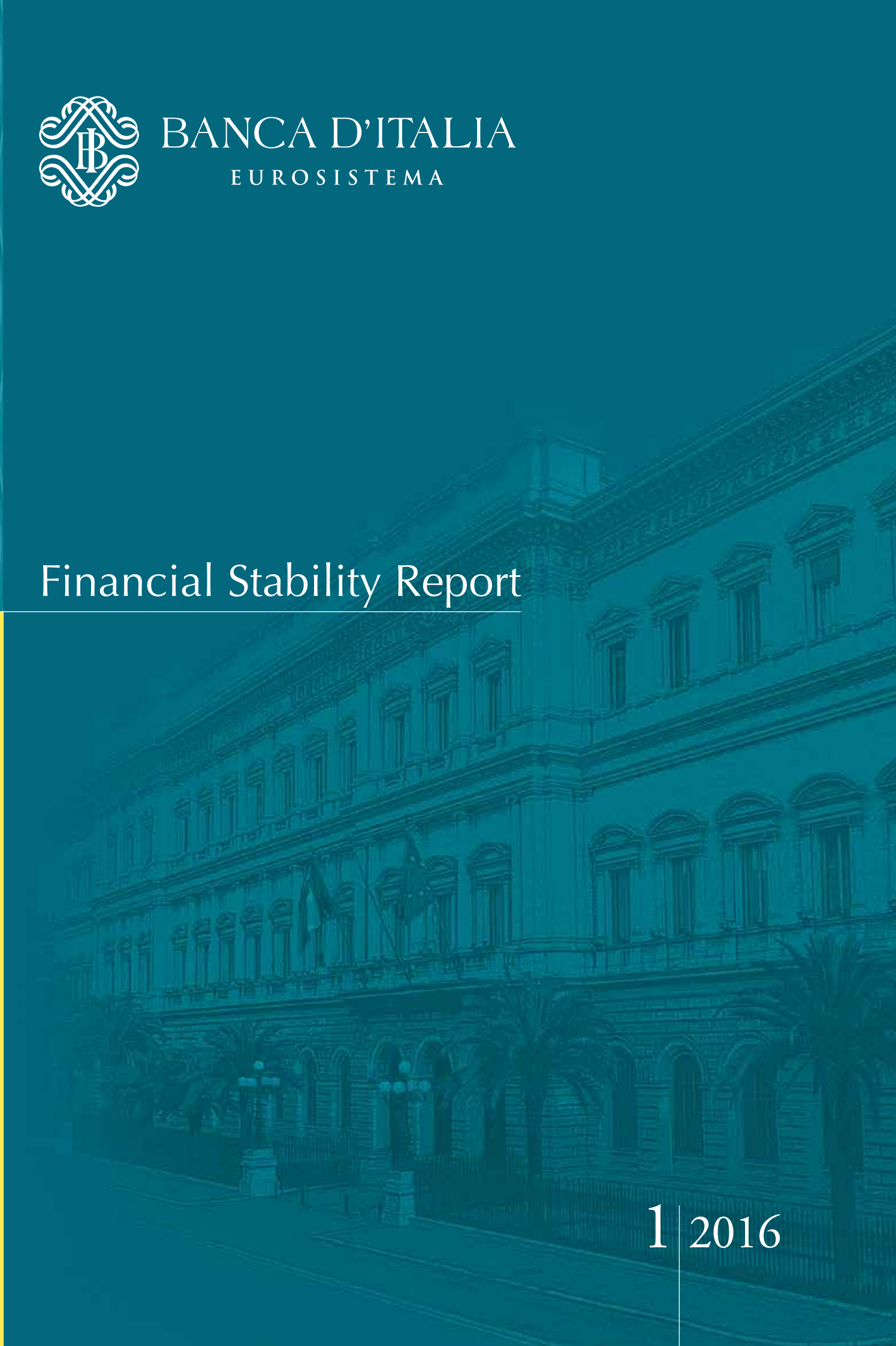
BANCA D'ITALIA
EUROSISTEMA

Financial Stability Report



April 2016

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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 increasing …

The slowing of the world economy, which has proven greater than expected, increases the risks for financial stability. The historically low level of commodity prices, and of oil in particular, weakens the emerging economies and fuels deflationary pressures in the advanced ones.

… affecting the financial markets

In the early months of the year heightened uncertainty over growth prospects led to a sharp fall in share prices and increased volatility on the capital markets. The decline in prices was most marked for bank securities, especially in the euro area.

Market perceptions of non-performing loans in Italy weigh on banks

Italian banks' share prices have been dampened by the large volume of non-performing loans, a legacy of the long recession, and by investors' uncertainty about the outcome of a few scheduled rights issues. The announcement of the launch of the 'Atlante' fund by private investors to support upcoming increases in banks' capital and purchase bad loans was welcomed by the markets.

Eurosystem measures mitigate the risks

The Eurosystem's expansionary monetary policy measures, which were strengthened in March, are helping to ensure financial stability by supporting growth, reducing the risk premiums demanded by investors and maintaining relaxed financial conditions. There is no evidence that the purchases are causing distortions on the Italian government bond market.

The Bank of Italy's macroprudential measures are favouring the recovery of the financial cycle

In Italy, the recovery of lending to the private sector is proceeding very gradually and the financial cycle is still weak. The Bank of Italy has accordingly set both the countercyclical capital buffer ratio and the reserve capital ratio for domestic systemically important banks at zero per cent.

The property market shows signs of recovery

The decline in house prices has come to a halt and the number of sales continues to increase gradually. Several indicators show that the recovery should continue in the coming months, with positive effects on financial stability.

Households' financial conditions improve …

Household finances are benefiting from an increase in disposable income and low interest rates. The main risk is a possible weakening of the economic recovery.

… as do those of firms, albeit with some residual strains

The financial situation of firms is also gradually improving. Debt continues to decline while liquidity continues to grow. The number of bankruptcies is falling and the indicators of firms' financial vulnerability should continue to diminish in the coming quarters, although they remain high in some sectors.

The quality of bank credit is improving

Banks' lending criteria, which have been steadily easing, remain cautious nonetheless. The loan default rate continues to fall and the flow of new bad debts should also decline in the coming months. The coverage ratio for non-performing loans, which stood at 45.4 per cent at the end of 2015, is in line with the average for the main European banks; the amount of guarantees on non-performing loans is greater than their book value.

Initiatives are under way to develop the market in non-performing loans

Incentives for developing the market in non-performing loans could come from the state guarantee

scheme for securitized bad debts (GACS) and from the activities of the Atlante fund.

