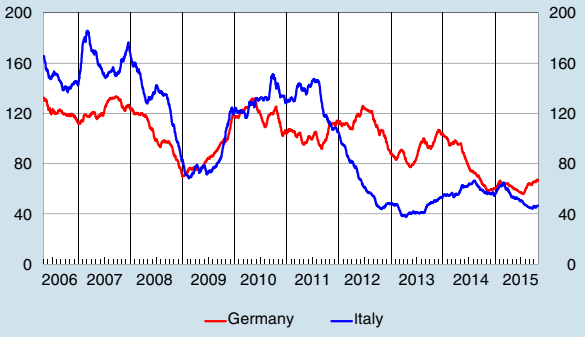
Partly conflicting indications come instead from measures of liquidity based on trading volume. Turnover, i.e. the ratio of trading volume to the amount of securities outstanding, which measures trading frequency, has dropped to well below the long-term average for both Italian and German bonds (Figure C). The price impact is much greater than that observed before the onset of the crisis (Figure D).

On the whole, the liquidity indicators show that while trading costs have remained stable, trading volumes have fallen and the potential price impact of sales has increased. This development is probably due to

[1] IMF, *Global Financial Stability Report*, October 2015.

Figure C

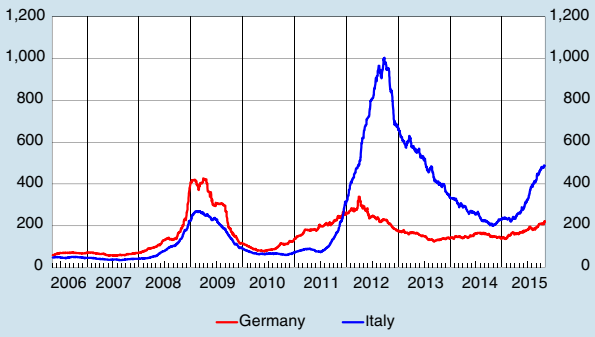
Turnover of ten-year government bonds(1)
(daily data; indices)



Source: Bloomberg.
(1) Turnover on the MTS for Italy and on the German Exchange for Germany, normalized for the average value for the period. The volumes of notional trades in benchmark securities are divided by the amount in circulation; 1-year-moving averages calculated excluding 12.5 per cent of values at the upper and lower tails of the data sample.

Figure D

Price impact (1)
(daily data; indices)



Source: Bloomberg.
(1) Ratio of price volatility to volumes traded on the MTS for Italy and the German Exchange for Germany, normalized for the average value in the period; 1-year moving averages calculated excluding 12.5 per cent of values at the upper and lower tails of the data sample. An increase indicates less market capacity to absorb large orders without a significant impact on prices.

changes in market structure, some of which could have long-term effects.[2] Specifically, they are (a) the gradual decline in incentives for banks to act as market makers because of regulatory changes, falling profits, and shifts in corporate strategy; (b) the higher ratio of trading costs to expected returns for operators; and (c) the popularity of passive investment strategies, which limits the range of investors' portfolio choices.

[2] Recent studies can be found in BIS, 'Market-making and proprietary trading: industry trends, drivers and policy implications', CGFS Papers, 52, 2014 and IMF, *Global Financial Stability Report*, October 2015.

Bond risk premiums increase

In the major advanced economies, the price-to-earnings ratios, declining since the start of the year and close to their long-term average values, are consistent with the economic fundamentals. The uncertainty that has arisen since the summer as to the extent of the slowdown in China and the scandal that hit the German automobile group Volkswagen in September have, however, sparked a temporary increase in stock market volatility (Figure 1.3.a) and a rise in risk premiums on bonds (Figure 1.3.b), which has been more pronounced for energy companies.

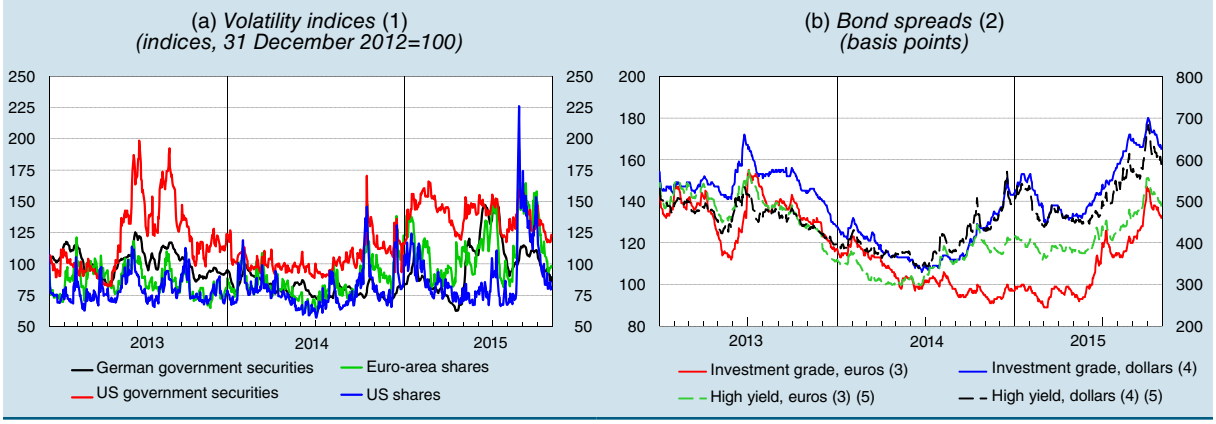
Low inflation continues to pose risks for the euro area …

The risks associated with consumer price inflation, which has stabilized at near zero in all the main advanced economies, remain high. Overly low levels of inflation make it more difficult to reduce public and private debts and tend to imply excessively restrictive monetary conditions, with adverse effects on production and income (see the box 'The risks of low inflation for financial stability in the euro area', in *Financial Stability Report*, No. 2, 2014). In the euro area these risks are countered by the Eurosystem's expanded asset purchase programme, which, together with the strengthening of growth, had a positive impact on medium- and long-term inflation expectations (Figure 1.4). However, the rise in expectations came to a halt in July, reflecting the worsening of the outlook for the world economy and the new decline in commodities prices. The ECB staff projections indicate that inflation will remain very low in 2015 and will rise only gradually thereafter.[2]

[2] ECB, *September 2015 ECB staff macroeconomic projections for the euro area,* 2015.

Figure 1.3

Stock and bond market indicators
(daily data)



Source: Bloomberg, Merrill Lynch and Thomson Reuters.
(1) Indices derived from the implied volatility of options prices. – (2) Investment grade bonds are those issued by companies with a credit rating not lower than BBB- or Baa3. High-yield bonds are those issued by companies rated below BBB- or Baa3. – (3) Fixed rate bonds with a residual maturity of not less than 1 year issued on the Euromarket. The spreads are calculated with reference to French and German government bonds. – (4) Fixed rate bonds denominated in dollars with a residual maturity of not less than 1 year issued on the US domestic market. The spreads are calculated with reference to US government securities. – (5) Right-hand scale.

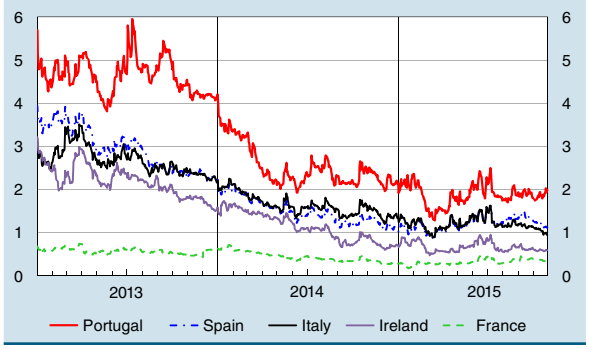
Figure 1.4

Euro-area inflation expectations implied by inflation swaps (1)
(daily data; per cent)

Source: Bloomberg.
(1) Inflation rates implied by 2-year, 5-year/5-year forward inflation swaps.

Figure 1.5

Ten-year sovereign spreads vis-à-vis Germany (1)
(daily data; percentage points)



Source: Based on Bloomberg data.
(1) Yield spreads between the 10-year government bonds of the countries indicated and the corresponding German Bund.

… but the strains stemming from the situation in Greece have eased

The agreement reached during the summer between the Greek government and the European institutions helped to ease pressures on the risk premiums on the euro-area countries' ten-year government bonds that had surfaced at the start of the summer during the negotiations (Figure 1.5).

1.2 MACROFINANCIAL CONDITIONS IN ITALY

The credit cycle in Italy does not indicate risks for stability

In Italy the exit from recession is fostering a gradual return to growth of lending to the private sector; as a share of output, however, it remains well below long-term average levels. Based on the internationally harmonized methodology proposed by the Basel Committee, in the second quarter of 2015 the credit-to-GDP gap was negative by about 10 percentage points. According to the Bank of Italy's methodology,

which takes account of the specific characteristics of the national financial cycle, the gap is only slightly narrower, at -8 percentage points (see the box 'The credit cycle and the countercyclical capital buffer').

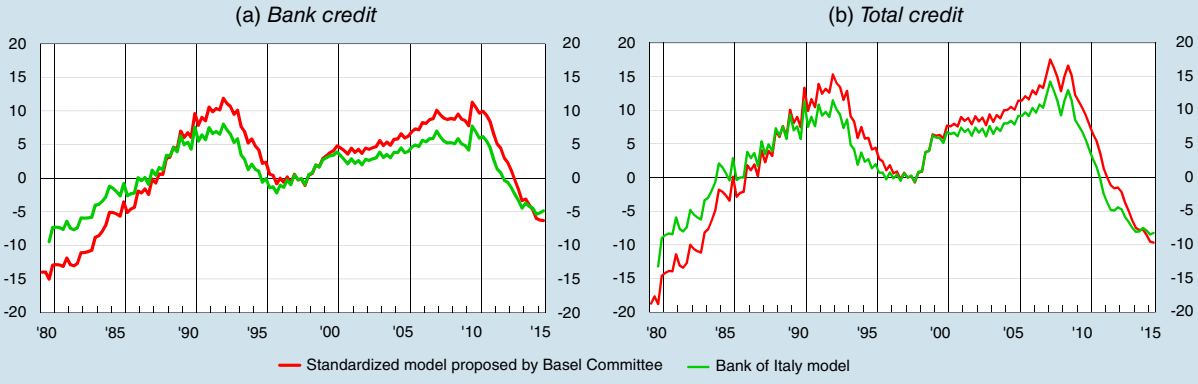
THE CREDIT CYCLE AND THE COUNTERCYCLICAL CAPITAL BUFFER

The purpose of the countercyclical capital buffer (CCB) is to improve the banking system's ability to face the risks associated with excessive credit growth. [1] Capital strengthening when the credit cycle is in an expansionary phase allows banks to have more resources to absorb losses that could arise during contractionary phases. Changes in the capital buffers, to the extent they affect credit supply, could also serve to reduce the volatility of the credit cycle.

In order to establish the CCB requirements, the competent authorities (in Italy, the Bank of Italy) must assess the state of the credit cycle and establish a set of indicators that are able to signal well in advance the rise of system-wide risks associated with excessive credit growth. The Basel Committee has defined the credit cycle as the deviation of the aggregate credit-to-GDP ratio from its long-term trend (credit-to-GDP gap) and proposed a standardized methodology to be used to measure it, leaving it to the national authorities to adapt the methodology as needed. [2]

The modifications introduced by the model used by the Bank of Italy [3] reduce the excessive volatility of the cycle estimated using the standardized methodology. [4] More specifically, the peaks of the expansionary phases in the early 1990s and in the subsequent decade are considerably lower than those computed with the standardized methodology (see the figure). However, the indicators are in agreement in signalling an inversion of the credit cycle starting from 2009-10 and in classifying the current economic phase as negative.

The credit-to-GDP gap in Italy (1)
(quarterly data)



Sources: Based on Bank of Italy and Eurostat data.
(1) The indicator is calculated based on credit to the non-financial private sector.

[1] The CCB is one of the macroprudential tools introduced by Directive 2013/36/EU (CRD IV), which requires all the member states to adopt it starting from 1 January 2016.
[2] See Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems*, revised version, June 2011.
[3] For a discussion of the methodology, see P. Alessandri, P. Bologna, R. Fiori and E. Sette, 'A note on the implementation of a countercyclical capital buffer in Italy', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), 278, 2015.
[4] See A. Orphanides and S. van Norden, 'The unreliability of output-gap estimates in real time', *The Review of Economics and Statistics*, 84, 4, 2002, pp. 569-583.

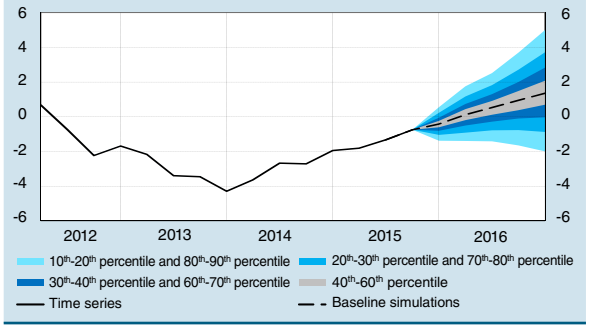
According to our projections, which are consistent with an economic recovery in line with that indicated in July's *Economic Bulletin*, bank lending to the non-financial private sector will return to growth in the first half of 2016 (Figure 1.6). The recovery in credit is not, however, expected to be sufficient to bring about an increase in the credit-to-GDP gap.

Even were the rate of growth in lending to reach 5 per cent at the end of 2016 (at the uppermost threshold of the likely results), the credit-to-GDP gap would still be such as to render macroprudential interventions unnecessary (see the box 'The Bank of Italy's macroprudential function').

Figure 1.6

Bank loans in Italy: projections (1)

(quarterly data; 12-month percentage changes)



(1) Loans to non-financial companies and to households for house purchase; including those not entered in banks' balance sheets because they have been securitized. The probability distribution of the projections, shown by percentile group, enables the size of the risks associated with the baseline estimate to be assessed.

THE BANK OF ITALY'S MACROPRUDENTIAL FUNCTION

The Italian legal order charges the Bank of Italy, in performing its duties, with safeguarding the stability of the national financial system, with the ultimate aim of reducing the likelihood of systemic crisis and dampening the impact on the economy. The Bank discharges this mandate both by microprudential supervision of banks,[1] non-bank financial intermediaries and some markets and by macroprudential policy addressed to the financial system as a whole.

The macroprudential powers of the Bank of Italy are governed chiefly by European rules. It is the national authority designated to activate the macroprudential instruments envisaged by Directive 2013/36/EU (the fourth Capital Requirements Directive, CRD4) and Regulation (EU) 2013/575 (the Capital Requirements Regulation, CRR) on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.[2] One of the tools available is the countercyclical capital buffer, designed to work against the procyclicality of the financial system; banks are to build up this extra reserve during the expansive phases of the financial cycle and run it down during contractions. In addition, more stringent capital requirements are placed on global or national systemically important institutions. By virtue of the Bank of Italy's responsibility under the Consolidated Law on Banking for safeguarding the overall stability of the financial system, for macroprudential purposes the Bank may also use instruments that are not harmonized at European level, such as a ceiling on loan-to-value or loan-to-income ratios for mortgage lending.

If macroprudential measures are to be effective, vulnerabilities and risks to systemic stability need to be detected promptly. To this end the Bank of Italy conducts regular research, risk analysis and assessment, both for the financial system as a whole and for its individual components. Research and analysis are also directed at developing quantitative indicators to signal when the

[1] Since November 2014, microprudential supervision has been carried out together with the ECB under the Single Supervisory Mechanism (SSM).

[2] Regulation (EU) 1024/2013 instituting the SSM also assigns macroprudential tasks vis-à-vis the banking industry to the ECB, concurrently with the national authorities. In fact, in the case of inaction by the national authorities, the ECB can activate the macroprudential instruments provided by European banking rules, and it can make measures adopted by those authorities more restrictive. To ensure effective use of the macroprudential measures, special procedures for coordination between the ECB and the national authorities are provided for.

various instruments available should be triggered. Special attention is paid to the construction of indicators that take national specificities into account, such as those for the assessment of the state of the Italian financial cycle (in order to activate the countercyclical capital buffer, which goes into effect on 1 January 2016), those for early detection of systemic vulnerabilities deriving from the real estate market and those for assessing the finances of firms and households.

The Bank of Italy has already adopted some macroprudential measures.[3] Since 1 January 2014 all banks active in Italy have been required to hold a capital conservation buffer equal to 2.5 per cent of risk-weighted assets and made up of common equity tier 1 capital. The Bank has identified the UniCredit banking group as a global systemically important institution authorized to operate in Italy. Accordingly, starting in January 2016, the group will be required to maintain an extra capital reserve, over and above the ordinary capital requirement, of 0.25 per cent of total risk exposure. This additional requirement will be gradually increased over the years to reach 1 per cent in 2019.

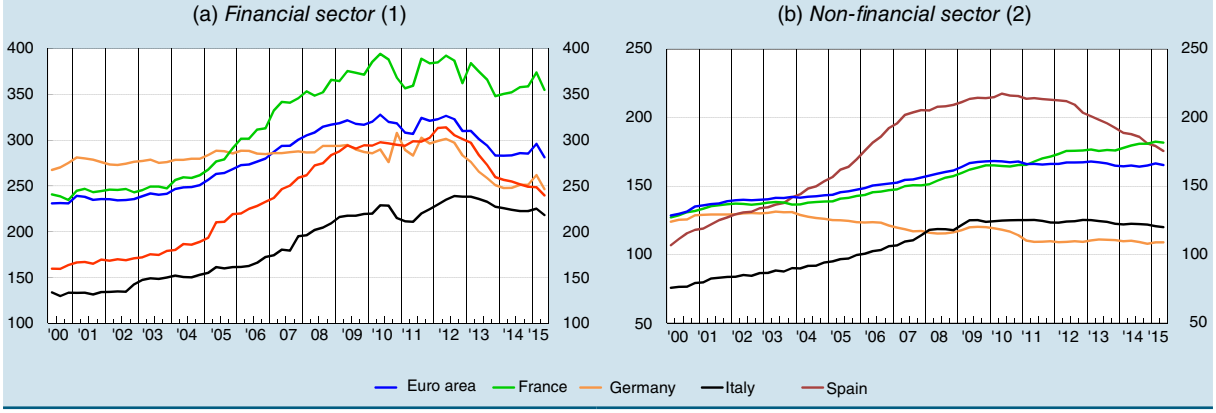
[3] More details on these measures are available on the Bank's website: http://www.bancaditalia.it/compiti/stabilita-finanziaria/politica-macroprudenziale/index.html.

Non-financial private sector debt continues to diminish

Reflecting weak credit dynamics, in the second half of 2015 the liabilities of banks and of other Italian monetary financial institutions continued to decline, to 218 per cent of GDP (Figure 1.7.a). Since the end of 2012 the contraction has been 20 percentage points in Italy, 37 points in Germany and 7 in France. The liabilities of Italian households and firms also continued to decline: at the end of the second quarter of 2015 they amounted to 120 per cent of GDP, a little above the figure for Germany and 46 percentage points below the euro-area average (Figure 1.7.b).

Figure 1.7

Ratio of private sector debt to GDP
(quarterly data; per cent)



Sources: ECB and Eurostat.
(1) Liabilities of monetary financial institutions net of capital and reserves. – (2) Financial debt of households and firms.