Liquidity conditions remain good

Tensions over the funding of a few banks at the beginning of the year following the resolution of four banks last November have subsided. There were no outflows of deposits abroad or to other investment instruments. The liquidity of Italy's banking system can cope with situations of stress. There has instead been an increase in subordinated bond yields, in particular for banks with a high share of non-performing loans. Average funding costs have fallen, reflecting the expansionary monetary policy. The new refinancing operations announced in March will ensure certainty about the cost and availability of funds, reducing the risk of repercussions should market tensions flare again.

Banks' profitability, while increasing, is still low

*Banks' profitability is improving but is still below average compared with other European banks. At the end of 2015 the CET1 ratio reached 12.3 per cent, with significant differences between the different size classes of banks. The recent reform of Italy's mutual banks (*banche di credito cooperativo – BCCs*) will strengthen their capacity to access the market.*

Risks are low for insurance companies …

Low interest rates continue to have a limited effect on Italian insurance compa-nies' profitability by virtue of the good matching of duration and yields between financial assets and liabilities. Firms are diversifying their investments but there are no strategies under way to raise risk-return profiles. More unit-linked and multi-class products are being placed, for which the market risk is partly borne by policyholders.

… and in the asset management sector

The Italian asset management sector has continued to expand even during the recent phase of market volatility. Asset managers' propensity to increase the proportion of capital invested in less liquid but higher yielding assets diminished. The profitability of real estate funds is improving, but remains negative and exposed to uncertainty.

1 MACROECONOMIC RISKS

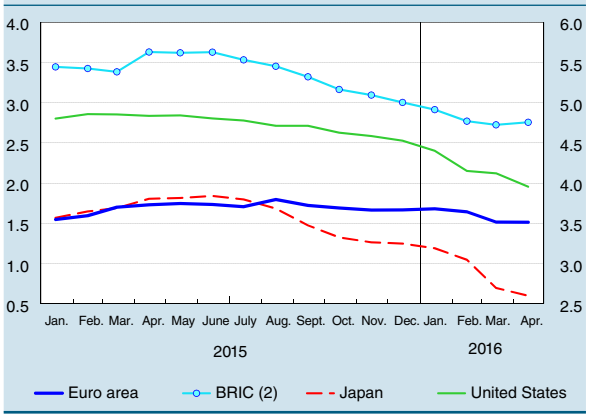
1.1 GLOBAL RISKS AND EURO-AREA RISKS

The risks posed to world growth increase

Growth expectations for 2016 in all the main economic areas have been revised downwards (Figure 1.1). The steep drop in the prices of oil and other commodities is fuelling deflationary pressures globally and heightens the economic and financial vulnerability of the emerging economies (see the box 'The decline in oil prices and global growth', in *Economic Bulletin*, No. 2, 2016).

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 risks associated with low inflation remain high

In the euro area the indicators derived from financial asset prices reveal expectations of very low inflation rates over the next few years (Figure 1.2). A prolonged period of low inflation slows the process of reducing public and private debts; furthermore, it can trigger a vicious circle between consumer price and wage dynamics and lead to a lasting deviation of inflation expectations from levels consistent with price stability (see the box 'Euro-area inflation expectations and monetary policy measures', in *Economic Bulletin*, No. 1, 2016). At its meeting of 10 March 2016 the Governing Council of the ECB adopted a series of new expansionary measures to help bring inflation back to levels lower than, but close to, 2 per cent (see *Economic Bulletin*, No. 2, 2016).

Figure 1.2

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

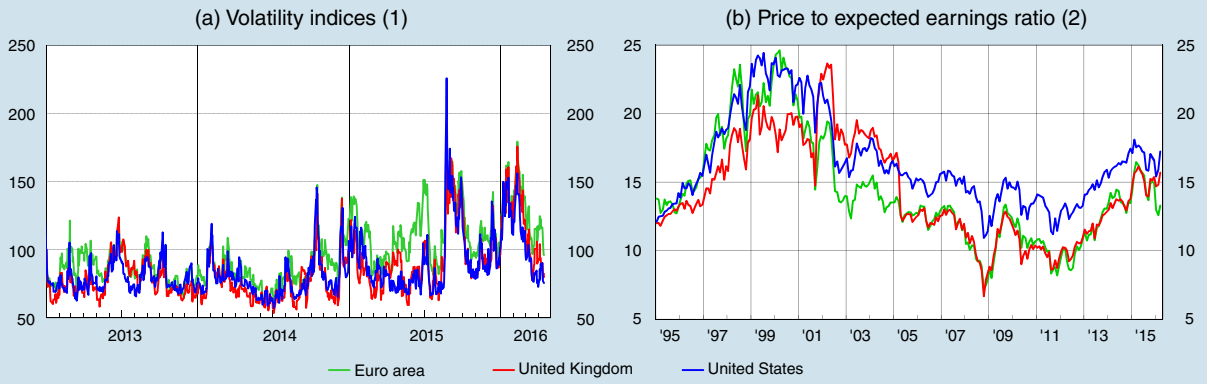
Source: Bloomberg.
(1) Inflation rates implied by 2-year, 5-year and 5 year/5-year forward inflation swaps.

The rate hike in the United States poses risks mainly to emerging economies

The raising of official rates in the United States last December, widely expected by market participants, had no repercussions on the prices and volatility of financial assets in international markets. Looking ahead, long-term yields in the euro area and in Japan are not likely to be affected by the rise in official rates in the US, thanks to the expansionary measures adopted by their respective central banks. In the emerging

Figure 1.3

Stock market indicators



Sources: I/B/E/S and Thomson Reuters.
(1) Daily data. Index (31 December 2012=100) of the implied volatility of option prices. – (2) Monthly data. 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.

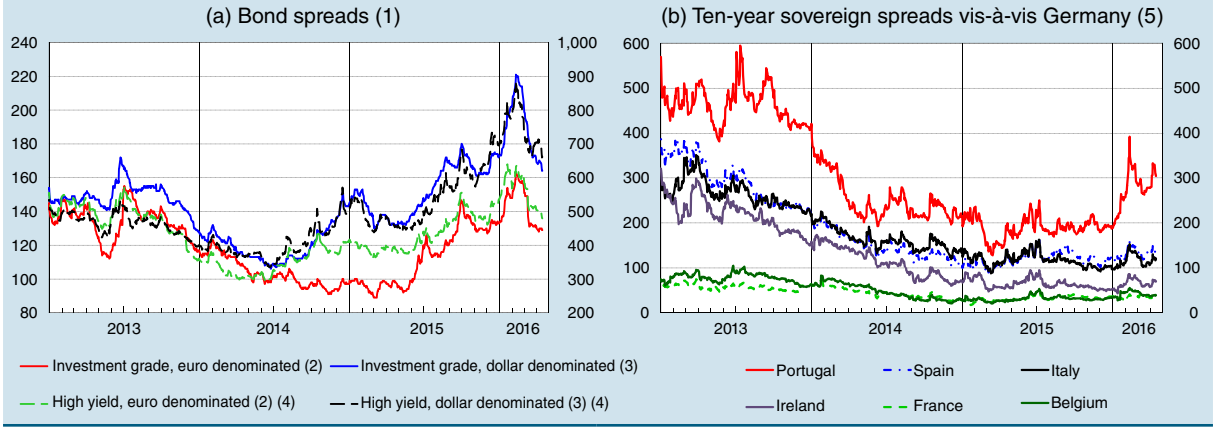
markets, instead, there is the risk of capital outflows intensifying, with repercussions on exchange rates and sovereign spreads.

Risk premiums in the euro area increase …

The rise in uncertainty concerning global growth set off a broadly based increase in volatility in the financial markets in the first few months of the year (Figure 1.3.a). The stock markets in the euro area have fallen, particularly steeply in the case of bank shares (see Chapter 4). At the global level, current share prices do not diverge significantly from fundamentals: the price to expected earnings ratio is close to the long-term averages in the United States and United Kingdom and about 2 percentage points below the average in the euro area (Figure 1.3.b). The decline in oil prices contributed to temporary surges in the risk premiums on bonds issued by energy companies, particularly in the US, which were subsequently

Figure 1.4

Bond market indicators
(daily data; basis points)



Sources: Bloomberg, Merrill Lynch and Thomson Reuters.
(1) 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. – (2) 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 securities. – (3) 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. – (4) Right-hand scale. – (5) Yield spreads between the 10-year government securities of the countries indicated and the corresponding German Bund.

transmitted to the rest of the high-yield market segment (Figure 1.4.a); the deterioration in liquidity conditions observed in these markets in the second half of 2015 also contributed to these increases.[1]

… and then partly retreat after the new Eurosystem measures

The new measures introduced in March by the Eurosystem helped to contain the risk premiums on investment-grade, euro-denominated corporate bonds, which will be eligible for purchase under the Corporate Sector Purchase Programme (CSPP); the risk premiums on the euro-area countries' ten-year government securities registered only temporary declines (Figure 1.4.b). The uncertainty about global economic growth and the persistent weakness of consumer prices could stimulate a new increase in the risk premiums of those euro-area countries perceived as the most vulnerable.

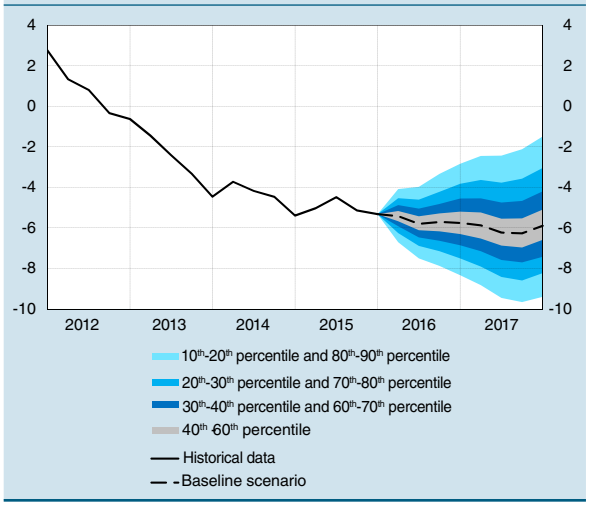
1.2 MACROFINANCIAL CONDITIONS IN ITALY

Credit growth remains weak in Italy

The economic recovery is very gradually affecting the growth of credit to the private sector in Italy. The credit-to-GDP gap, i.e. the deviation of the ratio of bank lending to GDP from its long-term trend, is negative by about 7 percentage points if calculated using the internationally harmonized criteria proposed by the Basel Committee and by 5 points according to the model developed by the Bank of Italy, which takes account of the specific characteristics of the national financial cycle.[2] In the absence of risks for financial stability coming from the expansion of credit, the countercyclical capital buffer rate has been set at zero per cent for the first two quarters of 2016 (see the box 'Macroprudential policy in Italy and the European Union').

Figure 1.5

Credit-to-GDP gap in Italy (1)
(quarterly data; percentage points)



Sources: Based on Bank of Italy and Istat data.
(1) The credit-to-GDP gap is the deviation of the ratio of bank credit to GDP from its long-term trend. The probability distribution of the projections, shown graphically by percentile ranges, makes it possible to assess the size of the risks to the baseline projection.

Our projections, which are consistent with the latest macroeconomic scenarios and with the forecasts of Consensus Economics, indicate that bank lending to the non-financial private sector will grow moderately in 2016 and over the two years to follow, but not by enough to bring an improvement in the credit-to-GDP gap, which is expected to stop declining only at the end of 2017 (Figure 1.5). It is projected that this indicator will remain negative throughout the coming year even if credit growth turns out to be significantly stronger than posited in the baseline scenario.

MACROPRUDENTIAL POLICY IN ITALY AND THE EUROPEAN UNION

European macroprudential rules, in line with those adopted at international level by the Basel Committee on Banking Supervision, call on national authorities to institute a countercyclical capital buffer (CCyB) to counter the procyclicality of the financial system (see the box 'The Bank

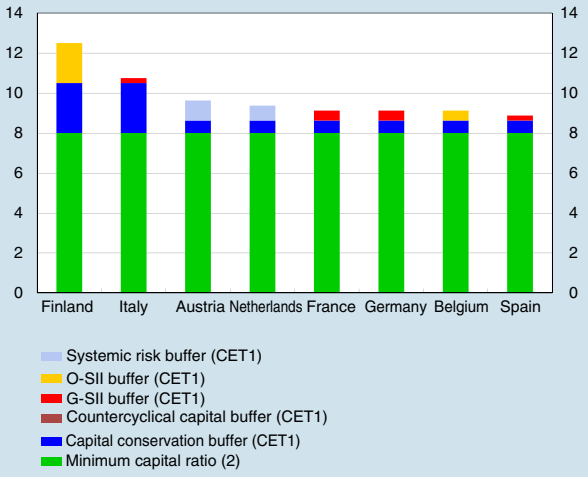
[1] IMF, *Global Financial Stability Report*, April 2016.
[2] For information on the methodology used to estimate the credit-to-GDP gap, see P. Alessandri, P. Bologna, R. Fiori and E. Sette, 'A note on the implementation of a countercyclical capital buffer in Italy', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), 278, 2015.

of Italy's macroprudential function,' *Financial Stability Report*, No. 2, 2015).[1] The buffer applies from 1 January 2016 and must be reviewed quarterly. In December and in March the Bank of Italy decided to set the buffer rate for the first two quarters of 2016 at zero per cent.