The other financial sustainability indicators are also favourable …

According to Government projections the debt-to-GDP ratio, still up slightly in 2015, should begin to fall in 2016 (*Update of the 2015 Economic and Financial Document*). The quantitative sustainability indicators officially calculated by the European Commission reveal the overall soundness of the public finances

(Table 1.1). Age-related expenditure in Italy in the period 2013-60 should fall by almost 1 percentage point, while on average in the euro area it is expected to increase by 1.5 points. [3]

Table 1.1

Financial sustainability indicators
(per cent of GDP unless otherwise specified)

	GDP (*annual growth rate*) (1)		Characteristics of public debt				Primary surplus (2)	S2 sustainability indicator (4)	Private sector financial debt (5)		External position statistics (6)	
			Level (2)		Average residual life of govt. securities (*years*) (3)	Non-residents' share (*% of public debt*) (3)			House-holds	Non-financial firms	Current account balance	Net international investment position
	2015	2016	2015	2016	2015	2014	2015	2015	2015	2015	2015	2015
Italy	0.8	1.3	133.1	132.3	6.5	36.0	1.3	-2.1	42.7	77.2	2.1	-26.1
Germany	1.5	1.6	70.7	68.2	6.6	61.0	1.7	1.5	53.9	55.0	7.9	47.3
France	1.2	1.5	97.1	98.0	6.8	61.2	-1.8	0.0	56.3	125.5	0.1	-20.9
Spain	3.1	2.5	98.6	98.8	6.0	42.5	-1.8	-0.3	69.4	106.3	1.4	-91.0
Netherlands	1.8	1.9	67.6	65.6	6.7	51.8	-0.9	3.3	111.6	128.2	10.6	65.6
Belgium	1.3	1.5	106.7	106.2	8.0	59.2	-0.2	4.3	58.8	151.3	-1.1	60.4
Austria	0.8	1.6	86.7	85.6	7.7	75.5	-0.1	2.8	52.1	94.9	2.7	4.2
Finland	0.4	0.9	61.9	64.0	6.1	78.5	-2.9	5.0	66.5	117.0	-0.1	6.7
Greece	-2.3	-1.3	196.9	206.6	....	81.5	-0.5	....	62.5	65.9	-2.0	-126.2
Portugal	1.6	1.5	127.8	125.0	6.4	71.8	1.7	0.4	78.9	120.8	0.6	-116.5
Ireland	4.8	3.8	100.6	95.9	12.4	62.2	0.8	2.5	76.5	185.4	4.9	-81.0
Euro area (8)	1.5	1.6	93.7	92.8	....	....	0.1	....	60.6	104.9	2.9	-8.7
United Kingdom	2.5	2.2	88.9	88.0	14.5	28.4	-2.6	4.2	87.1	70.4	-5.0	-20.2
United States	2.6	2.8	104.9	106.0	5.7	33.8	-1.8	....	79.1	70.6	-2.4	-37.8
Japan	0.6	1.0	245.9	247.8	6.8	8.1	-5.4	....	61.3	101.8	2.3	70.4
Canada	1.0	1.7	90.4	89.4	6.5	22.4	-1.3	....	94.9	108.9	-2.9	11.7

Sources: IMF, Eurostat, ECB, European Commission, national financial accounts and balance of payments data.
(1) IMF, *World Economic Outlook*, October 2015. – (2) IMF, *Fiscal Monitor*, October 2015. – (3) IMF, *Fiscal Monitor*, April 2015. For Italy, data on the average residual maturity of government bonds are provided by the Bank of Italy and refer to end-September 2015. – (4) The indicator is based on the European Commission's assessments of the stability and convergence programmes of the EU countries published in May 2015. Increase in the primary surplus/GDP ratio needed, given the Commission's latest demographic and macroeconomic projections ('no-policy-change scenario'), to satisfy the general government intertemporal budget constraint. 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. – (5) Loans and securities. End of Q2 2015. Data for the euro-area countries are taken from the ECB's *Statistical Data Warehouse*; data for the United Kingdom and non-EU countries are drawn from national sources; the data are compiled according to the new European System of Accounts (ESA 2010). – (6) Data at Q2 2015; the current account balance is calculated with reference to the last four quarters. Data for the European countries and the euro area as a whole are from Eurostat, ECB, and national sources. Data for non-EU countries are from national sources; the data are compiled according to the new international accounting standards (see the box 'The new international accounting standards for external transactions and investment positions' in *Economic Bulletin*, No. 4, 2014).

[3] European Commission, *The 2015 Ageing Report*, European Economy, 3, 2015. The analysis refers to the period 2013-60 and comprises five items: pensions, healthcare, long-term care, education and unemployment support. The estimates are formulated based on a methodology common to all EU countries and on shared macroeconomic and demographic assumptions.

… and net capital inflows to Italy do not point to financial market tensions

The Bank of Italy's debtor balance in TARGET2, based on monthly averages, rose by €63 billion between May and October 2015, to €238 billion (Figure 1.8). Net purchases of foreign securities by residents contributed to the increase, especially those of banks (see Section 4.2), institutional investors (see Section 5.1) and households, the latter indirectly through the purchase of asset management products.

1.3 REAL ESTATE MARKETS

Risks are growing in some European countries

The recovery in house prices in Europe continues (Figure 1.9), with prices stabilizing in the non-residential sector. The persistence of particularly high house prices led the Belgian authorities to maintain the increase in the risk weights for banks' mortgage loans that was introduced in December 2013 (see *Financial Stability Report*, No. 2, 2014). According to the assessments of the authorities in Finland and Sweden, the high level of household debt for house purchase poses a significant risk for the banking system.[4] The Bank of England is also paying particular attention to analysing the risks that might stem from the strong growth in mortgages for buy-to-let properties.[5]

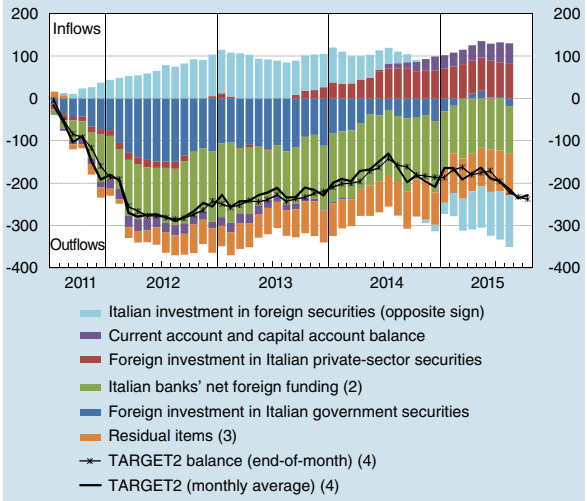
The fall in real estate prices comes to a halt in Italy …

House sales in Italy are showing signs of recovery (4.1 per cent seasonally adjusted in the second quarter; Figure 1.10). The increase involves all the main areas of Italy and is more widespread in the eight major cities.[6] House prices, which usually lag behind the cyclical reversal of transactions, stabilized at -0.1 per cent in the second quarter, breaking off the downward turn that began mid-2011. The prices of non-residential properties have also stopped falling; however, recovery in the number of sales in this sector is slower (Figure 1.10.c).

Figure 1.8

Italy: TARGET2 balance and cumulative flows of the balance of payments (1)

(monthly data; billions of euros)

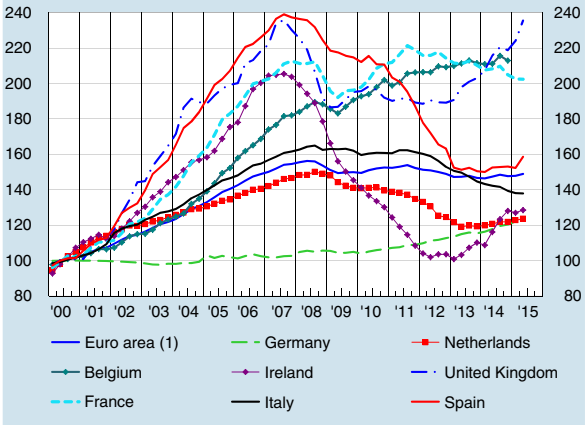


(1) Using the accounting identity of the balance of payments, an improvement in the Bank of Italy's negative balance vis-à-vis the ECB in TARGET2 may reflect investment in Italy by non-residents (greater liabilities), sales of foreign assets by residents (fewer assets) or a surplus on current and capital account. Cumulative capital flows from July 2011 onwards. – (2) Including funding intermediated by resident central counterparties. – (3) Foreign direct investment, derivatives, other investment, errors and omissions. – (4) Data updated to 23 October.

Figure 1.9

House prices in Europe (1)

(quarterly data at current values; indices, 2000=100)

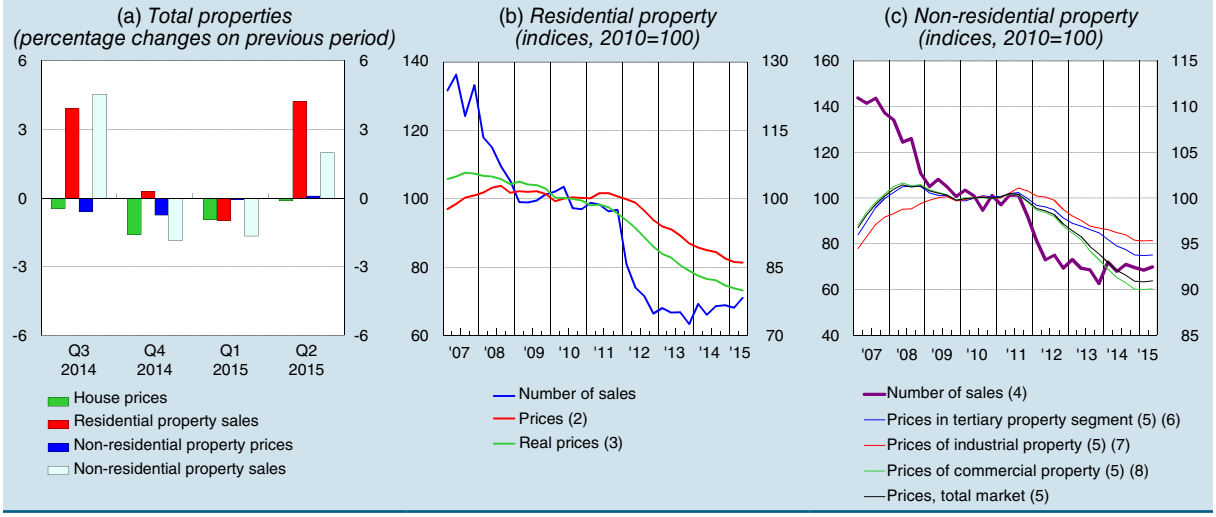


Sources: Based on national sources and ECB data.
(1) ECB estimates based on the average of the indices for each country, weighted with their GDP.

[4] Suomen Pankki, *Bank of Finland Bulletin,* 2, 2015 and Sveriges Riksbank, *Financial Stability Report,* 1, 2015.
[5] Bank of England, *Financial Stability Report*, 37, 2015.
[6] Milan, Turin, Genoa, Bologna, Florence, Rome, Naples and Palermo.

Figure 1.10

The property market in Italy (1)
(quarterly data)



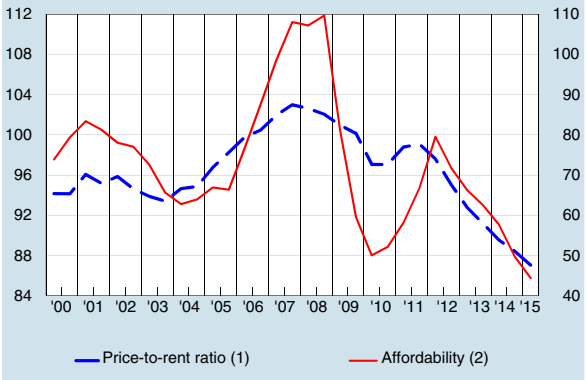
Sources: Based on data from Bank of Italy, Istat, Osservatorio del Mercato Immobiliare (OMI), Nomisma and Scenari Immobiliari.
(1) Seasonally and calendar adjusted. – (2) Right-hand scale. – (3) Right-hand scale. Deflated using the change in consumer prices. – (4) Total market. – (5) Right-hand scale. This experimental price indicator uses data drawn from transactions actually concluded on the market. – (6) The tertiary segment comprises office buildings and banks. – (7) Industrial property consists of buildings for industrial use. – (8) Commercial property comprises shops, shopping centres, and hotels.

… and they are confirmed as being sustainable in the current macroeconomic scenario

The halt in the fall of house prices reflects the growth in households' disposable income and the improvement in credit conditions. In the second half of 2014 the price-to-rent ratio continued to decrease and is now well below the medium- and long-term figures (Figure 1.11). The affordability indicator, which measures households' access to the property market, is at the highest level of the past fifteen years.

Figure 1.11

Sustainability indicators for the real estate market in Italy
(half-yearly data; indices, 1994-2013 average=100)



Sources: Based on data from Bank of Italy, Istat, Osservatorio del Immobiliare Italiano (OMI) and *Consulente immobiliare*.
(1) Price-to-rent ratio for new rental contracts. – (2) Right-hand scale. Ratio of debt service on new mortgage loans – proxied by the product of house prices and interest rates – to household disposable income; a decrease indicates that housing is more affordable.

Figure 1.12

Estate agents' expectations in Italy (1)
(quarterly data; percentage points)

Sources: Based on data from Bank of Italy, Osservatorio del Mercato Immobiliare (OMI) and Tecnoborsa.
(1) Data from the survey conducted by the Bank of Italy, OMI and Tecnoborsa. Balances between the percentages of responses indicating a situation that is improving or worsening. Short-term expectations refer to the quarter following that indicated; medium-term expectations refer to a 2-year horizon.

There are risk factors, but improvement continues

Forward-looking indicators for the construction sector predict that the cyclical improvement will continue over the next few quarters. In October the indicator of construction firms' confidence recorded extremely high levels compared with the last three years. In the fourth quarter of 2014 building licences (which on average are about a year ahead of the start-up of building projects) picked up with respect to the previous quarter, though still remaining very low. Estate agents' expectations continue to improve, in both the short and the medium term (Figure 1.12). Based on our estimates, house prices will recover slightly in the second half of the year, and should continue to rise in 2016. The still large stock of unsold houses is, however, an important risk factor for price dynamics.

2 RISKS BY SECTOR

2.1 HOUSEHOLDS

Households' finances improve

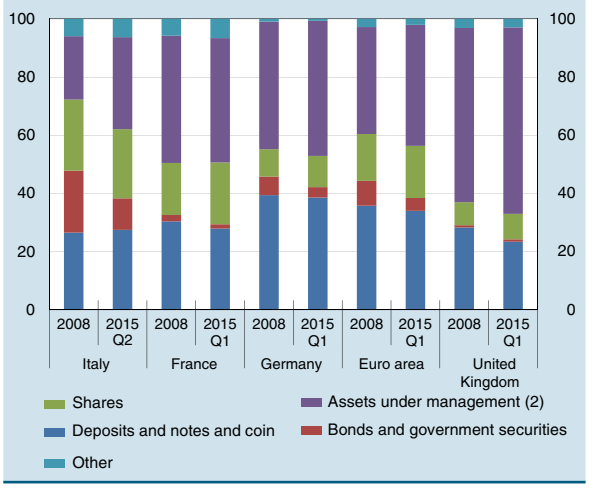
The financial condition of Italian households is strengthening. The economic recovery and low interest rates improve debt sustainability. The increase in disposable income (0.8 per cent in the first half of this year compared with the year earlier period) is gradually reducing vulnerability, even among the weakest segments. In Istat's survey on household confidence, the share of respondents reporting using their savings or going into debt to cover current expenses continues to decrease; the percentage, however, is still double that reported before the onset of the economic crisis.

The share of assets under management increases but wealthier households bear the risk

Net wealth remained stable as a result of the fall in house prices that offset the increase in the value of financial assets. In response to the fall in interest rates, households continued to modify their portfolios, investing in mutual funds and insurance products and reducing the share invested in government securities and bank bonds. Significant risks do not derive from this rearrangement of the financial portfolio of Italian households (Figure 2.1), which brings it more into line with that of the major European countries; the riskiest financial instruments are actually held by households with high income. The low percentage of bank bonds also lessens households' direct exposure to the risk of incurring losses in the event the issuing intermediary fails (see the box in Section 4 'The new rules for banking crises: transposition of the Bank Recovery and Resolution Directive into Italian law').

Figure 2.1

Composition of households' financial portfolios (1)
(per cent)



Sources: Bank of Italy and ECB.
(1) Consumer and producer households. – (2) Assets under management include units of mutual funds and insurance and pension funds.

New loan disbursements increase, but the debt level remains low

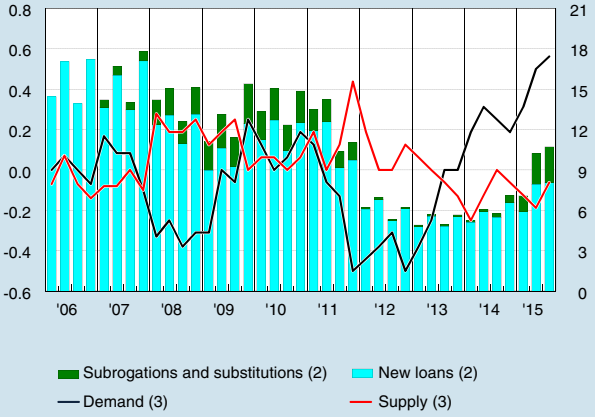
The risks related to the recovery of the mortgage market are small, especially given the low level of outstanding debt (63 per cent of disposable income) and the characteristics of new loans. In the first nine months of the year the flow of new mortgage loans grew by 32 per cent compared with the same period in 2014, spurred by a loosening of lending requirements by banks (Figure 2.2a). However, the margin reductions applied to most borrowers have not been extended to riskier customers. According to the quarterly survey on the Italian housing market, the loan-to-value ratio averaged 65 per cent, less than the level reported before the sovereign debt crisis (approximately 70 per cent). [1] The share of new fixed rate mortgage loans is high by historical standards (44 per cent on average for the first nine months

[1] Italian Housing Market Survey. Short-term Outlook, July 2015, *Supplements to the Statistical Bulletin*, No. 41, 2015.

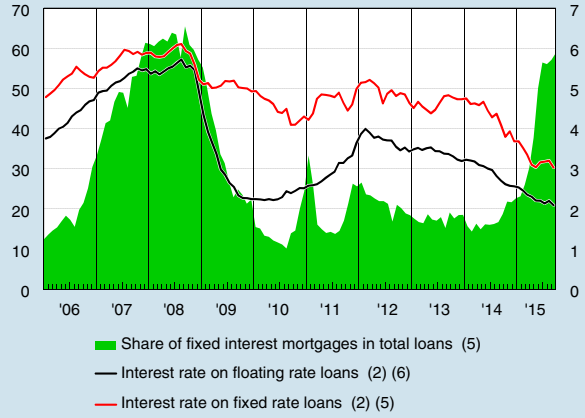
Figure 2.2

Indicators of households' borrowing conditions

(a) *Loans for house purchase: demand and supply conditions and new loans* (1)
(quarterly data; diffusion indices and billions of euros)



(b) *Interest rates and share of fixed rate mortgages* (4)
(monthly data; per cent)



Sources: Euro-area Bank Lending Survey and supervisory reports.
(1) The data refer to consumer households only. – (2) Right-hand scale. – (3) For the demand index, values above (below) zero indicate expansion (contraction); for the supply index, values above (below) zero indicate tightening (easing). – (4) Consumer and producer households and non-profit institutions serving households. The data refer to new loans. – (5) Fixed rate for at least 10 years. – (6) Variable rate or rate renegotiable before the end of the year.

of this year; Figure 2.2b); the exposure to the risk of future increases in interest rates is accordingly reduced. However, as a share of the stock of outstanding loans, it is still limited at around 26 per cent.

Debt quality is no longer deteriorating

Households with existing mortgage loans are lightening their debt burden through various forms of loan renegotiation that, in the first nine months of this year, involved more than 5 per cent of loans outstanding at the end of 2014 (1.3 per cent for the year earlier period). This easing of debt burdens has led to a decrease in the non-performing loan rate, down to 2.3 per cent in the second quarter on an annualized basis (see section 4.2). The share of non-performing loans remained stable at around 11 per cent (Table 2.1). Households in difficulty continue to take advantage of tools that allow for the suspension of instalment payments (Italy's solidarity fund for the purchase of first homes and the agreement between the Italian Banking Association and consumer associations; see *Financial Stability Report*, No. 1, 2015).

Risks for households remain limited

The positive effects of the gradual improvement in the macroeconomic outlook

Table 2.1

Loans to consumer households and firms (1)
(millions of euros and percentage composition)

	December 2014		June 2015	
	Consumer households			
Total	**548,154**	**100.0**	**548,505**	**100.0**
Performing	489,067	89.2	488,511	89.1
Non-performing (2)	59,087	10.8	59,993	10.9
Bad debts	38,021	6.9	38,534	7.0
Past-due	4,306	0.8	5,376	1.0
Other	16,760	3.1	16,084	2.9
	Firms			
Total	**988,171**	**100.0**	**983,888**	**100.0**
Performing	706,308	71.5	695,005	70.6
Non-performing (2)	281,863	28.5	288,883	29.4
Bad debts	157,078	15.9	166,055	16.9
Past-due	9,277	0.9	11,337	1.2
Other	115,508	11.7	111,490	11.3

Source: Unconsolidated supervisory reports of banks and financial companies.
(1) Loans include repos but are not adjusted for securitization. The data for firms refer to non-financial firms and producer households. – (2) From Q1 2015 reports of non-performing exposures are based on the new definition introduced by the European Banking Authority, which divides them into bad debts, past-due debts or breaches of credit line, and other non-performing loans. For December 2014, other non-performing loans include substandard loans and restructured loans; a comparison between the figures for the two dates may therefore reflect small statistical discrepancies.

and the low level of interest rates will gradually extend to the more vulnerable households as well in the coming months. The projections of the micro-simulation model used by the Bank of Italy to assess financial stability [2] indicate that, in the presence of an increase in disposable income, low interest rates and a recovery in the mortgage market, the number of vulnerable households will decrease slightly, to around 2 per cent in 2016. [3] In a moderately unfavourable scenario, with a 1 per cent reduction in nominal income and an increase in interest rates of 100 basis points in 2016, the share of vulnerable households would increase to a very limited extent.