The regulatory framework also establishes special safeguards in relation to systemically important banks. Accordingly, since the turn of the year the banks designated as global systemically important institutions (G-SIIs) have been subject to higher capital requirements, to take account of the greater risks they pose to financial stability. In March 2015, following the indications of the Financial Stability Board, the Bank of Italy designated the UniCredit group as a G-SII and subjected it to a capital buffer add-on of 0.25 per cent of risk-weighted assets. In December UniCredit was confirmed as a G-SII and the buffer rate was raised to 0.50 per cent as of 1 January 2017. It is further provided that the G-SII buffer will be increased by 0.25 percentage points in each of the two successive years to reach 1.0 per cent in 2019.

European rules also provide that as of this year other systemically important institutions (O-SIIs) will be identified at national level, which can be subject to an additional capital requirement. In January the Bank of Italy designated the three leading Italian banking groups (UniCredit, Intesa Sanpaolo, and Monte dei Paschi di Siena) as O-SIIs, setting the additional capital buffer rate for 2016 at zero per cent. This decision was motivated by three factors: (a) unlike some other national authorities, the Bank of Italy has applied the capital conservation buffer (CCoB) in full since 2014;[2] (b) imposing an additional capital requirement on the O-SIIs could have had an adverse effect on the economic recovery under way; and (c) the three groups, like all the banks that underwent the comprehensive assessment in 2014, must already maintain a common equity tier 1 capital add-on of 1 per cent.

Capital requirements in Italy and selected euro-area countries, 1 January 2016 (1)
(per cent of risk-weighted assets)



Source: ECB, *Macroprudential Bulletin*, 1, March 2016.
(1) Net of Pillar 2 measures. The highest between G-SII buffer, O-SII buffer and systemic risk buffer (however, where the systemic risk buffer is applied only to exposures within the member state setting the requirement and not to foreign exposures, this buffer is cumulative with the G-SII or O-SII buffer). – (2) The minimum capital ratio (8 per cent) must be met for at least 4.5 per cent out of common equity tier 1 capital (CET1), and may consist of at most 1.5 per cent of additional tier 1 capital and at most 2 per cent of tier 2 capital.

The capital requirements applied in Italy, considering both the minimum capital requirements and the macroprudential buffers, are high by international standards (see the figure), even though both the CCyB rate and O-SIIs buffer rate are at zero per cent.[3]

Overall, some 130 macroprudential measures were adopted in the European Union in 2015, compared with around 80 in 2014. The increase was due principally to the introduction of the countercyclical capital buffer, whose rate in most cases was set at zero per cent. Nearly all EU countries, furthermore, proceeded to identify the G-SIIs and the O-SIIs and to set the buffer

[1] See *Macroprudential policy decisions of the Bank of Italy* on the Bank's website.
[2] The purpose of the capital conservation buffer is to build up capital in excess of the minimum requirement to be drawn upon at times of stress. Banks that do not comply with the capital conservation buffer requirement cannot distribute dividends, variable compensation or other components of regulatory capital beyond predetermined limits and they must take measures to restore the buffer.
[3] It is not possible to make a comparison between countries that takes account of the second pillar measures because these are not always made public.

rates. Some countries are phasing the measures in, others have fully phased them in. Another macroprudential measure under EU legislation, the systemic risk buffer (SRB), has been introduced only in some countries, and for different reasons: in some cases it was put in place against sectoral risks (vis-à-vis commercial real estate, for instance) or for exposures to particular geographical areas, in other cases it was used to reinforce the O-SIIs, buffer, and in still others it serves to increase the resilience of the financial system with respect to the risks connected with size and concentration in the banking sector.

The Government forecasts that the ratio of public debt to GDP will start falling this year

After increasing by 16 percentage points in three years, the debt-to-GDP ratio rose only marginally in 2015, from 132.5 to 132.7 per cent. With the 2016 Economic and Financial Document approved at the beginning of April, the Government confirmed the objective of starting to reduce the debt-to-GDP ratio in 2016 despite the worsening of the macroeconomic setting.[3] The planned reduction amounts to 0.3 percentage points of GDP this year and is projected to be larger in the following years: over the three years 2016-19 the debt-to-GDP ratio is forecast to come down by a total of nearly 9 percentage points, to 123.8 per cent.

Table 1.1

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

	GDP (annual growth rate) (1)		Characteristics of public debt (2)				Primary surplus (2)	S2 sustainability indicator (3)	Private sector financial debt (4)		External position statistics (5)	
			Level		Average residual life of govt. securities (years)	Non-residents' share (% of public debt)			Households	Non-financial firms	Current account balance	Net international investment position
	2016	2017	2016	2017	2016	2015	2016	2015	2015	2015	2015	2015
Italy	1.0	1.1	133.0	131.7	6.4	40.0	1.4	-0.9	42.6	79.3	2.2	-26.7
Germany	1.5	1.6	68.2	65.9	5.9	62.0	1.1	1.7	53.9	54.4	8.5	49.2
France	1.1	1.3	98.2	98.8	7.0	64.8	-1.6	0.6	56.5	124.6	0.0	-17.4
Spain	2.6	2.3	99.0	98.5	6.1	50.9	-0.9	0.1	68.6	107.2	1.4	-90.5
Netherlands	1.8	1.9	66.6	64.9	6.3	56.6	-0.7	4.5	111.5	125.6	9.1	66.7
Belgium	1.2	1.4	106.8	106.5	8.0	65.1	-0.5	2.5	59.1	148.3	0.0	61.8
Austria	1.2	1.4	85.5	83.8	7.9	82.4	0.0	2.7	51.9	97.0	2.6	3.2
Finland	0.9	1.1	64.3	66.2	5.7	84.3	-2.6	3.9	67.2	112.3	0.1	-3.9
Greece	-0.6	2.7	....	....	....	....	....	....	62.5	65.6	-0.1	-126.4
Portugal	1.4	1.3	127.9	127.3	6.8	72.4	1.1	0.7	78.0	118.5	0.5	-109.4
Ireland	5.0	3.6	88.6	84.6	11.5	66.0	2.0	1.0	73.6	183.9	4.4	-70.0
Euro area	1.5	1.6	92.5	91.3	....	....	0.1	1.7	60.9	104.0	3.2	-4.0
United Kingdom	1.9	2.2	89.1	87.9	14.8	30.0	-1.6	3.2	86.1	71.2	-5.2	-3.5
United States	2.4	2.5	107.5	107.5	5.7	32.5	-1.8	....	79.3	71.3	-2.7	-41.3
Japan	0.5	-0.1	249.3	250.9	7.2	9.3	-4.8	....	63.2	101.3	3.3	69.7
Canada	1.5	1.9	92.3	90.6	5.4	22.4	-1.8	....	97.6	112.2	-3.3	23.8

Sources: IMF, Eurostat, ECB, European Commission, national financial accounts and balance of payments data.
(1) IMF, *World Economic Outlook*, April 2016. – (2) IMF, *Fiscal Monitor*, April 2016. – (3) European Commission, *Fiscal Sustainability Report 2015*, January 2016. The indicator is defined as the immediate and permanent increase in the structural primary surplus needed to satisfy the general government intertemporal budget constraint. – (4) Loans and securities. End of Q3 2015 for the European countries; end of Q4 2015 for the non-European countries. The data for the European countries are from ECB, *Statistical Data Warehouse*; those for non-European countries are from national sources; the data used are compiled according to the new European System of Accounts (ESA 2010). – (5) The data for the European countries and the euro area as a whole are from Eurostat, *Statistics Database*; those for the other countries are from national sources.

[3] '*Audizione preliminare all'esame del Documento di economia e finanza 2016*', testimony by the Deputy Governor of the Bank of Italy, L. F. Signorini, Chamber of Deputies, Rome, 18 April 2016.

At the beginning of 2016 the European Commission updated its estimates of the sustainability indicators for the public finances. The new estimates confirm the sustainability of Italy's public finances:[4] the discounted present value of future budget revenues, net of that of future expenditures, is more than sufficient to repay the present public debt (see the S2 indicator in Table 1.1). Furthermore, the Commission judges the risk of tensions in the sovereign debt securities market to be low in the short term, a conclusion supported by an analysis that considers the values of a broad set of macroeconomic and financial variables. The Commission underscores, however, that the ratio of debt to GDP will stay high in the medium term.

1.3 REAL ESTATE MARKETS

In Europe the rise in house prices gathers momentum

In the fourth quarter of 2015 euro-area house prices continued to rise compared with the previous quarter, pushed up especially by the increases in Germany and France. Although there are no widespread signs that housing is overvalued, in some countries with high and growing levels of household debt, such as Belgium, Finland and the Netherlands, the authorities have either maintained or announced macroprudential measures to prevent and mitigate risks. Outside the euro area, house prices also continue to trend upwards in Sweden and the United Kingdom, where the authorities have raised the countercyclical capital buffer rate to 1.5 and 0.5 per cent respectively.

In Italy the prolonged decline in house prices comes to a halt

House prices stabilized in Italy in the second half of 2015 (Figure 1.6.a), after a cumulative fall of almost 15 per cent since the summer of 2011 (Figure 1.6.b). The prices of new buildings rose. The number of house sales continued to increase, reaching the highest levels since 2012, and the upward trend involved

Figure 1.6

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) Data adjusted for seasonal and calendar effects. – (2) Deflated using the change in consumer prices. – (3) Total market. – (4) Right-hand scale. This experimental price indicator uses data drawn from transactions actually concluded on the market. – (5) The tertiary segment comprises office buildings and banks. – (6) Industrial property consists of buildings for industrial use. – (7) Commercial property comprises shops, shopping centres and hotels.

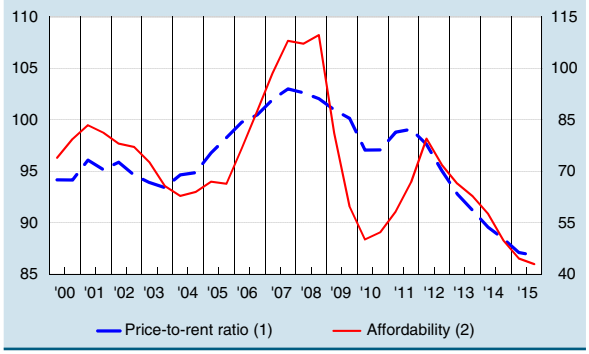
[4] European Commission, *Fiscal Sustainability Report 2015*, 2016.

all the main cities. The price-to-rent ratio stabilized at historically very low levels. The affordability index, which measures households' access to the property market, also indicates particularly favourable conditions, which are improving still further thanks to the recovery in disposable income and the low cost of loans (Figure 1.7). In the non-residential sector, however, the number of sales turned downwards and prices fell slightly (Figure 1.6c).

Figure 1.7

Sustainability indicators for the real estate market in Italy

(semi-annual data; indices, 1994-2013 average=100)



Sources: Based on data from Bank of Italy, Istat, Osservatorio del Mercato Immobiliare (OMI) and Consulente immobiliare.
(1) Ratio of house prices to rents 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.

The cyclical recovery continues in construction …

Several indicators point to a strengthening of the recovery in construction and the real estate market in the coming months. In December production in the industrial sectors that supply the main inputs to construction increased again. The latest data on building licences also point to an increase in construction, following the upturn recorded at the end of last year. In March the indicator of construction firms' confidence continued to rise.

According to the survey conducted by the Bank of Italy together with *Il Sole 24 ore*, construction firms see an improvement in investment conditions, partly ascribable to an easing of credit restrictions.

… and in the real estate market

Estate agents' expectations have improved, in both the short and the medium term. The number of potential buyers increased sharply at the end of last year and at the same time there was a decrease both in the final price discount with respect to the initial offer and in selling times. The improvement in the cyclical conditions of the real estate market should be reflected in a reduction in the risks for banks (see the box 'The real estate market and financial stability in Italy').

THE REAL ESTATE MARKET AND FINANCIAL STABILITY IN ITALY

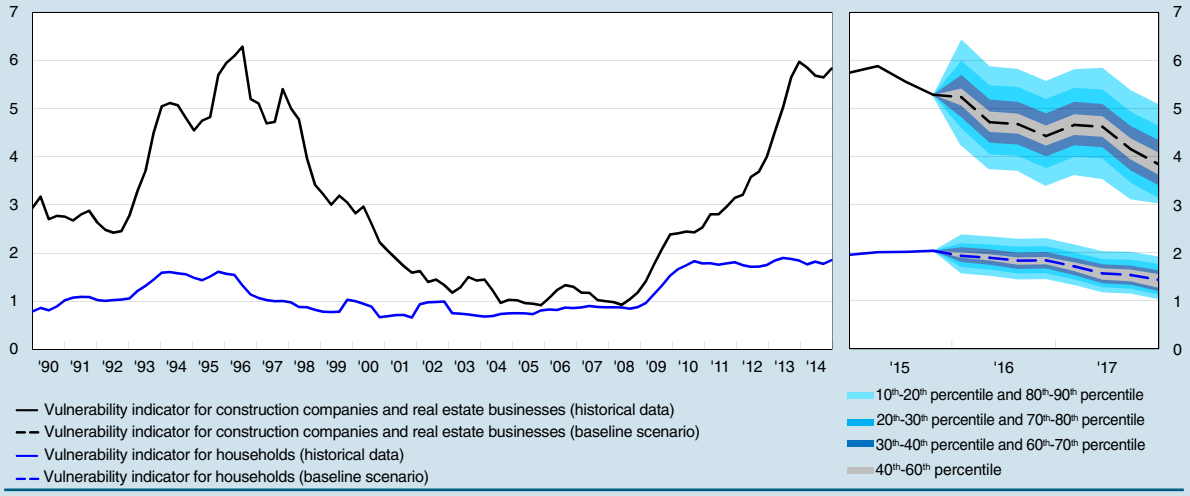
In all countries there is a strong link between real estate market developments and financial stability. Investments in real estate have long-term horizons and are financed by bank loans backed by the properties purchased or built. Negative changes in property prices imply a reduction in the value of the guarantees given and an increase in the risks for the banks financing the loans. A decrease in profitability for firms in this sector results in an increase in defaults.