2.2 FIRMS

Firms' financial situation is improving …

There has been a marked improvement in the financial situation of Italian firms for the first time since the outbreak of the crisis. A growing number of businesses, including small firms, are benefiting from the recovery: firms' debt repayment difficulties have eased and there are greater opportunities for accessing new loans. Overall, earnings have returned to growth, albeit at modest rates. A recent survey conducted by the Bank of Italy indicates that two thirds of firms expect to close the financial year 2015 with a profit, the highest share for about a decade; [4] the bulk of the respondents also foresee an increase in investment and an improvement in the terms of access to credit in the coming months.

… but indebtedness is diminishing slowly

The risks associated with firms' indebtedness, while still substantial, have also eased. Financial debt continues to diminish (-1.4 per cent in June, at an annualized rate); foreign debt, which has increased in recent years, does not pose especially large risks (see the box 'Italian firms' foreign debt'). Leverage, which has shed 6 percentage points since the peak of 2011, nonetheless remains higher than in the other euro-area countries. The difference, averaging an estimated 10 percentage points for firms, is especially large for small and medium-sized enterprises (Figure 2.3.a). [5]

ITALIAN FIRMS' FOREIGN DEBT

As of 2003, Italian firms have considerably increased their recourse to foreign funding, which amounted to €200 billion as of last June (see figure); the share of foreign debt in total financial debt grew by 9 percentage points to 16 per cent. The most significant increases occurred in 2009 and 2012, the years of greatest credit tightening by Italian banks.

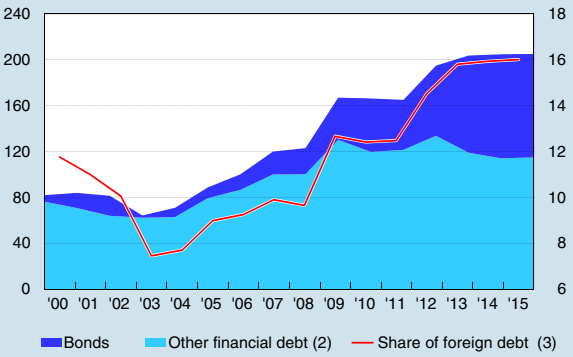
During the crisis, the increase in debt was mostly in the form of bonds. Two thirds of other foreign debt consists of intercompany loans. It is likely that a large portion of such debts relates to bond issues: these are transfers of funds from foreign subsidiaries frequently used by big corporations for the placement of securities in international markets.

[2] V. Michelangeli and M. Pietrunti, 'A microsimulation model to evaluate Italian households' financial vulnerability', *International Journal of Microsimulation*, 7, 3, 2014, pp. 53-79.
[3] Households are considered vulnerable when the instalments they have to pay (principal plus interest) exceed 30 per cent of their income and their disposable income is below the median of the distribution. The variations with respect to the estimates published in the previous *Financial Stability Report* are largely attributable to changes in the sample weights in the 2014 Survey on Household Income and Wealth due to Istat's revisions of demographic statistics.
[4] Business Outlook Survey of Industrial and Service Firms, *Supplements to the Statistical Bulletin*, No. 59, 2015.
[5] A. De Socio and P. Finaldi Russo, 'The debt of Italian non-financial firms: an international comparison', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), forthcoming.

The risks associated with foreign debt are limited. Based on recent experience, an abrupt disruption of the flow of funding from abroad seems unlikely: between mid-2011 and end-2012, during the worst of the sovereign debt crisis, foreign debt in fact continued to grow while internal debt diminished.

Exposure to currency risk is also limited: the share of debt denominated in currencies other than the euro is less than 10 per cent. Moreover, with regard to bonds – for which detailed information is available – the issuing companies are almost always large and international; it is therefore likely that such companies hedge against currency fluctuations both 'naturally', through income streams denominated in the same currency as the securities, and financially, through the use of derivatives.[1]

Debt towards foreign financiers (1)
(yearly data; billions of euros and per cent)



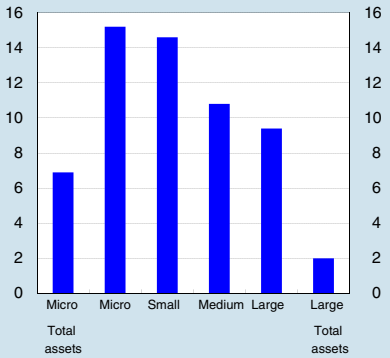
(1) Data for 2015 refer to Q2. – (2) Includes intra-group loans and financing from banks and other intermediaries. – (3) Right-hand scale.

[1] On the high correlation between the use of derivatives and the size or degree of internationalization of firms see M. Graziano, 'Le imprese italiane e gli strumenti derivati', Banca d'Italia, Questioni di Economia e Finanza (*Occasional Papers*), No. 139, 2012.

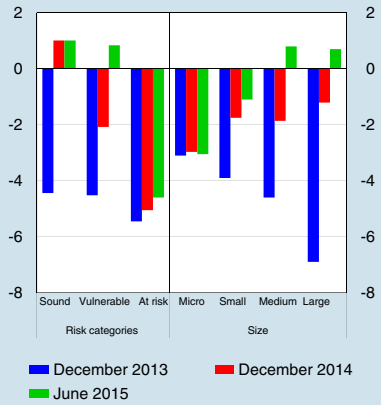
Figure 2.3

Indicators of firms' financial situation

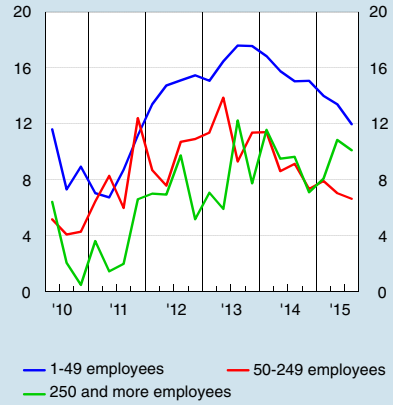
(a) *Difference in leverage between Italy and the other euro-area countries* (1)
(percentage points)



(b) *Loans to firms by risk category and size* (2)
(12-month percentage changes)



(c) *Credit rationing indicator* (3)
(quarterly data; per cent)



Sources: Bank of Italy, Orbis, and Cerved group.
(1) Leverage is measured as the ratio of financial debt to the sum of financial debt and net equity. The gap is estimated on the basis of the 2013 balance sheets of some 800,000 companies in 18 euro-area countries taking into account business sector, age, profitability, growth of sales and share of tangible fixed assets and liquid assets in total assets. – (2) Loans granted by banks and financial corporations. Data for the two years 2013-14 refer to a sample of about 450,000 companies; data for 2015 refer to about 330,000 companies whose 2014 balance sheets are available. The companies are divided by risk category according to points assigned by the Cerved group. Does not include companies that issued bonds. – (3) Share of firms reporting that they had applied for but not obtained a loan as a percentage of those that had contacted banks or financial companies in the 3 months leading up to the survey; average of monthly data recorded by Istat from a sample of manufacturing firms.

Credit expands for firms with the healthiest balance sheets

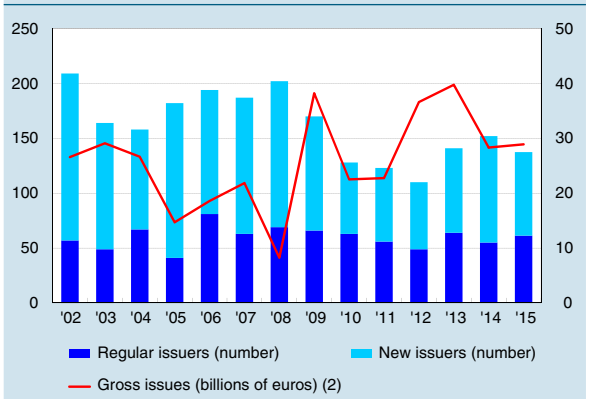
The terms of access to credit are gradually improving. Bank loans continue to decline for the riskiest companies, but have returned to growth for the others (Figure 2.3.b). Based on Istat data, the share of firms declaring that they had applied for but not obtained a loan fell to 10 per cent in the third quarter of 2015; small firms continue to report the greatest difficulty in accessing new loans, but have recouped some ground with respect to larger firms (Figure 2.3.c). The recent business outlook survey conducted by the Bank of Italy confirms that the easing of credit constraints is translating into an expansion of investment plans.

The number of new issuers on the bond market drops again

In 2015 alongside the improvement in bank loan supply conditions, recourse by firms to the bond market was basically stable (Figure 2.4). After two years of marked expansion, however, the number of new issuers declined. The reduction is partly ascribable to minibonds: in the first nine months of 2015 issuers on the ExtraMOT PRO market came to 24, ten fewer than in the same period last year.

Figure 2.4

Corporate bond issues (1)
(yearly data; number and billions of euros)



Sources: Bank of Italy and Dealogic.
(1) The data for 2015 are estimated on the basis of the yearly rate of change observed in January-September. – (2) Right-hand scale.

Firms' liquidity continues to increase

Low interest rates and still weak investment growth are driving firms to increase their liquidity reserves, which now stand at comparatively high levels with respect to the past (8.0 per cent of liabilities last June). Liquidity is ample for large firms in particular, but according to last September's survey conducted by the Bank of Italy together with *Il Sole 24 Ore* there are signs it is increasing in the other size classes as well. [6]

Loan repayment difficulties ease …

Firms' ability to repay their debts is improving. Based on Cerved data, in the first six months of the year protested bills declined further and delays in commercial debt repayments were shortened. In the same period and for the first time in seven years, the number of bankruptcies fell and voluntary windings-up continued to decline sharply. In the second quarter of 2015 the flow of new non-performing loans also diminished (see Section 4.2); as a share of total outstanding loans to firms they nonetheless rose to 29.4 per cent (Table 2.1).

… and the number of vulnerable firms is also declining

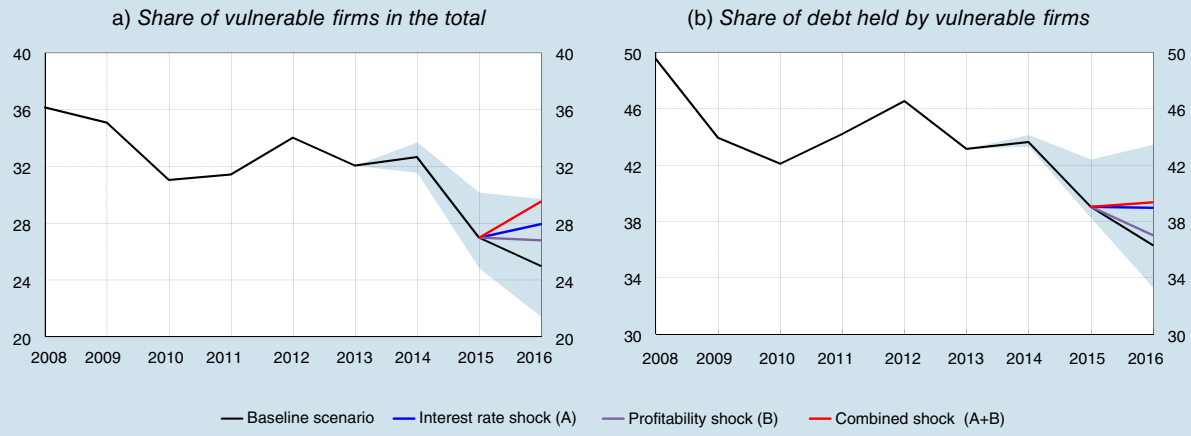
The prospect of an increase in turnover and profitability is creating favourable conditions for a strengthening of firms' balance sheets, including for the most vulnerable among them. The projections of a micro-simulation model indicate a significant reduction in the share of fragile firms in 2016 and in their debts as a share of the total (see the box 'The effects of the economic recovery on firms' vulnerability'). In the coming months the greatest risks for firms will stem from possible unfavourable developments in the macroeconomic outlook, such as those originating from a slowdown in the emerging economies. The risks generated by high indebtedness could materialize in the context of a rise, unlikely for now, in interest rates.

[6] Survey on Inflation and Growth Expectations, September 2015, *Supplements to the Statistical Bulletin*, No. 51, 2015.

THE EFFECTS OF THE ECONOMIC RECOVERY ON FIRMS' VULNERABILITY

The latest available financial statements for a sample of around 700,000 firms indicate that in 2013, vulnerable firms – defined as those with negative EBITDA (earnings before interest, taxes, depreciation and amortization) or with a ratio of interest expense to EBITDA exceeding 50 per cent – comprised 32 per cent of active firms holding 43 per cent of the sector's total financial debt.[1] The growth in the weight of such firms during the crisis reflected, on the one hand, interest rate developments and the weak macroeconomic situation and, on the other, the exit from the market of the most fragile firms (see the figure).

Vulnerability indicators (1)
(annual data; per cent)



Source: Based on Cerved group data.
In the baseline scenario EBITDA falls by 5 per cent in 2014, is stable in 2015 and increases by 3.7 per cent in 2016; interest rates diminish by 30, 70 and 30 basis points respectively in the three years. In the stress scenarios it is assumed that with respect to the baseline scenario in 2016 (A) the interest rate is 100 basis points higher or (B) nominal EBITDA is 5 per cent lower. The third scenario (A+B) is obtained by simultaneously introducing both of the stress factors hypothesized in (A) and (B). The shaded area indicates a confidence interval of 95 per cent around the baseline scenario.

The 2013 financial statement data were projected up to 2016 using a simulation model that incorporates the available macroeconomic information (time series and forecasts) more quickly and frequently.[2] The model makes it possible to estimate the impact of macroeconomic changes on the financial statement variables for some 90 classes of firms (grouped by size, sector of economic activity and volatility of EBITDA) and takes the effects of firms' market entry and exit into account. The construction of the baseline scenario in 2014 made use of the financial statements and the macroeconomic data of the national and financial accounts; for the two years 2015-16 the macroeconomic data were drawn from the Bank of Italy's econometric model.[3]

[1] The ratio of interest expense to EBITDA is an indicator suited to the analysis of firms' financial vulnerability in that it reflects the fragilities associated with firms' debt level, borrowing conditions and ability to generate income. The 50 per cent threshold for identifying vulnerable firms is conventional (see, for example, IMF, *Italy: Staff Report for the 2015 Article IV Consultation*, IMF Country Report, 15/166, 2015). Econometric analyses find significant changes in firms' probability of default, investment rate and liquid reserves in correspondence with that threshold.
[2] A. De Socio and V. Michelangeli, 'Modelling Italian firms' financial vulnerability', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), 293, 2015.
[3] EBITDA is estimated using the rates of increase of value added and labour costs; interest expense using the interest rates on new loans and the growth rates of financial and bank debt.

In 2014, as the cyclical turning point approached, the percentage of vulnerable firms and their share of total corporate sector debt remained basically stable at respectively 33 and 44 per cent. In 2016 the percentage of vulnerable firms is projected to fall to 25 per cent, as a result of the economic recovery, the further decrease in interest rates and the market exit of the least solid firms, while their share of total corporate debt is estimated to decline to 36 per cent. The projected improvement is marked for mid-sized companies and for businesses in manufacturing and services. Among micro-firms and construction companies, instead, financial fragility is expected to remain pronounced, though attenuating with respect to 2014. These projections are subject to a rather high degree of uncertainty, owing chiefly to the forecasts of the profitability of smaller companies.

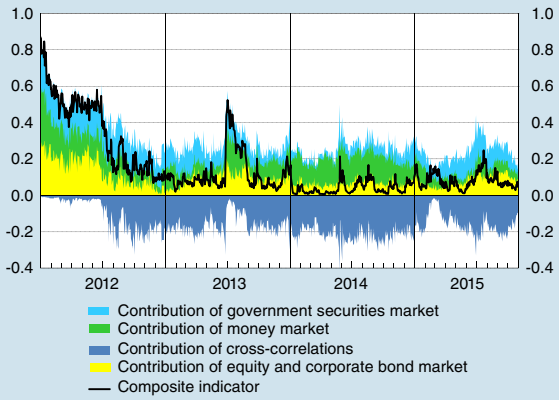
Firms' financial vulnerability would decline less markedly especially in the event of a rise in interest rates. In a moderately adverse scenario, in which interest rates rise in 2016 by one standard deviation (corresponding to 100 basis points) with respect to the baseline scenario, the share of vulnerable firms would be equal to 28 per cent. A reduction of one standard deviation in EBITDA (corresponding to 5 per cent) would bring the share of vulnerable firms to 27 per cent. If both shocks occurred simultaneously, it would still be lower than the value observed in 2014.

3 THE MONEY AND FINANCIAL MARKETS

Following the tensions of the summer months, liquidity conditions on the Italian financial markets have relaxed again (Figure 3.1). Recent spikes in volatility most likely reflect in part a number of structural changes taking place in the markets. Market makers have become more risk adverse, increasingly concentrating on trading more liquid assets and restricting their services to a smaller range of customers (see the box 'Developments in market making and the resilience of the MTS market', in *Financial Stability Report*, No. 2, 2014). The growing utilization of electronic trading platforms and high-frequency automated trading systems tend to heighten intra-day volatility.

Figure 3.1

Indicator of systemic liquidity risk in the Italian financial markets (1)
(daily data; index range, 0 to 1)



Sources: Based on data from Thomson Reuters Datastream, Bloomberg, Moody's KMV, MTS SpA, e-MID SIM SpA, and Bank of Italy.
(1) The systemic risk indicator measures the joint risk in the money market, the secondary market for government securities, and the equity and corporate bond markets. The index range is from 0 (minimum risk) to 1 (maximum risk). The graph also shows the contributions to the composite indicator of the individual markets and of the correlations between them. For the methodology used in constructing the indicator, see *Financial Stability Report*, No. 1, 2014.

3.1 THE MONEY MARKET AND MONETARY POLICY OPERATIONS

Money market conditions remain relaxed

The abundant supply of liquidity, boosted in part by the Eurosystem's securities purchases, helped reduce the interest rate dispersion on Italian money markets. The spreads with respect to the corresponding interest rates in the euro area also narrowed further. Trading volumes on the repo market operated by MTS SpA continue to be high. Unsecured trades on e-MID and on the OTC market remain at their lowest in recent years (Figure 3.2.a).

On the repo market Italian banks access funding from abroad at negative interest rates

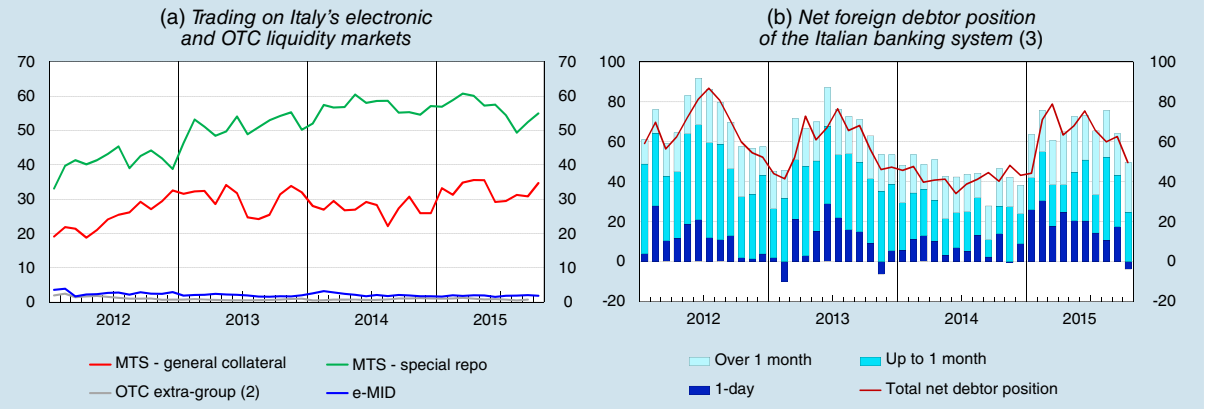
In the most recent months Italian banks have reduced their net foreign debtor position on the MTS repo market (Figure 3.2.b). Short-term interest rates, negative for maturities up to three months and only slightly above the rate on the Eurosystem's deposit facility, tend to favour a gradual lengthening of funding maturities.