In Italy, business activities connected with the real estate sector account for just under 40 per cent of GDP. Some 18 per cent of total bank loans are to households for house purchases and a further 14 per cent are granted to construction and real estate firms.

The prolonged weakness of the real estate sector, which began in 2006 and then became more pronounced, above all due to the recessive effects of the sovereign debt crisis, has had a serious impact on banks' balance sheets. The fall in revenues for construction firms and for those in the real estate sector has led to a sharp increase in the ratio of new bad debts to banks' capital (see the figure). The growth in households' bad debts has, however, been limited thanks to their low level

Banks' vulnerability stemming from the real estate market (1)

(quarterly data; per cent)



(1) Banks' vulnerability is measured by the ratio between new bad debts and the sum of banks' capital and reserves. The probability distribution of the projections, shown in the graph by percentile class, makes it possible to assess the risks characterizing the baseline forecast.

of indebtedness and to the many types of support offered to borrowers in financial difficulty over the last few years.[1]

Some economic and financial indicators are very good at predicting losses for Italian banks that are attributable to the real estate sector.[2] Statistical analyses show that the trend of the new bad debt ratio can be forecast fairly accurately, for households, by using the ratio of construction value added to GDP and the cyclical component of the number of residential purchases, and for the real estate sector, by using long-term government bond yields and the price-to-income ratio. According to these indicators the gradual improvement in the real estate market that started last year should lead to a significant reduction over the next few quarters in the risk for the banking sector from the real estate sector, both from households and firms in that sector (see the figure).

[1] S. Magri and R. Pico (2012), 'Italian household debt after the 2008 crisis', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), No. 134, 2012.

[2] F. Ciocchetta, W. Cornacchia, R. Felici and M. Loberto (2016), 'Assessing financial stability risks from the real estate market in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), No. 323, 2016.

2 RISKS BY SECTOR

2.1 HOUSEHOLDS

The financial condition of households improves

The financial condition of households is strengthening with the growth of disposable income (0.8 per cent in real terms in 2015). Household confidence indicators, though impacted by the recent volatility in the financial markets, remain at high levels. Indebted households are benefiting from low interest rates.

Wealth increases and portfolios are more diversified

In the first nine months of 2015 households' financial wealth expanded by 1.8 per cent (or by more than €70 billion), mainly as a consequence of the increase in asset prices. The diversification of portfolios continues, spurred by the search for more efficient combinations of risk and return. Households are reducing their direct holdings of government securities and bank bonds (see the box 'Households' holdings of bank debt instruments and exposure to bail-in risk'), in favour of asset management products (Table 2.1): the portion of financial assets in the form of investment funds and insurance policies grew from 26.2 per cent to 31.5 per cent of the total between 2012 and 2015; the gap with respect to the euro-area average (42 per cent), though still large, is shrinking.

Table 2.1

Households' portfolios (1)
(millions of euros and percentage composition)

	2008		2012		2015 (2)	
Total	**3,770,123**	**100.0**	**3,727,149**	**100.0**	**4,019,397**	**100.0**
Deposits and notes and coin	1,098,897	29.1	1,178,199	31.6	1,241,446	30.9
Italian government securities	273,828	7.3	209,247	5.6	125,754	3.1
Other bonds	527,672	14.0	509,697	13.7	314,189	7.8
Shares	917,504	24.3	731,615	19.6	954,224	23.7
Assets under management (3)	825,351	21.9	975,451	26.2	1,265,203	31.5
Other (4)	126,871	3.4	122,940	3.3	118,582	3.0

Source: Financial accounts.
(1) Consumer and producer households and non-profit institutions serving households. Rounding of decimal points may cause discrepancies in totals. – (2) Data refer to the third quarter. – (3) Share of investment fund units, insurance and pension fund reserves and severance pay entitlements. – (4) Includes commercial credit and other minor items.

HOUSEHOLDS' HOLDINGS OF BANK DEBT INSTRUMENTS AND EXPOSURE TO BAIL-IN RISK

Since the beginning of 2012 the share of households' financial wealth invested in deposits and bonds issued by banks has diminished by almost 6 percentage points, falling to 23 per cent (see the table). Driving this decline have been non-rollover and disposals of bonds, which have lost their favourable tax treatment compared with bank and postal deposits. The tax rate on bank bonds was raised from 12.5 to 20 per cent in January 2012 and then to 26 per cent in July 2014, on a par with financial instruments other than government securities and post-office savings certificates.

Households' investment in deposits and bonds issued by banks (1)
(billions of euros; per cent of household wealth)

	Bank debt instruments		Subject to bail-in						Not subject to bail-in			
			Subordinated bonds		Senior unsecured bonds		Share of deposits above €100,000		Share of deposits below €100,000		Senior covered bonds	
2008	994	*26.4*	27	*0.7*	330	*8.7*	183	*4.9*	454	*12.0*	0.0	..
2011	1,017	*28.6*	35	*1.0*	341	*9.6*	184	*5.2*	457	*12.9*	0.4	..
2015 (2)	921	*22.9*	29	*0.7*	173	*4.3*	225	*5.6*	493	*12.3*	0.1	..

Sources: Financial accounts and supervisory reports.
(1) The data refer to consumer and producer households and non-profit institutions serving households. Debt instruments are issued by banks operating in Italy and do not include securities held indirectly through asset management products. Excludes the liabilities of Cassa Depositi e Prestiti SpA. Deposits above and below €100,000 are estimated. The figures shown differ from those taken from supervisory reports, which are stated at nominal value.– (2) Data for the third quarter.

Under the new rules on bank crisis management introduced by the European Union's Bank Recovery and Resolution Directive (Directive 2014/59/EU), some bank liabilities may be subject to a bail-in, i.e. written down or converted into equity in the case of the resolution of the issuer bank.[1] Deposits up to €100,000 protected by the Interbank Deposit Protection Fund (IDPF) and senior covered bonds are excluded. The bank's shareholders are the first to see their claims reduced or written off entirely. If this proved insufficient to cover the losses or if it should be necessary to recapitalize the bank, the first non-equity instruments subject to bail-in would be subordinated bonds, which could undergo a reduction in value and/or conversion into equity. Only after the bank's subordinated bonds have been used up can senior unsecured bonds and the share of deposits over €100,000 not protected by the IDPF be bailed in. However, deposits in excess of €100,000 held by retail customers (households and small enterprises) are accorded preferential treatment in that they are the last to be bailed in.

It can be estimated[2] that households' investments in instruments (other than shares) that could be subject to bail-in measures in the event of bank resolution represent just over 10 per cent of Italian households' financial assets, of which subordinated bonds make up less than 1 per cent, senior unsecured bonds 4.3 per cent and deposits above €100,000 come to 5.6 per cent. The total amount of households' financial wealth that might actually be involved depends on the size of the bank in crisis, the amount of the losses, the amount of capital held, recapitalization needs, and the decisions of the resolution authority, which could decide to exclude some liabilities on a discretionary basis in order to preserve financial stability.

According to the Survey on Household Income and Wealth in 2014,[3] about 6 per cent of households own non-equity instruments eligible for bail-in. Most of these investments (86 per cent by value) belong to households in the highest decile of the distribution of financial wealth. This is an underestimate, because the wealthiest families are more inclined to under-report the value of their financial holdings.[4] Investment in instruments eligible for bail-in makes up about 40 per cent of these households' aggregate portfolios.

1 For further details, see *Changes in the way bank crises are managed* on the Bank of Italy's website.
2 Owing to the absence of individual data, the maximum amount of deposits above €100,000 subject to bail-in is estimated using the data by size class of deposit included in supervisory reports. In particular, for the size class comprising deposits between €50,000 and €250,000, the maximum amount exceeding €100,000 is estimated for each province and bank.
3 In the survey data it is not possible to distinguish covered bank bonds, but these make up only a negligible fraction of households' portfolios; see Banca d'Italia, 'I bilanci delle famiglie italiane nell'anno 2014', *Supplementi al Bollettino Statistico*, 64, 2015 (English translation forthcoming).
4 G. D'Alessio and I. Faiella, 'Non-response behaviour in the Bank of Italy's Survey of Household Income and Wealth', Banca d'Italia, Temi di discussione (Working Papers), No. 462, 2002.

Debt poses limited risks …

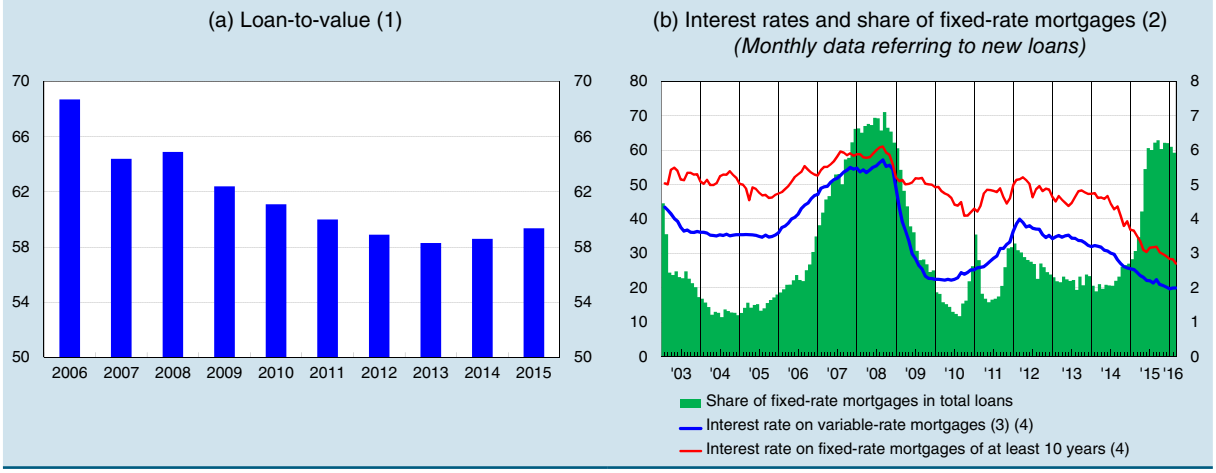
Loans to consumer households issued by banks and financial companies resumed growing (by 0.9 per cent in 2015), but the ratio of household debt to disposable income fell slightly to 62.6 from 62.9 per cent. New mortgage loan disbursements amounted to €32 billion in 2015 (€23 billion in 2014), about half as much as in the years preceding the financial crisis. The loan-to-value ratio, equal to 59.4 per cent, is approximately 10 percentage points lower than it was in 2006 (Figure 2.1.a) and is the lowest among the main euro-area countries.

… thanks in part to low interest rates and increased resort to fixed-rate mortgages

The fall in interest rates has reduced debt servicing costs. In February 2016 the average cost of loans for house purchase fell by 0.3 percentage points from the end of 2014, to 2.5 per cent. This reduction was due in part to the decline in the reference rates on variable-rate mortgages, which represent three quarters of outstanding mortgages (the reference rates entered negative territory, with 3-month Euribor at -0.2 per cent).[1] Also contributing was the decrease in the margins applied by intermediaries to new loans, especially pronounced for fixed-rate mortgages. The share of fixed-rate disbursements rose to about 60 per cent from 23 per cent in 2014 (Figure 2.1.b), reducing households' exposure to the risk of future interest rate hikes. In 2015 approximately 7 per cent of mortgages outstanding at the start of the year were renegotiated, subrogated or substituted.

Figure 2.1

Indicators of households' borrowing conditions
(per cent)



Sources: *Regional Bank Lending Survey*, supervisory reports, and Central Credit Register, *Analytical Survey of Interest Rates*.
(1) Averages weighted by the amount of outstanding mortgages of each bank at the end of the year. The data refer to consumer households only. – (2) The data refer to consumer and producer households and non-profit institutions serving households. – (3) Variable rate or rate renegotiable before the end of the year. – (4) Right-hand scale.

Credit quality continues to improve

The non-performing loan rate reached 2.3 per cent in 2015 (Figure 2.2), a slightly higher value than that of the period preceding the financial crisis. In December, the 12-month growth rate of non-performing loans was 3.2 per cent, one of the lowest levels recorded since 2009. The ratio of non-performing loans to total

[1] With regard to variable-rate mortgages where reference rates are negative, the Bank of Italy recently called on all intermediaries to refrain from applying de facto floor clauses that are not advertised and are neither included in the disclosure documentation nor the contract. See on the Bank of Italy's website: *Parametri di indicizzazione dei finanziamenti con valori negativi: trasparenza delle condizioni contrattuali e correttezza nei rapporti con la clientela*.