The average maturity of Eurosystem refinancing lengthens

Italian counterparties are extending the average maturity of refinancing operations with the Eurosystem. The percentage of three-month operations has fallen, while that of targeted LTROs maturing in September 2018 has increased to now account for over two thirds of total operations (Figure 3.3.a). In June and September Italian counterparties obtained funding equal to one quarter of total demand through targeted operations (Figure 3.3.b).

Figure 3.2

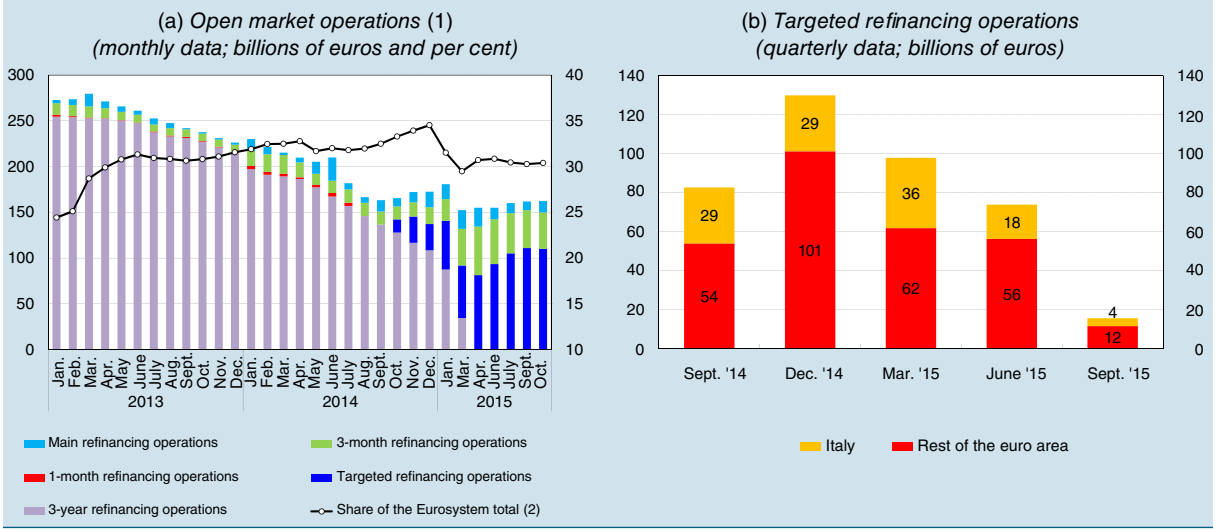
Trading on Italy's money market and net debtor position on MTS repo market (1)
(monthly data; billions of euros)



Sources: Based on e-MID SIM SpA, MTS SpA, and TARGET2-Banca d'Italia data.
(1) Monthly averages of daily data. – (2) Estimates of unsecured money market trading with maturity up to one week by Italian banks with non-group counterparties, based on TARGET2 data. In recent times the accuracy of these estimates is affected by errors in identifying trades at zero interest because of the large number of payments for identical amounts settled in TARGET2. – (3) The net debtor position is calculated on the cash value of the outstanding contracts; the breakdown by duration is based on end-of-month data.

Figure 3.3

Recourse to Eurosystem refinancing by Italian counterparties



Sources: Based on ECB and Bank of Italy data.
(1) Averages of daily data in the maintenance period. The horizontal axis gives the month in which each maintenance period ends. From January 2015 the duration of the maintenance periods has been extended from 4 to 6 weeks. – (2) Right-hand scale.

The Eurosystem purchases €63 billion of Italian public securities

The Expanded Asset Purchase Programme's monthly target of €60 billion worth of securities was achieved on average. Up to October, Italian public securities accounted for €63 billion out of a total of €396 billion purchases made by the Eurosystem through its Public Sector Purchase Programme. The average maturity of the Italian government securities purchased rose from 9.0 years at the start of the programme to 9.3 years in October (8.0 years for the Eurosystem). The purchasing procedures were designed so as not to affect the normal operation of secondary markets (see the box 'The impact of the Public Sector Purchase Programme on the Italian government securities market'.)

THE IMPACT OF THE PUBLIC SECTOR PURCHASE PROGRAMME ON THE ITALIAN GOVERNMENT SECURITIES MARKET

In order to prevent the Public Sector Purchase Programme from having any undesired effects on secondary markets, the Eurosystem's purchases have been staggered over time and along the maturities curve; furthermore, no securities have been purchased for which tensions were reported on the special repo segment. The Bank of Italy's securities lending programme, launched last May and entrusted to a leading international depository, established cost conditions – in accordance with the Eurosystem guidelines – that make it cheaper for operators to use the facility at the slightest sign of tensions on government securities. [1]

Our estimates show that the programme did not cause distortions in the price formation mechanism on the MTS cash market: pricing errors on the MTS for securities purchased as part of the programme on any given day do not differ from those for securities not purchased. [2] The programme's impact also tends to be transmitted to securities that are not directly purchased without creating distortions across different maturities.

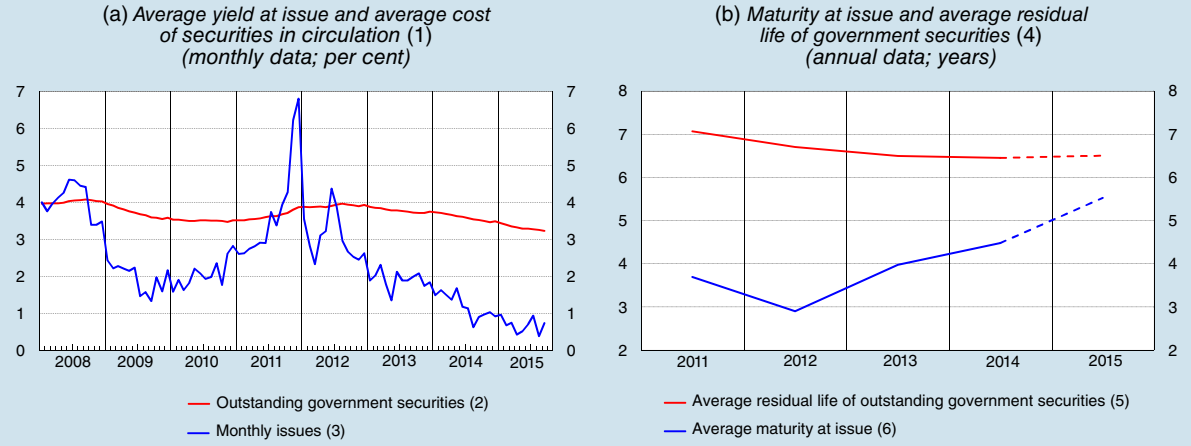
Trading volumes remain high on the MTS repo market and changes in the net supply of government securities due to the purchases have had a negligible effect on the average cost of transactions: the difference between the general collateral rate and the special repo rate at the same maturity (specialness), the main indicator of the scarcity premium of securities, remained at very low levels from March to September, at about six basis points. In particular, the Bank of Italy's securities lending has helped reduce the impact precisely on those securities for which there was a greater risk of an increase in specialness. For this reason too, the share of settlement fails has remained limited (see Section 3.4).

[1] See https://www.bancaditalia.it/media/comunicati/documenti/2015-01/cs-110515.pdf.

[2] Pricing errors are the differences between market prices and the theoretical prices calculated using the Svensson method (see L.E.O. Svensson, 'Estimating and interpreting forward interest rates: Sweden 1992-1994', NBER Working Paper, 4871, 1994).

Figure 3.4

Yields and average maturity of government securities



Sources: Based on Ministry of Economy and Finance and Bank of Italy data.
(1) Placements on the domestic market of non-indexed government securities. – (2) Weighted average of the yields at issue of government securities outstanding at end of month. – (3) Weighted average of the yields of government securities placed during the month, by settlement date. – (4) Government securities placed on the domestic market. The figure for 2015, indicated by the dashed line, refers to the end of September. The two series differ in level mainly owing to the quantity of BOTs, which, as they may be rolled over even more than once during a year, account for a larger share of new issues. – (5) End-of-period data, weighted by the stock outstanding. – (6) Average term to maturity of issues during the period by settlement date, weighted by amounts issued.

3.2 THE GOVERNMENT SECURITIES MARKET

Net issues decrease and yields are historically low

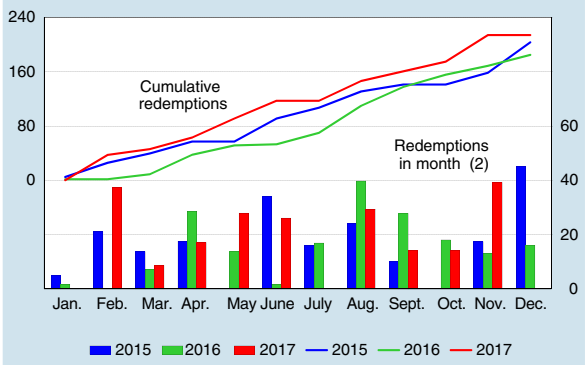
The diminished need for financing and the large volume of liquidity on its accounts allowed the Treasury to reduce net issues by €9 billion in the first nine months of 2015 compared with the same period of 2014. The average issue cost stayed below 1 per cent and reached the historic low of 0.4 per cent, permitting a significant reduction in the average cost of securities in circulation (3.2 per cent at the end of September, down from 3.6 per cent a year earlier; Figure 3.4.a). At the end of October, securities were placed at negative interest rates for the first time.

The average residual life of outstanding government securities begins to lengthen again

The Treasury took advantage of the favourable market conditions through a lengthening of the average maturity of new issues (Figure 3.4.b). The average residual life of outstanding government securities began to lengthen again. The amount of medium- and long-term securities falling due in 2016 will be smaller than in 2015 (€185 billion as against €203 billion; Figure 3.5). With a view to reducing the high volume of redemptions scheduled for 2017 – €214 billion – three bond conversions have been conducted since the beginning of the year, cutting the amount by €3 billion.

Figure 3.5

Redemption schedule of medium- and long-term government securities (1)
(monthly data; billions of euros)



Sources: Based on Ministry of Economy and Finance and Bank of Italy data.
(1) Government securities (including those placed on international markets) with original maturity of more than one year. The redemptions of index-linked BTPs are not revalued for inflation. – (2) Right-hand scale.

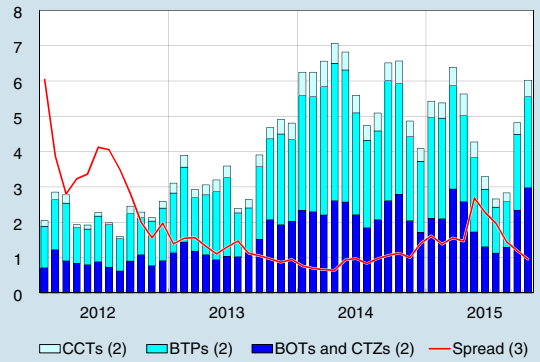
The main liquidity indicators on the secondary market improve

The liquidity of the secondary market for government securities has gradually improved since

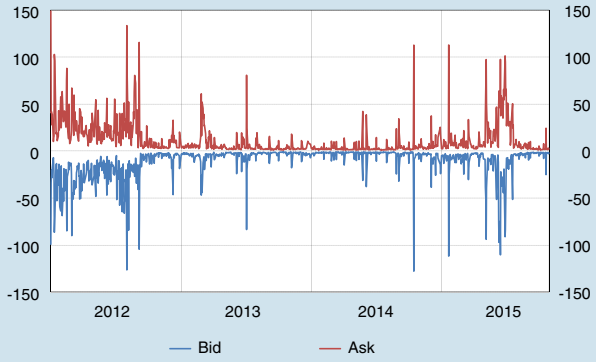
Figure 3.6

Liquidity indicators on Italian government securities

(a) *Bid-ask spread and trading volumes on MTS* (1)
(monthly averages of daily data; billions of euros and basis points)



(b) *Impact of large orders on the prices quoted on MTS Cash* (4)
(daily data; basis points)

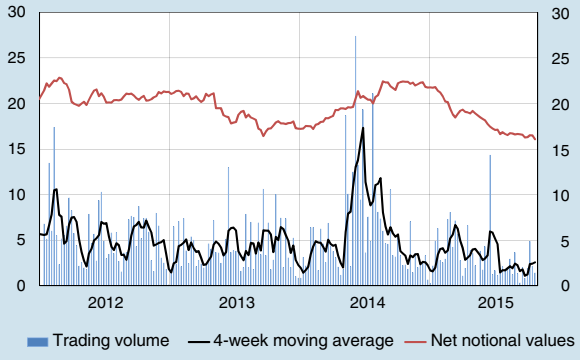


Source: Based on MTS SpA data.
(1) The spread is measured as the simple average of the bid-ask spreads observed during the trading day for the BTPs listed on MTS. – (2) Volumes traded on MTS. – (3) Bid-ask spread; right-hand scale – (4) The analysis refers to the ten-year benchmark BTP. Estimated impact on bid and ask prices of entering a hypothetical €50 million buy or sell order in the MTS book.

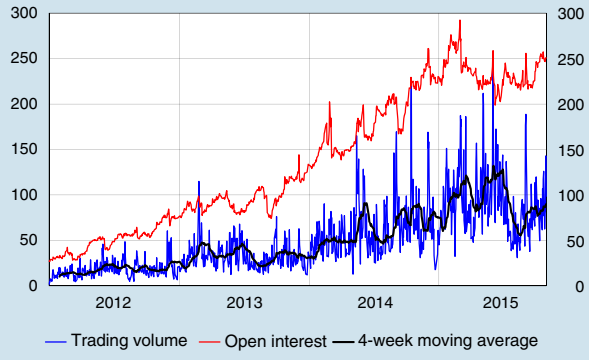
Figure 3.7

Markets in derivatives on sovereign debt

(a) *Republic of Italy Sovereign CDS: trading volumes and net notional values* (1) *(weekly data; billions of dollars)*



(b) *Futures on 10-year BTPs: trading volumes and open interest* (2) *(daily data; thousands of contracts)*



Sources: Based on data from Thomson Reuters Datastream and Depository Trust & Clearing Corporation (DTCC).
(1) Trading volumes refer to 'market risk transaction activity' as defined by DTCC (see http://www.dtcc.com/repository-otc-data). – (2) Open interest is the sum of all open futures contracts on the date indicated; trading volumes are calculated on the most traded contract on each trading day.

July, even though trading volumes remain lower compared with those of last year both on MTS and on BondVision, a wholesale market for institutional investors (Figure 3.6.a). [1] The deterioration in resilience [2] observed in the previous months could, however, indicate that liquidity conditions on the secondary market have become structurally more fragile (Figure 3.6.b; see the box 'Recent trend in the liquidity of euro-area government bonds', in Section 1).

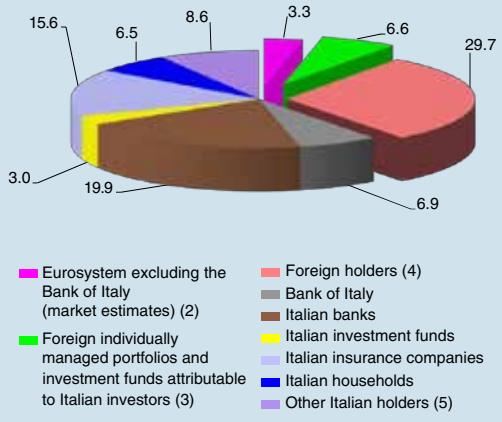
CDS trading volumes decrease but activity in BTP futures remains brisk

The narrowing of the spread on government securities (see Section 1.1) was also accompanied by a progressive reduction in net notional values and in trading volumes in Italian sovereign credit default swaps (CDS) (Figure 3.7.a). By contrast, activity in BTP futures remains brisk, with positive effects on the liquidity of the secondary market for BTPs (Figure 3.7.b). The growing interaction between the futures market and the spot market could, however, contribute to the transmission of volatility shocks from the former to the latter, with a potentially negative impact on liquidity in the secondary market in conditions of stress.

Figure 3.8

Italian general government securities: distribution by holder (1)

(June 2015; per cent)



Source: Financial accounts data.
(1) Percentage shares calculated at market prices net of securities held by Italian general government entities. The shares relating to non-resident holders are shown separately. – (2) Estimate, based on market sources, of Italian general government securities held by the Eurosystem (net of those held by the Bank of Italy) under the Securities Markets Programme and the Public Sector Purchase Programme. – (3) Individually managed portfolios and investment funds managed by foreign institutions but attributable to Italian investors. Partially estimated data. – (4) Net of securities held by foreign individually managed portfolios and investment funds but attributable to Italian investors and by the Eurosystem (excluding the Bank of Italy). – (5) Non-financial corporations, pension funds, and other types of investor.

[1] Trading volumes by primary dealers (Specialisti in titoli di Stato) on electronic platforms and OTC fell by more than 20 per cent in the first 9 months of 2015 compared with the same period of the previous year.

[2] Resilience is the ability of markets to absorb large orders without displaying significant or persistent variations in prices.

The share of Italian government securities held directly by households decreases

The share of Italian government securities held by non-residents remains stable and close to 30 per cent (Figure 3.8). Conversely, in the first six months of 2015 the share held directly by households diminished. Largely owing to its purchases on behalf of the Eurosystem, the share held by the Bank of Italy rose to 6.9 per cent, from 5.7 per cent at the end of 2014.

3.3 CORPORATE BOND AND EQUITY MARKETS

The liquidity of the corporate bond market shrinks

The corporate bond market has suffered from episodes of high volatility over the last few months: from April to September the average monthly turnover of corporate bonds traded on the MOT (Mercato Telematico delle Obbligazioni) was €800 million, 12 per cent lower than in the same period of last year. The average trade size and market resilience also decreased. The value of Italian corporate issuance has fallen by 14 per cent since the beginning of the year. This has gone hand in hand with a contraction in trades on the CDS market for Italian private issuers' debt and, more recently, with a fall in the related premiums.

International factors create tensions for share prices …

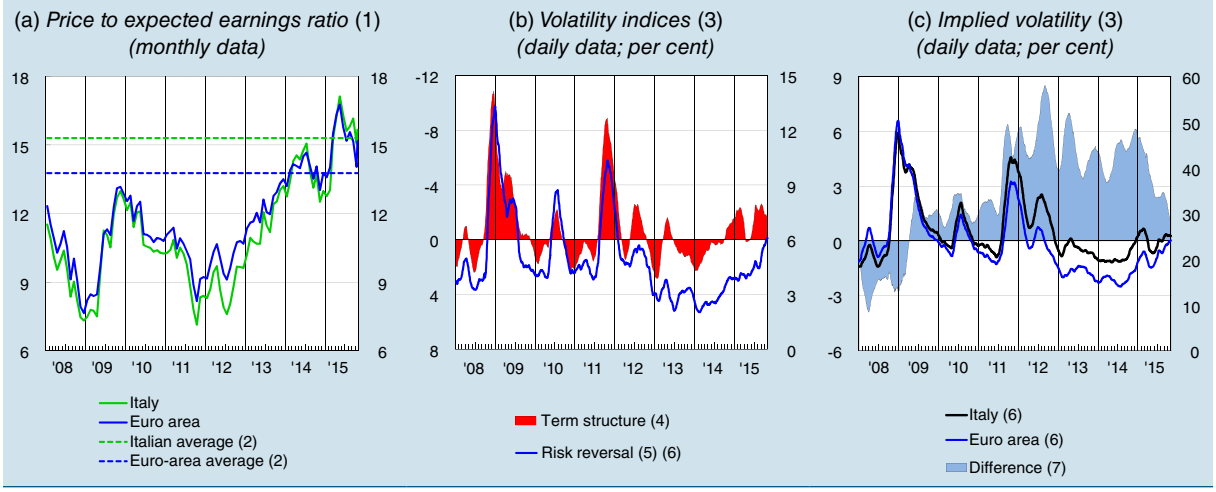
Italian share prices show no signs of being overvalued: the price-to-earnings ratio is close to its historical average and in line with that of the euro area (Figure 3.9.a). The fall in share prices in recent months was accompanied by a reduction in market liquidity. From June to September, market resilience deteriorated and the average trade size decreased.

… temporarily increasing the demand for protection

The tensions recorded on international markets in the last few months have increased investors' demand for protection against the risk of further sharp downturns in share prices, including Italian securities. Implied volatility and extreme risk measures derived from option market prices (such as risk reversal and the differential between the implied volatilities of short- and longer-term put

Figure 3.9

Stock market indicators

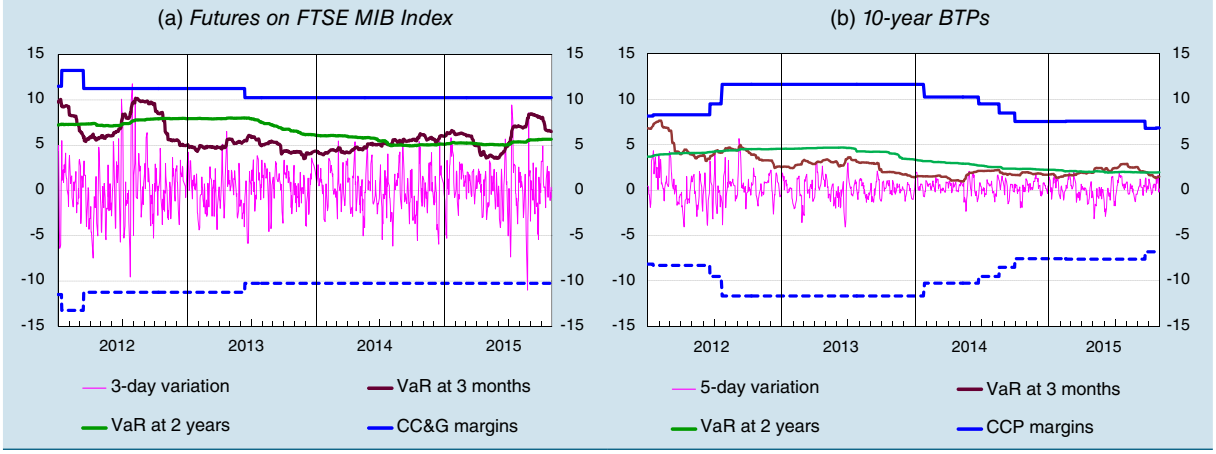


Sources: I/B/E/S, Thomson Reuters Datastream and Bloomberg.
(1) Ratio of stock market capitalization of the general index to expected earnings over the next 12 months, surveyed by the company I/B/E/S. – (2) Averages since February 1987. – (3) 60-day moving averages. – (4) Difference of the implied volatilities of options on the Italian stock market index with maturities of 12 and 2 months. – (5) Risk reversal is calculated as the difference between the implied volatilities of put and call options on the Italian stock market index with the same delta (0.25) and the same maturity (2 months). – (6) Right-hand scale. – (7) Difference between the implied volatilities of options on the Italian and euro-area stock market indices for options with a maturity of 2 months.

options; Figures 3.9.b and 3.9.c) have risen. More recently, expectations of new monetary policy measures have helped to ease market tensions. The gradual narrowing of the difference between implied volatilities for the Italian and the euro area markets confirms that there are no specific concerns for the Italian economy.

Figure 3.10

Margins applied by CCPs and volatility of the financial instruments (1)
(daily data; per cent)



Sources: Based on Bloomberg and Cassa di Compensazione e Garanzia SpA data.
(1) Volatility is measured by the variation in the price of the benchmark 10-year Italian government bond (BTP) over a 5-day horizon and by the 3-day variation in futures on the FTSE MIB Index. The value-at-risk indicator (VaR) is calculated with reference to a period of 3 months and 2 years with a confidence interval of 99 per cent. The margins for BTPs are those for the 7-10 year duration bucket; the broken line, which is the mirror image of the margins, highlights the adequacy of the margin requirements to cope with the negative price fluctuations actually registered in the market..

3.4 MARKET INFRASTUCTURES

Central counterparties' margin requirements remain stable in a phase of heightened volatility

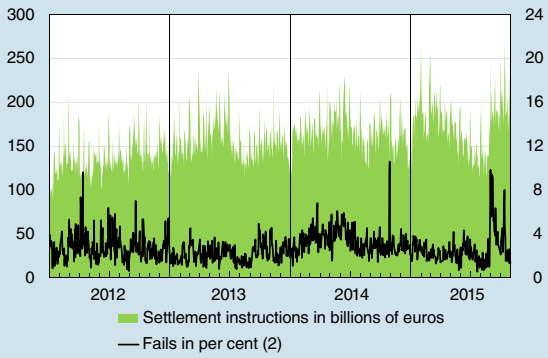
In line with the requirements of the new European Market Infrastructure Regulation, the models used by the central counterparties (CCPs) to calculate margins mitigate the possible procyclical effects of sudden and temporary variations in market volatility. [3] Notwithstanding the acute tensions of recent months, the Cassa di Compensazione e Garanzia SpA (CC&G) did not raise the initial margins required for futures contracts on the FTSE MIB index (Figure 3.10.a) and for Italian government securities (Figure 3.10.b).

The Italian financial system's migration to T2S is successfully completed

The migration of the Italian financial market-place to the new securities settlement platform

Figure 3.11

Securities settlement system (1)
(daily data)



Source: Based on Monte Titoli SpA data.
(1) The data refer to the Express II settlement system until 28 August 2015 and to T2-Securities from 31 August 2015. – (2) Right-hand scale.

[3] In fact, in determining margins a very long look-back period of over 10 years (if available) is used, together with holding periods for up to 5 days and a coverage ratio ranging from 99.0 to 99.9 per cent.

TARGET2-Securities (T2S) took place at the end of August, guaranteeing full operational continuity. The new platform facilitates cross-border trading of securities and permits a greater diversification of risks by investors (see the box 'TARGET2-Securities and financial stability'). Following a period of adaptation to the new operating procedures, the share of transactions entered in T2S via Monte Titoli SpA not settled at the original settlement date (fails) has progressively declined to close to the average level for the first few months of the year (Figure 3.11).

The intraday liquidity risk of the Italian banks in TARGET2-Banca d'Italia remains low.[4] The transition to T2S did not create tensions in the intraday management of liquidity of Italian banks, in part thanks to the mechanisms for optimization and auto-collateralization provided by the new platform, and to the abundant availability of collateral at the Bank of Italy.

TARGET2-SECURITIES AND FINANCIAL STABLITY

The Italian central securities depository Monte Titoli migrated to TARGET2-Securities (T2S), joining those from Greece, Malta, Romania and Switzerland (the last two only for transactions in euros), which had begun operations on the new platform in June. The other European depositories are expected to complete their migration by February 2017.

Monte Titoli's migration is of particular importance owing to the large volumes involved and to the fact that Monte Titoli exploits the platform's most advanced features, which the depositories that had joined earlier have not used. In the first month of operations on T2S the Italian financial marketplace settled a daily average of more than 80,000 transactions for a total amount of nearly €183 billion.

Being able to trade securities throughout Europe using a single account will enable banks to optimize their liquidity and collateral management, thereby increasing the soundness of the system. Banks will reap savings in terms of liquidity and collateral from being able to settle transactions using the intra-day credit automatically granted by their central bank against the securities available in the banks' accounts or against the securities that are being traded (auto-collateralization). The new platform will also facilitate cross-border trades in securities, aligning the costs to those of domestic trading. T2S complies with high standards in order to drastically reduce the operational risks stemming from the centralization on a single platform of the different European securities settlement systems.

The greater level of market integration achieved through T2S, which will be further enhanced once the harmonization of post-trading activities is completed, will facilitate competition between central depositories and foster more efficient capital allocation.

[4] Measured by the ratio between each participant's maximum net debtor position during the course of the day and the liquidity available at the central bank at the start of the day (see the box 'Intraday liquidity risk in TARGET2-Banca d'Italia', *Financial Stability Report*, No. 2, 2011).

4 BANKS

The gradual improvement in the economy is being reflected in Italian banks' balance sheets. Though still weak, profitability is showing signs of a recovery thanks to the increase in income from services and the slight reduction in value adjustments to loans. Capital strengthening continues. Our projections indicate a moderate increase in profitability for 2016 as well. The main risks stem from developments in the macroeconomic outlook (see Section 1.1): without a consolidation of growth, the current improvement in credit quality would falter and earnings and profits stagnate to the detriment of banks' self-financing capacity.

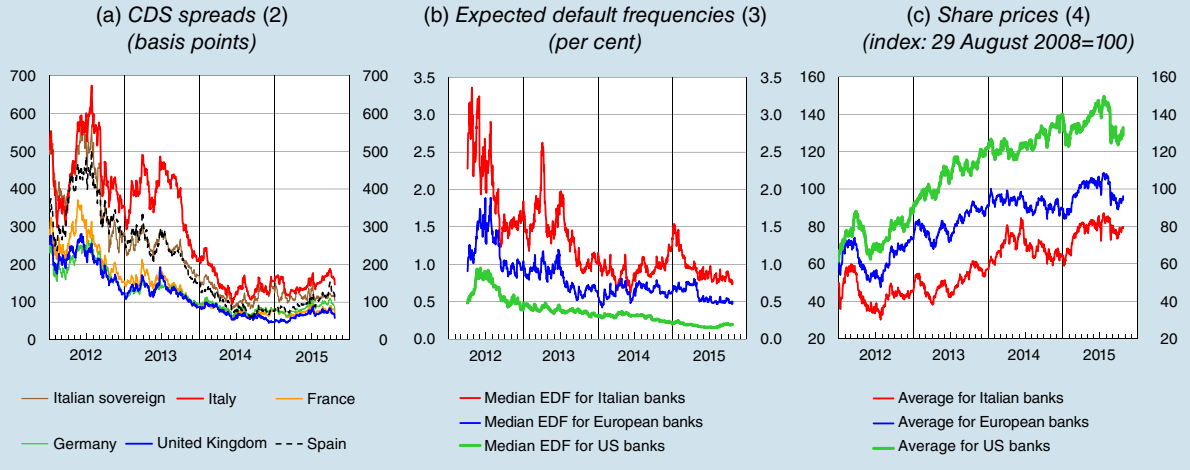
4.1 MARKET INDICATORS

Market indicators are affected by the international tensions

Since last April a number of market indicators of the soundness of Europe's leading banks, including Italian banks, have worsened (Figure 4.1), following uncertainties about the situation in Greece and, more recently, the slowdown in the Chinese economy. Share prices have fallen and their volatility has increased. CDS spreads have edged up (from 130 to 150 basis points for

Figure 4.1

Listed Italian banks: international comparison (1)
(daily data)



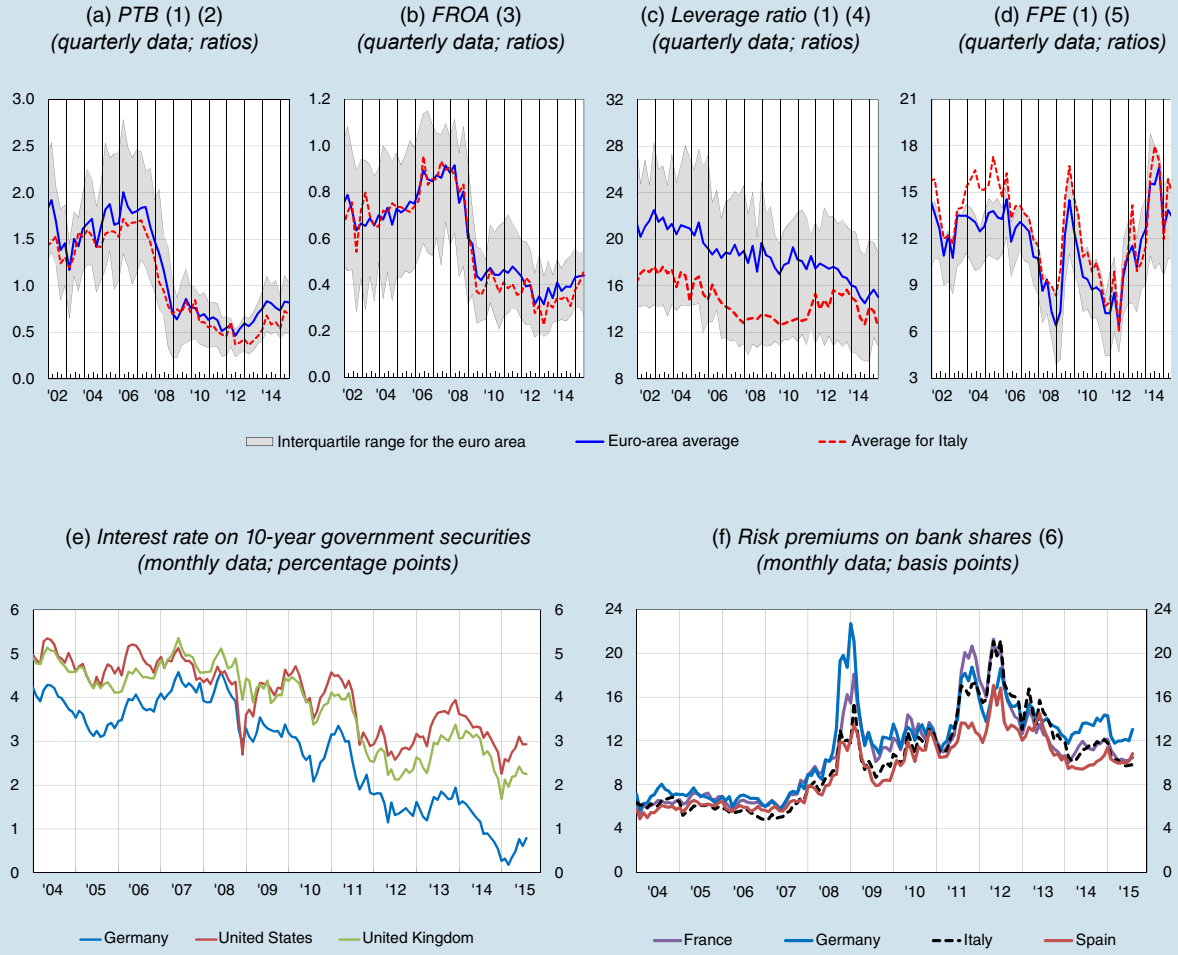
Sources: Based on data from Bloomberg, FTSE, Thomson Reuters Datastream and Moody's KMV.
(1) Panel (a) refers to the following banks: for Italy, UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena; for France, BNP Paribas, Société Générale and Crédit Agricole; for Germany, Deutsche Bank and Commerzbank; for the United Kingdom, Barclays, Royal Bank of Scotland, HSBC and Lloyds; for Spain, Banco Santander and Banco Bilbao Vizcaya Argentaria. Panels (b) and (c) refer to the following sample 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, 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, Morgan Stanley and Wells Fargo. – (2) Five-year CDS spreads. – (3) EDFs, calculated on the basis of the price and volatility of the shares of the banks to which they refer, measure the probability of assets having a lower market value than liabilities over a period of 1 year. – (4) Average share prices are calculated with reference to price indices.

Italian banks), affected by the general increase in operators' risk aversion; the expected default frequencies have remained basically unchanged. Banks' share prices remain at low levels, mainly owing to the limited profitability of intermediaries (see the box 'The low level of banks' share prices in the euro area').

THE LOW LEVEL OF BANKS' SHARE PRICES IN THE EURO AREA

The ratio of market capitalization to book value (price-to-book or PTB ratio) of the euro area's leading banks declined markedly during the global financial crisis and has remained low ever since (figure, panel a).

The euro area's leading listed banks: price-to-book ratios and their determinants



Sources: Based on data from Standard & Poor's Capital IQ, I/B/E/S and Thomson Reuters Datastream.
(1) The sample consists of all the listed banks in the euro area with assets exceeding $10 billion at the end of 2014. All the indicators (simple averages and interquartile ranges) are calculated from the data on individual banks, winsorized at the 1st and 99th percentile. – (2) Ratio of the share price at the end of the quarter to the book value of own capital per share. – (3) Ratio of expected cumulative earnings for the 4 subsequent quarters to total assets, valued at balance sheet values (the indicator is obtained as the ratio of PTB to the product of FPE and the leverage ratio). – (4) Ratio of total assets to book value of own capital. – (5) Ratio of share price at the end of the quarter to expected earnings per share at 1 year. – (6) For each country, average of the estimated risk premiums on bank shares obtained using 4 different valuation models (CAPM, 2 differently specified dividend discount models and Shiller's cyclically adjusted price earnings ratio). The estimates refer to the Morgan Stanley indices of listed bank shares.

The PTB ratio can be disaggregated into three components: [1] (a) the forward return on assets ratio (FROA), i.e. the ratio of expected future earnings to balance sheet assets, a gauge of a bank's ability to generate profits; (b) the leverage ratio of balance sheet assets to equity; and (c) the forward price earnings ratio (FPE), i.e. the ratio of market capitalization to expected future earnings, which indicates the value currently attributed by investors to banks' future income flows. For a given expectation on earnings, the FPE ratio depends on the rate implicitly used by investors to discount future cash flows, which in turn can be defined as a risk free interest rate (generally proxied by government securities yields) plus a risk premium.

The sharp decline in the PTB ratio between the third quarter of 2007, when the financial crisis began, and the last quarter of 2008, marked by the Lehman Brothers failure, resulted mainly from the lowering of earnings expectations for the banks as measured by FROA (figure, panel b). During that period share prices were also pushed down by the increase in the risk premiums demanded by investors to hold bank shares (figure, panel f). In the years that followed, the negative effect on the PTB ratio from the leverage ratio also intensified (figure, panel c), due to the banks' policy of shedding assets. From the summer of 2012 onwards (the turning point in the euro area's sovereign debt crisis, which dealt a severe blow to national banking systems), banks' share prices were instead buoyed by the gradual rise in the FPE ratio (figure, panel d), owing both to the drop in government securities yields (figure, panel e) and to the decline in bank equity risk premiums (figure, panel f), which nonetheless remain at significantly higher levels than before the global financial crisis.

Overall, the current low banks' share prices in the euro area primarily reflect expectations of very limited growth in earnings and continuing high risk premiums.

[1] The ratio of market price to book value (PTB), can be defined as the product of the three component factors:
PTB = FROA x leverage ratio x FPE, where FROA indicates the ratio of expected future earnings to total assets at one year, the leverage ratio is the ratio of total assets to the book value of own capital, and where FPE indicates the ratio of share price to expected earnings at one year.

4.2 ASSET RISKS

Credit

Lending towards less risky borrowers increases …

The improvement of the Italian economy has spurred the demand for new loans by households and firms, allowing banks to increase lending albeit with supply policies that are still marked by prudence. The stock of loans to households has been growing again since June; the decline of the stock of business loans is limited to the riskier customer segments (see Section 2.2).

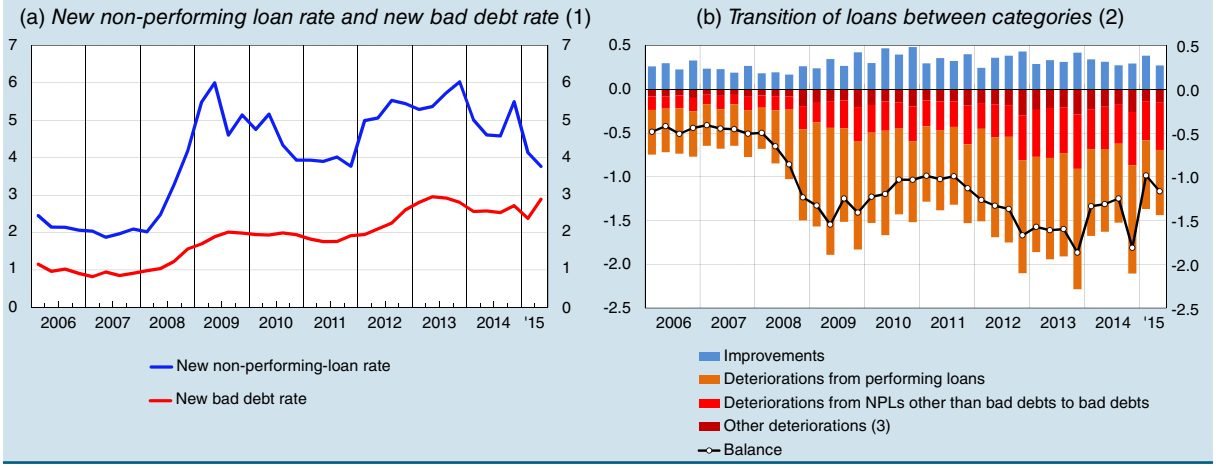
… and the growth in non-performing loans gradually slows

The deterioration in credit quality attenuated: the flows of new non-performing loans in proportion to total loans returned, in the second quarter, to the levels reported at the end of 2010 (3.8 per cent, compared with a high of 6.0 per cent at the end of 2013), before the recession intensified due to the sovereign debt crisis (Figure 4.2.a). The increase in the rate of new bad debts recorded in the same quarter is mainly ascribable to the reclassification of loans that were already non-performing (Figure 4.2.b); according to preliminary data, the flow of new bad debts declined in the third quarter. Our estimates, consistent with the forecasts for economic activity, indicate that the rate of new bad debts will continue to come down in 2016.[1] For

[1] In the scenario hypothesized, economic activity will gradually strengthen during 2016, with contributions from the pick-up in domestic demand and the gradual revival of foreign demand. Interest rates are projected to remain at the current lows, with a very moderate increase in the slope of the yield curve.

Figure 4.2

Credit quality indicators
(per cent)

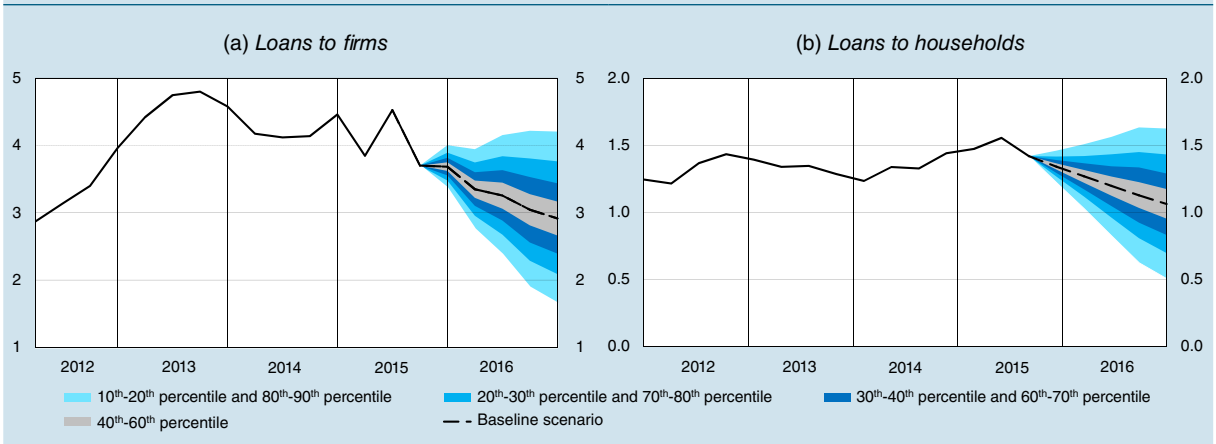


Source: Central Credit Register.
(1) Annualized quarterly flows of adjusted non-performing loans and adjusted bad debts in relation to the stock of loans at the end of the previous quarter, net of adjusted non-performing loans and adjusted bad debts on an annual basis; data seasonally adjusted where necessary. – (2) Data at the end of the quarter. The index considers the movements of loans between the different categories of credit quality. It is calculated as the balance between the shares of loans whose quality deteriorated/improved in the 12 preceding months. – (3) Deteriorations from past-due debts to other non-performing loans and write-offs with loss.

households, at the end of next year the indicator is projected to return to levels slightly higher than those of the period before the economic crisis (0.9 per cent on average in the period 2005-08); for firms, the expected reduction would bring the rate of new bad debts below 3 per cent at the end of 2016, over 1.5 percentage points less than the average recorded in the two years 2013-14 (Figure 4.3).

Figure 4.3

New bad debt rate: projections (1)
(per cent; 4-quarter moving averages)



(1) Quarterly flow of adjusted bad debts in relation to the stock of loans at the end of the previous quarter, net of adjusted bad debts; data seasonally adjusted, where necessary. The probability distribution of the projections, graphed by percentile groups, allows estimation of the size of the risks to the baseline projection.

According to the latest available data, consolidated by banking group and referring to the end of last June, gross non-performing loans amounted to 18.0 per cent of total loans to customers (Table 4.1), up slightly from 17.8 per cent in December 2014; bad debts alone amounted to 10.3 per cent. No consistent differences were found between banks as a function of their size (Figure 4.4).

Table 4.1

Credit quality: amounts and shares of non-performing loans and coverage ratios (1)

(billions of euros and per cent; June 2015)

	5 largest groups			Large banks			Small banks			Minor banks			Total system		
	Amount	Percentage composition	Coverage ratio	Amount	Percentage composition	Coverage ratio	Amount	Percentage composition	Coverage ratio	Amount	Percentage composition	Coverage ratio	Amount	Percentage composition	Coverage ratio
Customer loans:	**1,240**	**100.0**	**9.0**	**434**	**100.0**	**7.5**	**156**	**100.0**	**9.2**	**178**	**100.0**	**7.4**	**2,008**	**100.0**	**8.6**
Performing	1,013	81.6	0.6	360	83.1	0.6	128	81.9	0.7	146	81.9	0.6	1,646	82.0	0.6
Non-performing (2)	228	18.4	46.1	73	16.9	41.7	28	18.1	47.8	32	18.1	38.2	361	18.0	44.7
Bad debts	133	10.8	59.3	39	9.0	57.4	17	11.0	62.0	17	9.5	53.8	207	10.3	58.7
Other	94	7.6	27.6	34	7.9	23.7	11	7.1	25.8	15	8.6	20.9	155	7.7	25.9

Source: Supervisory reports, on a consolidated basis for banking groups, and individually for the rest of the system.
(1) The values are gross of the corresponding provisions. The coverage ratio is the amount of loan loss provisions in relation to the corresponding gross exposure. In the case of performing loans, it is calculated as the ratio of generic provisions to the loans. The division into size classes is based on the composition of banking groups in June 2015 and total non-consolidated assets as of December 2008. The 5 largest groups comprise the banks belonging to the following groups: UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, UBI Banca and Banco Popolare. The size classes 'large,' 'small' and 'minor' refer to banks belonging to groups or independent banks with total assets, respectively, greater than €21.5 billion, between €3.6 billion and €21.5 billion, and below €3.6 billion. Foreign bank branches are not included. Rounding may cause discrepancies in the totals. The percentage composition is calculated on the basis of the amounts expressed in millions of euros. Provisional figures. – (2) As of January 2015, a new harmonized definition of non-performing loans is in force at the European level. For a description of the subcategories that comprise non-performing loans see 7th update of 20 January 2015, available only in Italian, of Bank of Italy Circular No. 272/2008.

The coverage ratios are stable

The ratio between value adjustments and gross non-performing exposures (coverage ratio) remained practically stable at 44.7 per cent (Table 4.1). It is lower for smaller banks, mostly mutual banks, partly because more of their lending is secured by guarantees (79.8 per cent compared with a system-wide average of 66.5 per cent).

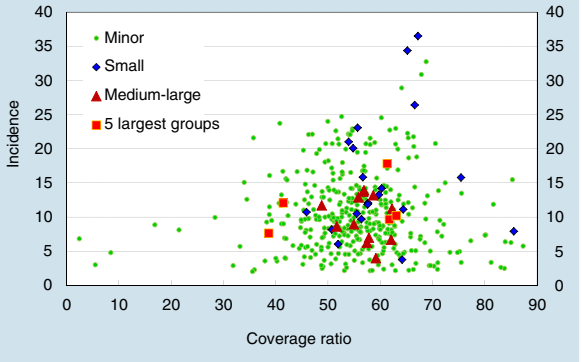
The Italian market for non-performing loans has yet to take off

The slowdown in flows does not yet correspond to a reduction in the stock of non-performing loans because of the difficulties in starting a secondary market. Recent reforms regarding credit recovery procedures and the tax deductibility of write-downs and losses on loans could accelerate the closure of disputed positions (see the box 'The recent measures on credit recovery procedures and tax deductibility of loan losses and write-downs').

Figure 4.4

Incidence and coverage ratios of bad debts of banks and banking groups (1)

(per cent; data as at 30 June 2015)



Source: Supervisory reports.
(1) The incidence is the ratio between bad debts and outstanding loans, both gross of provisions; the coverage ratio is the ratio between the amount of provisions and the gross amount of bad debts. For the division into size classes see the footnote to Table 4.1. Banks and groups with incidences of less than 2 per cent and/or coverage ratios over 90 per cent are excluded; these entities account for only 1 per cent of total bad debts.

THE RECENT MEASURES ON CREDIT RECOVERY PROCEDURES AND TAX DEDUCTIBILITY OF LOAN LOSSES AND WRITE-DOWNS

Decree Law 83/2015, converted into Law 132/2015, enacted on 6 August, amends the Bankruptcy Law and the Code of Civil Procedure to make bankruptcy and enforcement procedures shorter

and more effective. It also provides for full and immediate tax deductibility of loan write-downs and write-offs. The purpose is to remove the legal and fiscal obstacles to the development of an Italian market in impaired loan assets and foster more efficient management of insolvency cases.[1]

The amendments to the Bankruptcy Law mainly concern the conventional tools for addressing corporate crisis, namely composition with creditors (*concordato preventivo*) and out-of-court restructuring agreements. As for the former, the reform introduces measures to increase creditors' recovery rates and incentives for debt restructuring as an alternative to asset liquidation. Creditors may submit plans alternative to the plan presented by the debtor; where the debtor's plan already includes an offer from a third party to buy the firm or a part of the business, the judge is required to open a competitive auction for collecting offers from the greatest possible number of potential buyers.

The reform institutes a new type of out-of-court restructuring agreement for firms whose debts to banks and other financial intermediaries amount to 50 per cent or more of their total liabilities: agreement with creditors holding 75 per cent or more of the firm's financial debt becomes binding also over dissenting creditors. This new model neutralizes opportunistic conduct on the part of minority creditors. Further amendments to the Bankruptcy Law are intended to make procedures shorter and more transparent.

The amendments to the Code of Civil Procedure simplify and shorten court proceedings for forced sales of collateral. The reform makes it mandatory for the judge to delegate the activities related to the forced sale procedure to professionals (e.g. notaries, lawyers, chartered accountants). The new rules on auctions provide that bids may be accepted even at a price below the asset's estimated value (but not by more than one quarter); the assignment of the collateral to creditors is incentivized. The old method of publishing notices is replaced by a new system based on on line notices. The creation of a dedicated single national online platform managed by the Ministry of Justice should enhance the transparency of court-ordered sales and with it the overall efficacy of the process, with better safeguards for the interests of creditors and debtors.

The measures are expected to shorten bankruptcy proceedings from their current average length of over six years to between three and five, and enforcement proceedings from four years to three. Their effectiveness will depend in part on organizational and management factors affecting the application of the new rules by the courts and by banks and other intermediaries. The lack of official statistics on the length of the procedures will make prompt evaluation of the results difficult.

Finally, the tax treatment of banks' loan losses has been revised. In particular, new write-downs and write-offs are now immediately fully deductible, whereas previously they were deductible only over five years. As a consequence, the amount of deferred tax assets on banks' balance sheets will be gradually reduced. The change eliminates a competitive handicap for Italian banks internationally, makes more prudent loan valuation policies less costly, and ends the forced loan to the Treasury that was implicit in the deductibility instalments.

[1] For a detailed examination of the reform, see M. Marcucci, A. Pischedda and V. Profeta, 'The changes of the Italian insolvency and foreclosure regulation adapted in 2015', Banca d'Italia, *Note di Stabilità Finanziaria e Vigilanza*, No. 2, 2015.

In the period 2012-14 Italian banks sold or securitized bad debts amounting to €11 billion (equal to 2 per cent of the average stock of outstanding bad debt on an annualized basis). The sales were again for small amounts in the first nine months of 2015 (approximately €2 billion) and were mostly limited to the major banking groups and to foreign banks operating in Italy. The stimuli that will result from the reforms may not be enough to restart the market. The creation of a special purpose asset management company for the purchase and management of non-performing loans operating at market conditions could serve as a catalyst for private initiatives (see the box 'A special purpose company for the purchase of Italian banks' bad debts', *Financial Stability Report*, No. 1, 2015).

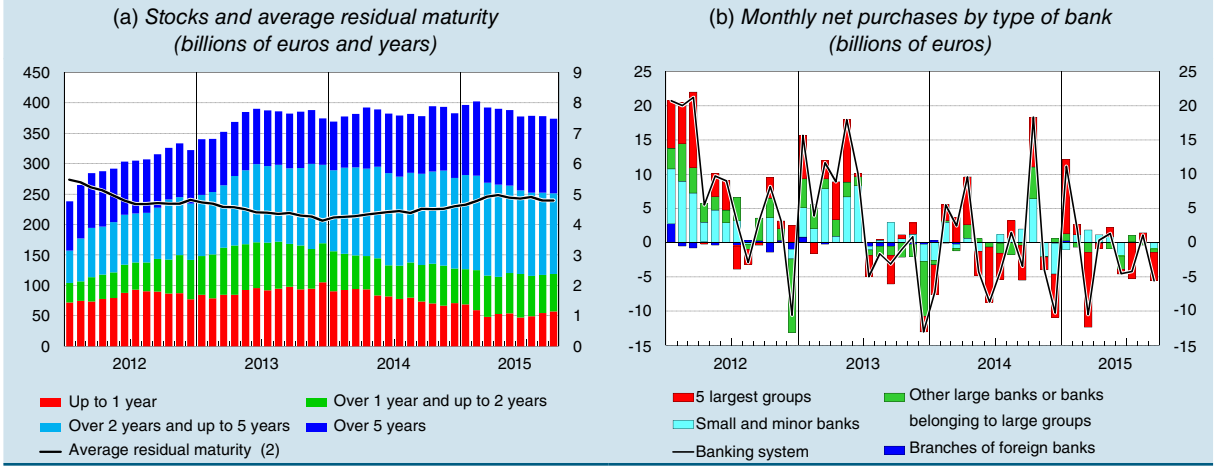
Sovereign risk exposure in the euro area and foreign assets

The exposure to other euro-area countries grows

At the end of September the amount of Italian general government securities held by banks amounted to €374 billion (Figure 4.5), equal to 10.5 per cent of total assets, down by €9 billion compared with the end of 2014. This decrease reflects a common trend among euro-area banks, which in the first nine months of the year reduced their holdings of government bonds issued by their respective countries of residence by €32 billion. In contrast, Italian banks increased their investment in government securities issued by other euro-area countries, in particular Spain (net purchases of €13 billion), France (€6 billion), and Germany (€5 billion). The overall exposure vis-à-vis other euro-area countries consequently grew by 15.2 per cent with respect to the end of 2014 (Table 4.2), but it remains low as a percentage of total assets (around 13 per cent). Loans granted to central and eastern European countries increased by 4.4 per cent; those going to Russia and Ukraine fell by 3.9 per cent compared with the end of 2014, to just over €20 billion.

Figure 4.5

Banks' investments in Italian general government securities (1)
(monthly data)



Source: Supervisory reports.
(1) Amounts of purchases are net of variations in market prices. Holdings are shown at market value. All general government securities are counted, including those issued by local authorities. Cassa Depositi e Prestiti is excluded. – (2) Right-hand scale.

4.3 REFINANCING RISK AND LIQUIDITY RISK

Funding conditions are stable

Banks' funding conditions remain favourable: in September total funding increased at an annual rate of 0.4 per cent (Figure 4.6.a) and its cost declined further to 0.7 per cent from 0.9 per cent at the end of 2014. Households continued

Table 4.2

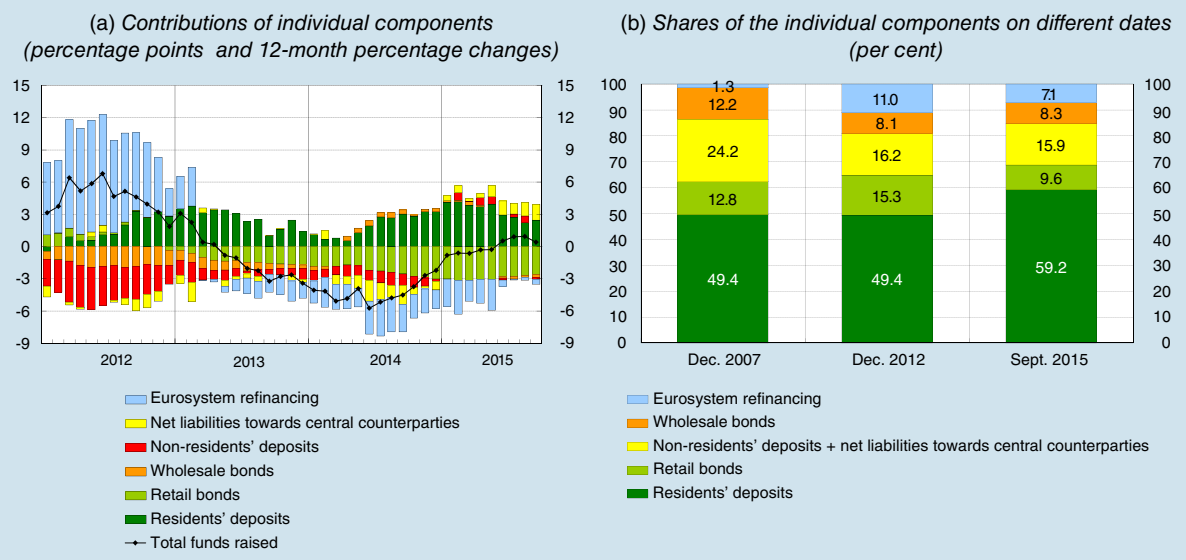
Exposure of Italian groups and banks to foreign residents, by borrowers' nationality and sector (1)
(billions of euros; June 2015)

	General government	Banks	*Financial corporations*	*Households and firms*	Total	Percentage change in total from 6 months earlier	As a percentage of total exposures reported to BIS (2)
Europe	**144.4**	**97.6**	**75.7**	**296.8**	**614.4**	**11.6**	**6.3**
Euro area	102.2	72.5	54.9	180.7	410.3	15.2	8.3
Germany	42.0	25.8	26.6	83.0	177.3	15.5	14.4
Austria	17.6	8.4	1.5	50.6	78.1	0.1	40.3
France	12.4	14.0	3.0	10.4	39.7	30.2	3.9
Luxembourg	0.3	2.8	11.7	3.7	18.5	1.4	4.2
Spain	19.2	12.2	1.8	5.2	38.5	78.3	9.7
Netherlands	1.4	4.5	4.4	6.4	16.8	2.7	3.3
Ireland	0.4	0.8	4.4	0.8	6.4	10.1	2.0
Portugal	0.5	1.4	0.2	0.8	2.9	-4.9	2.8
Greece	0.1	0.1	0.0	0.5	0.7	-36.6	3.8
Other (3)	8.3	2.6	1.3	19.2	31.3	0.0	4.6
CEE (4)	**45.3**	**9.6**	**4.6**	**114.0**	**173.5**	**4.4**	**15.9**
of which: Poland	11.5	0.7	2.7	26.0	40.9	8.3	16.9
Croatia	7.8	0.2	0.2	14.9	23.1	1.0	46.5
Slovakia	2.8	0.2	0.4	12.6	16.0	5.7	27.2
Hungary	4.8	0.5	0.2	8.3	13.8	-4.0	22.6
Russia	1.1	1.3	0.4	14.2	17.0	-4.1	13.7
Ukraine	0.1	0.0	0.0	2.9	3.0	-1.6	25.8
Rest of world	**24.0**	**14.4**	**9.4**	**23.2**	**71.0**	**8.8**	**0.6**
Advanced countries	11.9	7.2	7.9	8.7	35.8	24.2	0.5
of which: United States	9.0	5.6	7.4	5.9	27.9	22.3	0.5
Developing countries	12.0	6.7	0.4	9.5	28.6	0.4	0.8
of which: Egypt	2.2	0.2	0.0	2.9	5.4	8.8	22.6
Offshore centres	0.2	0.4	1.1	4.9	6.6	-15.8	0.3

Sources: Consolidated supervisory reports for banking groups and individual supervisory reports for banks not belonging to a group.
(1) Exposures to 'ultimate borrowers', gross of bad debts and net of provisions. Does not include Cassa Depositi e Prestiti. – (2) As a percentage of the total foreign exposures to each country in March 2015 reported to the BIS by a large set of international intermediaries. – (3) Belgium, Cyprus, Estonia, Finland, Latvia, Lithuania, Malta, Slovakia, and Slovenia. – (4) Central and Eastern Europe: Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan; among these, European or euro-area countries are also counted under exposures to Europe and the euro area.

Figure 4.6

Bank funding (1)



Source: Supervisory reports.
(1) The sum of contributions in percentage points is equal to the 12-month percentage change in total funds raised. The changes in the individual components are calculated net of reclassifications, exchange rate variations, value adjustments and other variations not due to transactions. Liabilities towards resident MFIs are excluded. Net liabilities towards central counterparties are the funds raised by way of repos with non-residents via these counterparties.

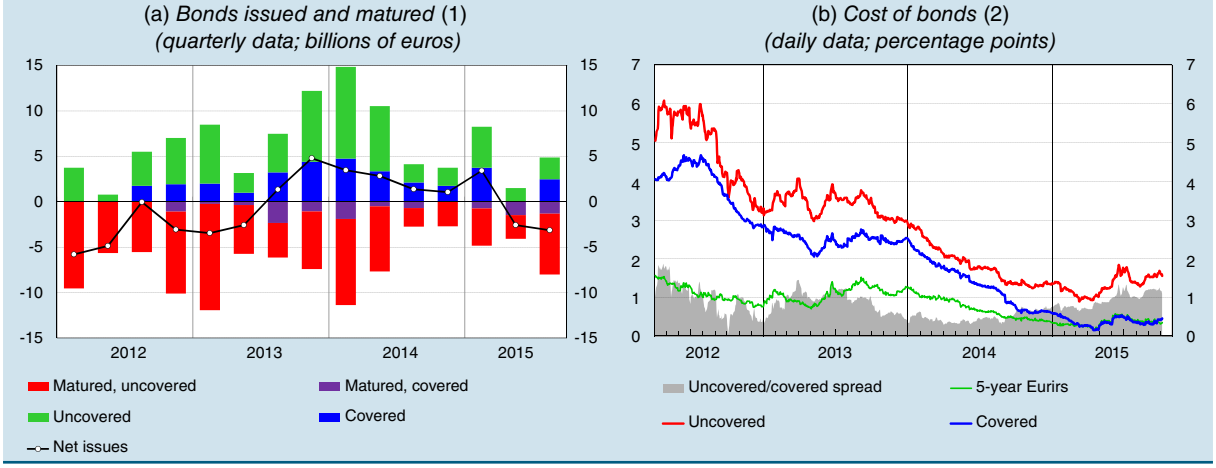
to substitute deposits for bonds (Figure 4.6.b). Stable retail funding and still subdued credit dynamics have kept the funding gap at a historically low level (10.1 per cent in September). The growth in wholesale funding recorded at the start of 2015 has moderated in the last few months (see Section 3.1).

Net issues on the bond markets decline

In the second and third quarters of 2015 Italian banks' net issues of uncovered bonds were negative by almost €6 billion, while net placements of covered bonds were

Figure 4.7

Bank bonds



Sources: Dealogic and Bloomberg data.
(1) Italian banks' issues larger than €200 million on international markets. Does not include issues retained on issuers' balance sheets, those earmarked for the retail market, those of Italian banks' foreign subsidiaries or those of foreign banking groups' Italian branches. – (2) Yields at maturity of Italian banks' bonds with residual maturity of 5 years.

virtually nil (Figure 4.7.a). The contraction in uncovered bond issues also affected the other main European countries and was accompanied by a rise of about 60 basis points in yields for the five-year maturities in Italy and in the other countries (Figure 4.7.b). The decline may reflect the higher cost of the issues and the inclusion of this category of securities on the list of liabilities that may be used for bail-ins, according to the new rules on banking crises, which enter into force in Italy at the start of 2016 (see the box 'The new rules for banking crises: transposition of the Bank Recovery and Resolution Directive into Italian law').

THE NEW RULES FOR BANKING CRISES: TRANSPOSITION OF THE BANK RECOVERY AND RESOLUTION DIRECTIVE INTO ITALIAN LAW

The Bank Recovery and Resolution Directive (BRRD), which is currently being transposed into Italian law, forms part of the series of reforms promoted internationally following the financial crisis to reduce the cost of bank failures to the community. The new rules are based on the general principle that the costs of a bank crisis must be borne in the first place by the shareholders and creditors, giving them a strong incentive to control the risks that the bank assumes. For those banks whose collapse would have significant effects on the stability of the financial system (systemically important banks), the implicit state guarantee for their liabilities will be removed.

The resolution authorities have a harmonized set of tools and incisive powers to facilitate the restructuring or closure of a failing bank without jeopardizing the stability of the financial system, while ensuring the continuity of the essential services provided by the banks and protecting depositors.[1] All banks will have to draw up recovery plans, to be approved by their respective supervisory authorities, in which they outline the actions they would take in the event of financial difficulties. At the first signs of a deterioration in financial conditions, the supervisory authorities will be able to intervene promptly, for instance by calling for the implementation of the measures indicated in the recovery plan and, if necessary, by removing and replacing the senior management or the management body.[2] In the event of failure or risk of failure, the resolution authorities must decide whether to activate normal insolvency proceedings – 'compulsory administrative liquidation' under Italian banking law – or to start the resolution procedure to safeguard financial stability and protect savers' interests more effectively.

The most innovative among the tools included in the BRRD is the participation of shareholders and creditors in the losses (bail-in). The bail-in tool, which will be operational in Italy from January 2016, provides that in the resolution stage the authorities can write down the bank's equity and some other types of liabilities and order the conversion of debts into equity. The objective is to obtain the resources needed to absorb the losses and recapitalize the bank from its shareholders and creditors.

The need to safeguard financial stability has resulted in the exclusion of some kinds of liabilities from the scope of bail-ins. These are (a) deposits up to €100,000, which are protected by the deposit guarantee scheme; (b) secured liabilities, including covered bonds; (c) interbank liabilities (except those within the same banking group) with original maturity of less than seven days; (d) liabilities resulting from the holding of customers' goods or by virtue of a fiduciary relationship, such as the

[1] From 1 January 2016 the resolution functions in the euro area will be carried out under the Single Resolution Mechanism (SRM) which together with the Single Supervisory Mechanism (SSM) constitutes one of the pillars of the Banking Union. The Single Resolution Board (SRB) will be competent for the resolution of banks under the direct supervision of the ECB and those that operate cross-border. The Bank of Italy is the national resolution authority for Italy and will participate in the SRM. It will be competent for the resolution of banks that are under its supervisory control within the SSM framework and do not operate cross-border.

[2] These are the early intervention measures detailed in Articles 27-31 of the BRRD.

contents of safe deposit boxes or securities held in a special account; (e) liabilities with residual maturity of less than seven days resulting from participation in payment systems; (f) debts towards employees, trade payables and tax liabilities – the latter provided that they are preferred under the applicable bankruptcy law; and (g) liabilities for contributions owed to deposit guarantee schemes. The liabilities subject to bail-in are, first, capital instruments; next, subordinated debt instruments; subsequently, uncovered bank bonds and other senior liabilities. The deposits of households and SMEs can be bailed-in only for the part exceeding €100,000, but only after the other liabilities, which effectively minimizes the possibility that they will suffer losses in the event of a failure. Lastly, when applying a bail-in the authorities may exclude additional liabilities from the write-down or conversion into equity so as to avoid effects on financial stability and ensure the continuity of critical functions.[3]

The new bail-in rules will affect the cost and composition of funding for European banks, which will also be affected by decisions regarding the minimum requirement for own funds and eligible liabilities (MREL), which the resolution authorities will adopt, for each bank, to ensure adequate loss-absorbing capacity in the event of resolution. In the same way, the rules on total loss-absorbing capacity (TLAC), which the Financial Stability Board is currently finalizing, will be applied to global systemically important banks (G-SIBs).

Banks must comply strictly with the information, transparency and good conduct requirements governing the issue, placement and marketing of their liabilities to retail customers who are potentially subject to bail-in. Both the banks and the authorities (supervisory, resolution and market authorities) have a fundamental role to play in raising savers' awareness of the risks and improving financial education.[4]

[3] The resolution may exclude or partially exclude liabilities from the scope of the bail-in where (a) it is not possible to bail them in within a reasonable timeframe; (b) the exclusion is strictly necessary and proportionate to achieve the continuity of critical functions and core business lines; (c) the exclusion is strictly necessary and proportionate to avoid widespread contagion – in particular as regards the deposits held by natural persons and micro, small and medium-sized enterprises – which would seriously disrupt the functioning of the financial markets, including financial market infrastructures, and would cause considerable economic disruption; or (d) the application of the bail-in would cause a destruction in value such that the losses borne by other creditors would be higher than if those liabilities had been excluded from the bail-in.

[4] For this purpose the Bank of Italy has published an explanatory document on its website to illustrate the new ways of managing banking crises (see *Changes in the way banking crises are managed*, 2015).

Covered bonds have instead continued to benefit from Eurosystem purchases under the third Covered Bond Purchase Programme. In addition, last October the rules on the short-term liquidity coverage ratio (LCR) came into force; the new rules consider covered but not uncovered bonds as assets that satisfy the LCR requirement. The yield spread between the two types of bond widened by more than 45 basis points, both for European banks and for Italian banks, reaching the highest levels of the last two years (Figure 4.7.b).

The short-term net liquidity position improves

The short-term net liquidity position of the major Italian banks has improved overall, reaching about 11 per cent of assets in September (Figure 4.8). In June 2015 the 15 major Italian banks in the observation sample had an LCR close to or higher than 100 per cent, the lowest value that will be allowed when the system is fully operational (from 1 January 2018).[2] Still in June, almost all these groups

[2] For 2015 the minimum LCR is 60 per cent.

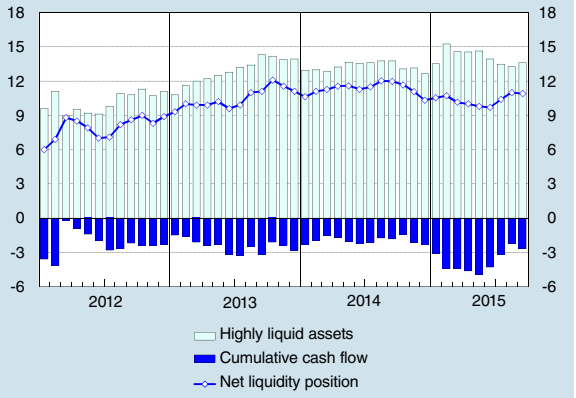
(13 out of 15) were in compliance with the net stable funding ratio (NSFR) for longer-term liquidity, which enters into force in 2018.

Loans make up a larger share of collateral posted with the Bank of Italy

Since March the value of the assets deposited with the Bank of Italy in the collateral pool against credit operations with the Eurosystem has grown slightly to €257 billion. The decline in ABS was more than offset by the growth in government bonds, which rose to 40 per cent of the total, and bank loans, which increased to €55 billion, or 21 per cent of the total (Figure 4.9.a). The bank loans posted in the form of loan portfolios, have grown from €6 billion to €9 billion, following the measures introduced by the Bank of Italy, and the use of loan portfolios in the collateral pool seems set to increase further.[3] Since the end of 2013 the value of banks' freely available marketable securities has remained at around €280 billion (Figure 4.9.b).

Figure 4.8

Net liquidity position (1)
(averages; per cent of total assets)

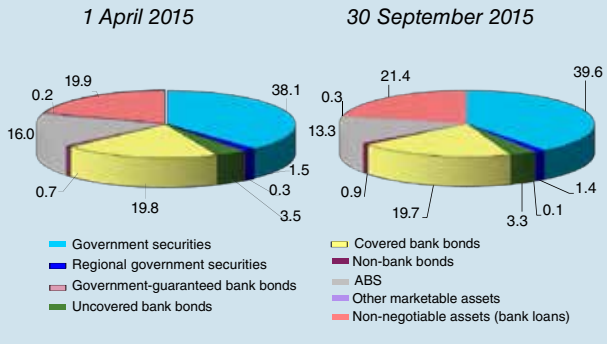


Source: Data for a sample of 30 banking groups subject to periodic monitoring of their liquidity position by the Bank of Italy.
(1) Monthly averages of weekly observations. The net liquidity position is calculated as the (positive or negative) difference between the holdings of assets eligible for use as collateral for Eurosystem refinancing operations and cumulative expected cash flow; the time frame is 1 month; on prudential grounds it is assumed there is no roll-over of maturing obligations towards institutional counterparties.

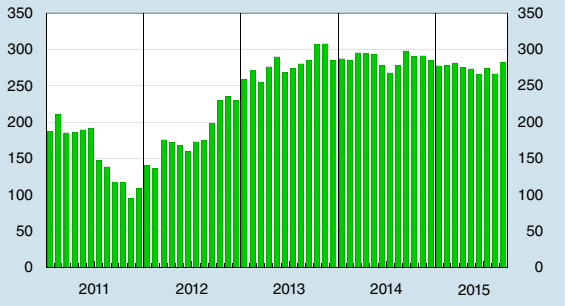
Figure 4.9

Eligible assets of the Italian banking system

(a) *Composition of eligible assets in the collateral pool* (1)
(per cent)



(b) *Freely available marketable securities* (2)
(monthly data; billions of euros)



Sources: Based on ECB data and supervisory reports.
(1) Data referring to monetary policy counterparties of the Bank of Italy. The eligible assets in the collateral pool are valued by Eurosystem standards, see Guideline (EU) 2015/510 of the ECB on the implementation of the Eurosystem monetary policy framework (ECB/2014/60) and http://www.ecb.europa.eu/mopo/assets/html/index.en.html. – (2) End of period data for the entire banking system, excluding Cassa Depositi e Prestiti. Securities are considered to be marketable if they are eligible as collateral for the Eurosystem. Amounts at market values.

[3] See the box 'The measures to promote the use of bank loans as collateral for Eurosystem credit operations' in *Financial Stability Report*, No. 2, 2014. The portfolios posted as collateral must have high levels of diversification and granularity. This allows banks to include loans in the portfolio that would not meet the necessary standards individually. This is an incentive for numerous banks to adjust their procedures for managing collateral: 16 of the 47 banks that use loans as collateral have adopted the portfolio based procedure and others are developing the necessary procedures.

4.4 INTEREST RATE RISK AND MARKET RISK

Exposure to interest rate risk remains modest

The exposure of the major Italian banking groups to interest rate risk remains limited. A rise of 200 basis points in the entire risk free interest rate curve would result in an average decrease in net economic value between assets and liabilities equal on average to 4.8 per cent of regulatory capital (compared with 5.4 per cent in December 2014), which is well below the 20 per cent early warning threshold set by international regulations. Net interest income would rise on average by 9.2 per cent over the following 12 months.[4] The contrary scenario – namely a decline in interest rates such as to bring the yield curve down to zero, even for maturities that posted positive rates in June 2015 – would result in an average increase in the net economic value of the largest Italian banking groups equal to 3.9 per cent of regulatory capital (compared with 2.9 per cent in December 2014). Net interest income would fall by 1.5 per cent.

Market risks are diminishing

In the course of 2015 the value at risk (VaR) of all portfolios at fair value, i.e. both trading and banking books (Figure 4.10), was significantly affected by the market tensions prompted by the Greek debt crisis. The volatility of government securities yields in the euro area, which constitute the main source of market risk, led to an increase in VaR in the second quarter, followed by a decline in the third quarter owing to the narrowing of sovereign spreads. The VaR on the trading book decreased in the second half, mainly because of a contraction in securities and foreign exchange positions, and has since remained at modest levels.

Figure 4.10

VaR at a sample of banks (1)
(index, 1 January 2011=100)

Source: Data from a sample of 6 banking groups using internal models for market risk measurement.
(1) Averages weighted according to the size of each bank's portfolio. VaR is the loss on a portfolio within a given time horizon (10 days) that will not be exceeded at a given confidence level (99 per cent). The indices are constructed so as to reflect changes in VaR in relation to all positions (securities and derivatives) valued at fair value (in red) and to the trading book component alone (in blue). A decline indicates a reduction in risk.

4.5 BANKS' CAPITAL AND PROFITABILITY

Capital ratios rise

The capital strengthening of the Italian banking system has proceeded, thanks to a revival in profitability and capital increases totalling about €4 billion by some Italian banking groups in the first half of 2015. At the end of June the ratios of common equity tier 1 capital (CET1), tier 1 capital, and total own funds to risk-weighted assets were some 20 basis points higher than at the end of 2014, and at 12.1, 12.5 and 14.8 per cent, respectively, were well above the minimum requirements including the capital conservation buffer. The five largest groups recorded the sharpest rise in the CET1 ratio (approximately 40 basis points), bringing it to 11.8 per cent, compared with 12.2 per cent for a sample of leading European banks in December.

The prudential leverage ratio for the main Italian banking groups, calculated as the ratio of tier 1 capital to total non-risk-weighted assets, is 5.4 per cent. Using the definition of tier 1 that goes into effect in 2018, the leverage ratio last June would be 5.0 per cent, which is higher than the non-binding minimum of 3 per cent and also higher than the average for a sample of internationally

[4] The data are calculated on the basis of the estimates of the banks participating in the survey that use internal models, in particular with respect to early loan repayment and the responsiveness of demand deposits to interest rate changes.

active European banks in December (4.2 per cent).[5]

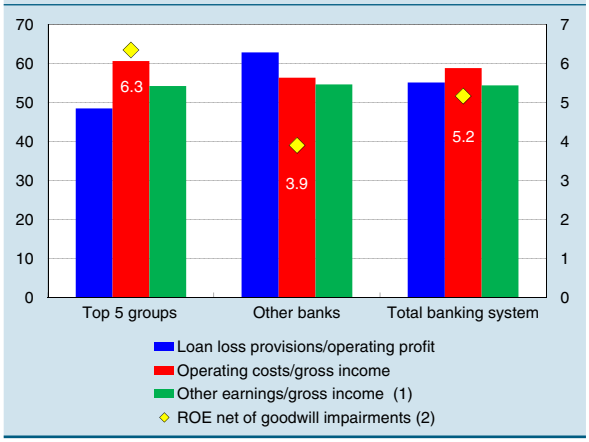
Profitability is still weak but shows signs of improving

Although still weak, banks' profitability showed signs of improving in the first six months of the year, thanks to an increase in asset management fees and a decrease in loan loss provisions. The latter continue to absorb a substantial share – 55 per cent – of operating profit. Italian banks' return on equity (ROE) for the period, annualized and net of goodwill impairments, was 5.2 per cent, up from 3.0 per cent in the first half of 2014 (Figure 4.11). The average ROE of the five leading groups was 6.3 per cent.

Figure 4.11

Indicators of profitability

(per cent; data at 30 June 2015)



Source: Supervisory reports, on a consolidated basis for banking groups and individually for the rest of the system. Provisional data.
(1) Other earnings are the net result of fees and commissions and financial operations. – (2) Right-hand scale.

The trend should continue in 2016

In a scenario of gradually strengthening economic recovery in 2016 and still low interest rates, the profitability of Italian banks (net of foreign and non-banking components) should improve again next year. The gain is expected to be driven by a reduction in loan loss provisions and, to a lesser degree, a decline in costs and a rebound in net interest income.

[5] See EBA, *CRD IV–CRR/Basel III monitoring exercise report*, September 2015.

5 INSURANCE COMPANIES AND THE ASSET MANAGEMENT INDUSTRY

5.1 INSURANCE COMPANIES

Capital, profitability and risks

Expected earnings rise …

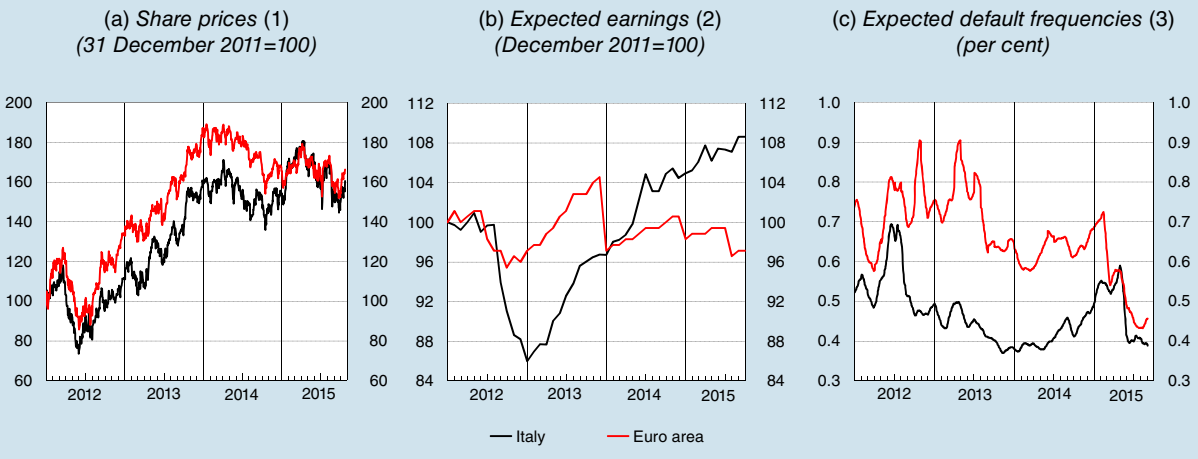
Market assessments of the outlook for Italian insurers have improved somewhat. Share performance is in line with that for the leading euro-area insurance companies (Figure 5.1.a). Analysts' expectations for earnings in Italy have continued to rise (Figure 5.1.b), while the expected default frequencies implied by share prices have remained stable (Figure 5.1.c).

… and insurers' capital position remains strong

The market indicators have been confirmed by the first-half reports available, which show ROE of 6.1 per cent in the life insurance sector and 5.4 per cent in non-life (Figure 5.2.a). The earnings performance fostered a broad-based capital strengthening within the industry, which is continuing in the second half as well. Analysis by the insurance supervisor Ivass reveals that even under the new solvency rules Italian insurance companies are in compliance with the capital requirements (see the box 'The risks of the insurance industry under the new Solvency II regime').

Figure 5.1

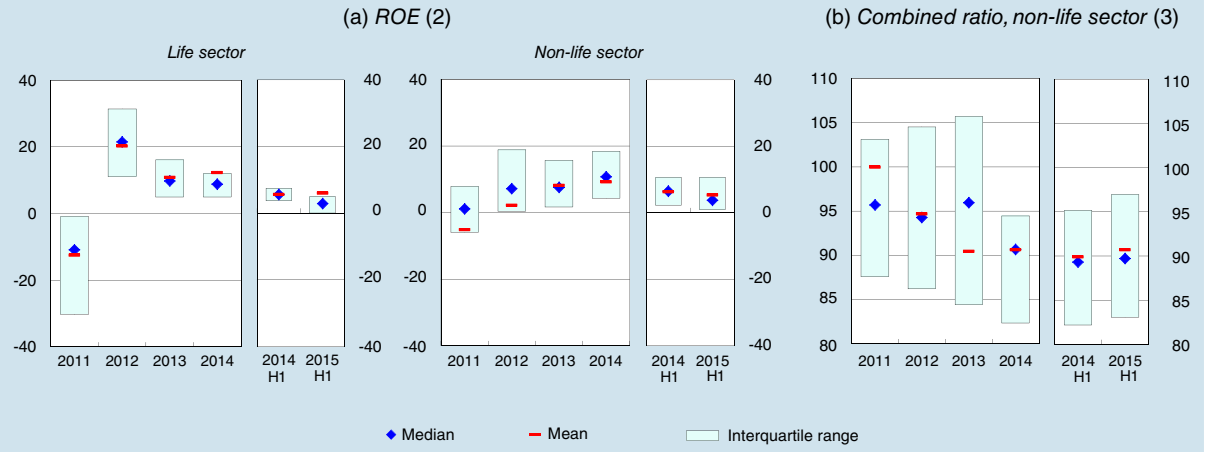
Insurance companies in Italy and the euro area



Sources: Based on Thomson Reuters Datastream and Moody's KMV data.
(1) Daily data. Insurance company share indices. – (2) Monthly data. Weighted average (by the number of shares in circulation) of expected earnings per share in the 12 months following the reference date. For Italy the data refer to the following companies: Assicurazioni Generali, Mediolanum Assicurazioni, Società Cattolica Assicurazioni, UGF Assicurazioni, Vittoria Assicurazioni; for the euro area the data refer to the companies included in the Datastream insurance sector index. – (3) Thirty-day averages of daily data. The expected default frequencies, calculated on the basis of the price and volatility of the shares of the companies to which they refer, measure the probability of the market value of assets becoming lower than that of liabilities within one year. The graph shows the average values of the expected default frequencies of the Italian insurance companies considered (see note 2) and of the companies included in Moody's KMV European insurance sector index.

Figure 5.2

Main indicators for Italian insurance companies (1)
(per cent)



Source: Ivass.
(1) For 2015, preliminary data. – (2) Ratio of earnings to shareholders' equity. Average weighted by shareholders' equity of Italian insurance companies. The half-yearly data are not annualized. – (3) Ratio of incurred losses plus operating expenses to premium income for the period.

THE RISKS OF THE INSURANCE INDUSTRY UNDER THE NEW SOLVENCY II REGIME

The regulatory regime that goes into effect on 1 January 2016 will bring a good number of changes for the insurance industry, including the determination of a solvency capital requirement (SCR) as a function of each company's risk profile.[1] In the current preparatory phase, European insurance companies and groups have transmitted to their respective supervisory authorities a broad set of data (concerning the 2014 financial year), anticipating the data and assessments that they will have to provide on a continuous basis starting next year.

Initial analysis of the supervisory reports confirms that the Italian insurance sector is also fundamentally sound in terms of capital adequacy under the new Solvency II regime: eligible own funds at industry-wide level amount to more than twice the minimum requirement.[2] Under the new rules, capital requirements must be calculated first singly, evaluating each risk category, and then in the aggregate, taking reciprocal correlations into account. The insurers' data show that market risks will absorb over half their regulatory capital (57 per cent; panel (a) in the figure).[3] As the results of the 2014 stress test show, these values put the risk profile of Italian insurance companies in line with that of their European counterparts.[4] After market risk, the main factors of capital absorption are technical insurance risks in connection with life insurance policies (17 per cent) and non-life policies (16 per cent).

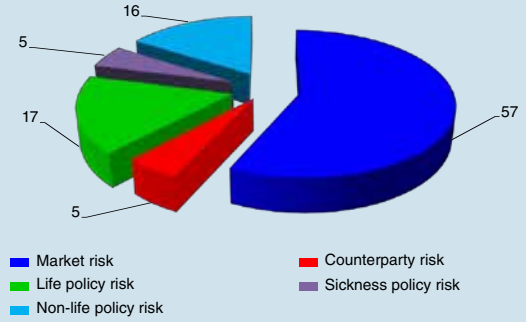
For Italian insurers, the diversification of sources of risk and the capacity to absorb losses in connection with insurance liabilities and deferred tax liabilities produce a 60 per cent reduction

[1] The requirement corresponds to the value at risk of the insurer's 'base' own funds at a 99.5 per cent confidence level over a period of one year.
[2] Ivass, *Insurance Supervisory Authority 2014 Annual Report. Remarks by the President, Salvatore Rossi*, Rome, 2015.
[3] Not taking correlations into account.
[4] EIOPA, *Eiopa Insurance stress test 2014*, 2014.

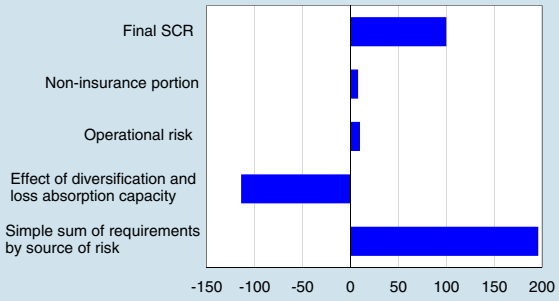
in the solvency capital requirement that would be associated with the single sources of risk (panel (b) in the figure). The components of the SCR relating to operational risk and to non-insurance business count for less than 20 per cent of the total.

Ivass analysis of the insurance market in 2014: Solvency II data
(per cent)

(a) *Main undiversified risk factors*



(b) *Composition of final SCR*



Sources: Ivass.

Liquidity risk is still limited …

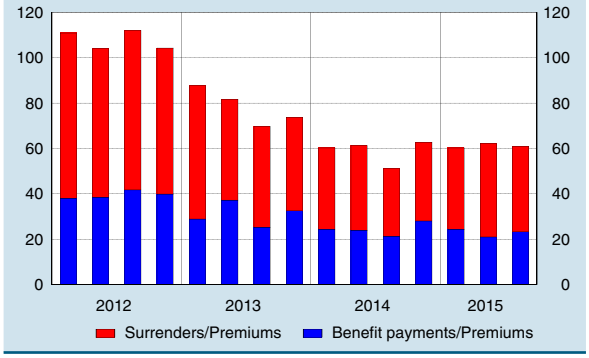
Italian insurance companies' liquidity has benefited from the stability of life policy surrenders, while premium income has improved significantly, gaining 5 per cent through August by comparison with the same period of 2014. The loss ratio has held steady at around 60 per cent (Figure 5.3).

… as is low interest rate risk

In Europe, the prospect of an extended period of low interest rates subjects the insurance industry to considerable strain. To gauge the risk, Ivass has conducted a new exercise hypothesizing a lower yield curve than was used in the 2014 stress test of the European Insurance and Occupational Pensions Authority (EIOPA).[1] The exercise confirms the good duration matching of assets and liabilities, which limits Italian insurers' exposure to the solvency risk engendered by protracted low interest rates quite stringently (see the box 'The effects of the prolonged period of low interest rates on Italian insurance companies').

Figure 5.3

Ratio of surrenders and benefit payments to premiums in the Italian life insurance sector (1)
(quarterly data; per cent)



Source: Ivass.
(1) The indicators are calculated as the sum of policy surrenders and benefit payments at policy maturity (principal and annuities) in proportion to premium income during the period. An amount higher (lower) than 100 indicates a net outflow (inflow) of funds.

Marketing strategies are being adapted

The long spell of low interest rates is affecting the leading insurers' marketing approach. Guaranteed returns on new policies are being reduced, while there has been an increase in the marketing of unit-linked policies and hybrid products (combining traditional and financial products), for which the policyholder bears all or part of the investment risk.

[1] See the box 'The EIOPA stress test for the risk of low interest rates', *Financial Stability Report*, No. 1, 2015.

THE EFFECTS OF THE PROLONGED PERIOD OF LOW INTEREST RATES ON ITALIAN INSURANCE COMPANIES

Ivass has replicated the analyses performed for the 2014 stress test using the yield curve that EIOPA published in March 2015,[1] which is 76 basis points lower at the average maturity of life insurance liabilities (seven years) than the curve used in the adverse scenario for the 2014 exercise.

The new analyses, run for the entire sample of Italian life insurance companies and for three distinct sub-samples according to company size (large, medium, small), confirm that even with a lower interest rate curve, the mismatching of financial duration between assets and liabilities remains limited; it increases from 0.3 to 0.4 years for the entire sample (see the table), with a practically insignificant impact on solvency. There are no substantial differences between size classes.

Asset and liability cash flows and financial durations

	(a) *EIOPA stress test, 2014: low-yield scenario* (1)						(b) *Ivass impact assessment: EIOPA term structure, March 2015* (2)				
	Current value of asset cash flows	Current value of benefit payment flows	Average duration of assets	Average duration of benefit payments	Mismatch between average durations		Current value of asset cash flows	Current value of benefit payment flows	Average duration of assets	Average duration of benefit payments	Mismatch between average durations
	(billions of euros)			*(years)*			*(billions of euros)*			*(years)*	
Entire sample	489	397	8.1	8.5	0.4	Entire sample	455	368	7.7	8.0	0.3
Large companies	295	279	8.5	9.1	0.6	Large companies	274	257	8.1	8.6	0.5
Medium-sized companies	173	110	7.4	6.9	-0.5	Medium-sized companies	162	103	6.9	6.6	-0.4
Small companies	20	8	8.5	9.7	1.1	Small companies	18	7	8.0	9.1	1.1

Source: Ivass.
(1) Based on the term structure applied by EIOPA in its 2014 stress test for the low-yield or 'Japanese' scenario. – (2) Based on the interest rate curve published by EIOPA at the end of March 2015.

[1] The risk-free interest rate curves used by EIOPA are available at https://eiopa.europa./eu/regulation-supervision/insurance/solvency-ii-technical-information/risk-free-interest-rate-term-structures.

Investments

Investment in government bonds continues to be strong …

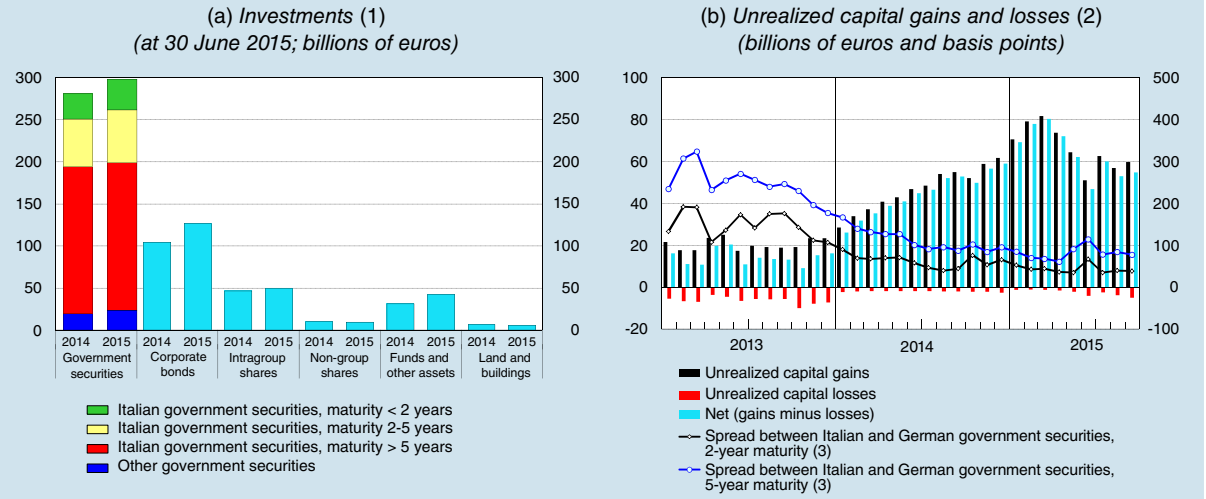
Government securities, mostly Italian, continue to account for the bulk of insurance company assets (Figure 5.4.a). The fall in market yields in early 2015 led to an increase in net unrealized capital gains, but in recent months these have declined significantly and turned highly volatile in connection with the performance of the financial markets (Figure 5.4.b).

… while that in risky assets is modest

The periodic surveys conducted by Ivass to assess the investment policies of the major insurance groups have not found evidence of aggressive strategies for raising portfolio risk and return profiles. Insurers are diversifying asset portfolios by purchasing the securities of other euro-area governments and European private sector securities. To date they have not taken advantage of the regulatory changes that have broadened the range of assets eligible as cover for reserves. They have invested very little in the minibonds of unlisted companies (about €30 million), and their investment in funds specializing in the bonds of unlisted companies has likewise been marginal. No insurance company has made direct loans to firms.

Figure 5.4

Investments and unrealized capital gains and losses of Italian insurance companies



Sources: Ivass and Bloomberg.
(1) Balance sheet values. The composition of government securities holdings is partially estimated. – (2) Unrealized capital gains and losses are the difference between the market value and the balance sheet value of the securities held. – (3) Right-hand scale.

5.2 THE ASSET MANAGEMENT INDUSTRY IN ITALY

The industry is relatively small

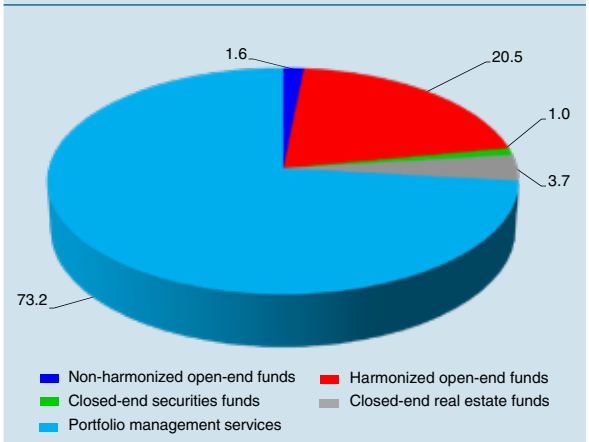
The risks to financial stability posed by asset management are quite limited in Italy by reason of the industry's small size, the investment strategies pursued and supervisory arrangements. At mid-2015 the total assets of Italian investment funds and portfolio management services amounted to just over €1 trillion, about 60 per cent of GDP; the comparable figure for the European Union at the end of 2014 was 130 per cent.

The risks from the traditional segments remain moderate

In recent years the traditional forms of asset management (individual portfolio management services and harmonized investment funds), which account for over 90 per cent of the industry (Figure 5.5), have expanded rapidly. In the first half of 2015 their net funding came to €45 billion. The risks that these segments pose to financial stability are quite limited. Individual portfolio management is characterized by low variability in both funding and redemption flows. Harmonized open-end funds invest mainly in listed securities, and their capacity to borrow is limited by law. Moreover, no constant net asset value money market funds, which would be exposed to the risk of a wave of redemptions in the case of market tensions, are active in Italy. From 2009 to June 2015 the portion of investment fund assets consisting in

Figure 5.5

Structure of the asset management industry (1)
(June 2015; per cent)

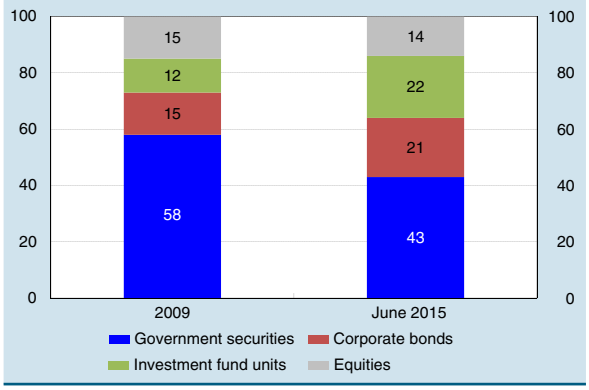


(1) Italian investment funds and services only. Portfolio management services are net of the portion invested in Italian investment funds.

less liquid assets nevertheless increased considerably. The share of investment fund units and private sector bonds in the portfolios of open-end funds rose from 26 to 43 per cent, while that of government securities fell from 58 to 43 per cent (Figure 5.6).

Figure 5.6

Asset portfolio of open-end investment funds (1)
(per cent)



(1) Italian funds only.

Alternative funds are of modest size

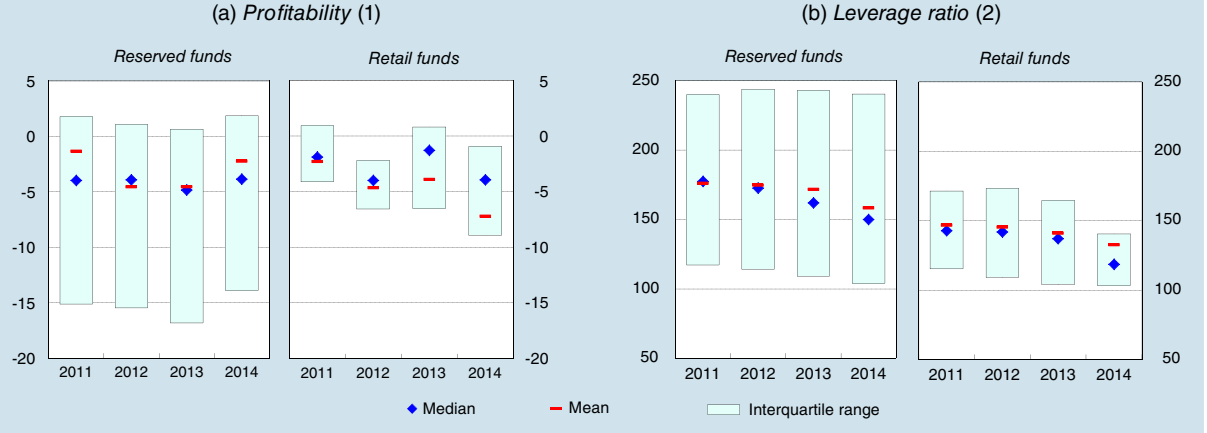
Alternative investment funds, whose assets are on average are riskier than those of the harmonized funds and which can leverage their investments, account for about 6 per cent of total managed assets in Italy. Investment in closed-end funds specializing in SME debt instruments (minibond funds and credit funds, both introduced recently) is limited (about €2 billion as of June). Regulatory safeguards include prudential and organizational requirements to contain the risks for markets and prevent regulatory arbitrage.

The risks for real estate funds remain

Most of the closed-end funds are real estate funds, whose main risks consist in sharp deteriorations in asset values and poor operating profitability. These factors impact on the funds' ability to service their debt (Figures 5.7.a and 5.7.b). However, the direct exposure of banks and other intermediaries to this segment is quite limited (just under €20 billion at the end of June). The industry's problems have to do mainly with reserved funds, which are more highly leveraged than the funds marketed to retail investors. What is more, the operations of some reserved funds – and their management companies – have been affected by the solvency problems of some investors, who have failed to honour their subscription commitments. In the segment for non-professional investors, extensions of the funds' lifetimes have mitigated the risks connected with repayment difficulties, which were aggravated by the bunching of maturities and by the cyclical phase, unpropitious for asset liquidation. In any case, the prolongations and the often disappointing operating results of these funds could heighten reputational and legal risks.

Figure 5.7

Main indicators for Italian real estate investment funds
(per cent)



(1) Profits as a ratio to the average of net assets at the end of the reference year and of the previous year. – (2) Ratio of total assets to net worth.

Asset management companies on the whole are profitable

Overall, asset management companies are turning a net profit, but differences between segments persist. In the first half of 2015 operating profits were up 53 per cent from the year earlier period, thanks mainly to the growth in earnings of the companies managing open-end funds and individual portfolios, which benefited from the significant expansion in the volume of assets under management. The profits of those managing real estate funds, which had been depressed in years past by the weakness of the property market, recorded a modest recovery. The results of private equity fund managers, by contrast, continued to worsen owing to persistent difficulty in raising fresh capital.