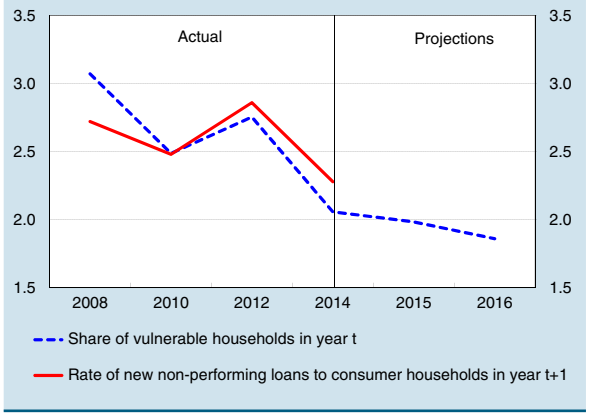
loans remained practically unchanged (Table 2.2). Past-due loans, which are considered the initial form of non-performing credit, are on the decline for every type of household loan.

The main source of risk remains weak income growth

The projections of the Bank of Italy's micro-simulation model,[2] consistent with the latest macroeconomic scenarios and Consensus Economics forecasts, indicate that the share of vulnerable households and their share of debt, which are already at low levels, will decrease slightly in 2016 to less than 2 per cent (Figure 2.2) and 16 per cent respectively (from 2.1 per cent and 16.8 per cent in 2014). The main risk for households comes from a possible weakening in the labour market recovery: in an adverse scenario of an annual reduction of 3.0 per cent in nominal income in 2016, the share of vulnerable households would remain at 2014 levels, while their share of total household debt would increase by about 1 percentage point.

Figure 2.2

Vulnerability of households and rate of new non-performing loans (1)
(per cent)



Sources: Based on data from the Survey on Household Income and Wealth, and Central Credit Register data.
(1) The red line indicates the rate of new non-performing loans to consumer households in year t+1, based on Central Credit Register data. The dotted blue line indicates the number of vulnerable households in year t, calculated using microeconomic data. The latest data available refer to 2014; a micro-simulation model is used to estimate the values for 2015 and 2016.

2.2 FIRMS

The financial situation of firms is improving

With the economic recovery and the easing of monetary conditions, the financial situation of Italian firms has continued to improve, though at a modest pace. Operating profitability is still low, but the cost of debt has diminished thanks to the fall in interest rates and the gradual rebalancing of financial structures. At aggregate level the decline in lending has been attenuated, but credit access has been still further differentiated according to risk.

The rebalancing of financial structures proceeds

The reduction of corporate indebtedness is proceeding gradually. Over the first nine months of 2015 the amount of firms' financial debt declined both in absolute terms and in proportion to GDP (Figure 2.3.a). Leverage came down by 2 percentage points with respect to the end of 2014, a quarter of the contraction being due to the combined effect of new capital inflows and the reduction in financial debt and three quarters to the rise in the value of shareholders' equity (Figure 2.3.b). The sustainability of the debt strengthened above all thanks to the decline in net interest expense.

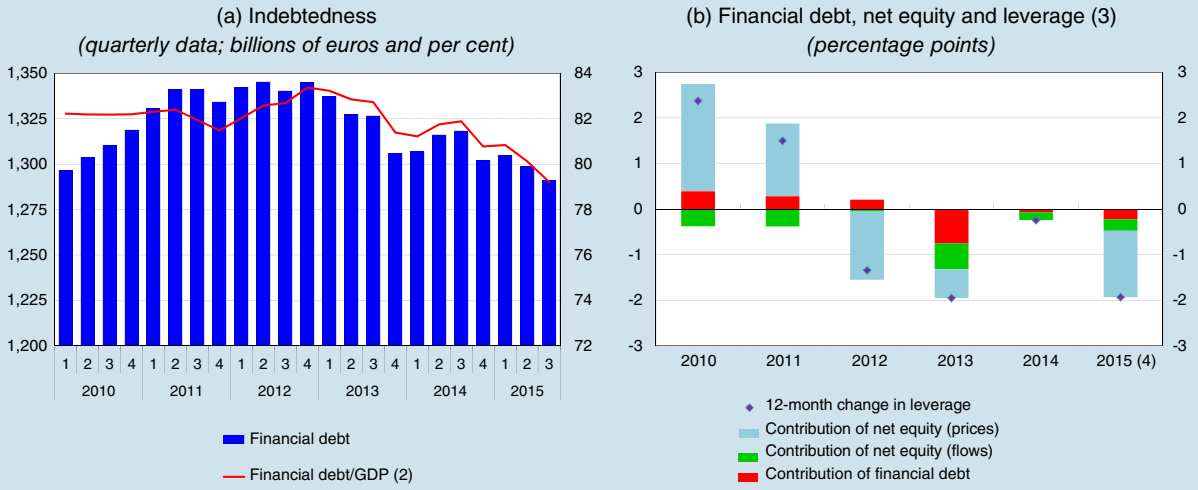
Credit resumes growing for only some categories of firms

After a protracted decline, lending by banks and financial companies has shown signs of steadying. Loans are increasing for firms whose economic and financial conditions are relatively sound, and in particular for the largest corporations, while credit to micro-firms has continued to contract (Figure 2.4). Istat's manufacturing survey found that in the first quarter of the year the share of firms that reported being denied a loan declined to 8.4 per cent; greater difficulty in accessing credit was confirmed, although it is less marked, for small firms (10.5 per cent).

[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.

Figure 2.3

Indicators of firms' financial situation (1)



Sources: Bank of Italy and Istat.
(1) Data for the non-financial corporate sector. – (2) Right-hand scale. – (3) Contribution of financial debt and net equity at market prices (flow effect and price effect) to the change in leverage. – (4) For 2015, first three quarters.

The number of bond issuers is declining

The process of diversifying the sources of corporate borrowing has slowed. The portion of financial debt accounted for by bonds, though high by comparison with the period prior to the crisis, decreased slightly from the peak of 13.0 per cent at the end of 2014 to 12.5 per cent in the third quarter of last year. Gross corporate bond issues in 2015 were equal to €30 billion, in line with the previous year, but the number of issuers declined, in particular those, chiefly small and medium-sized firms, that were resorting to the bond market for the first time. Foreign investors hold three quarters of the bonds issued by Italian firms, which are mostly euro-denominated. The fraction held by domestic institutional investors is small but growing, while the exposure of banks is marginal.

Liquidity increases further

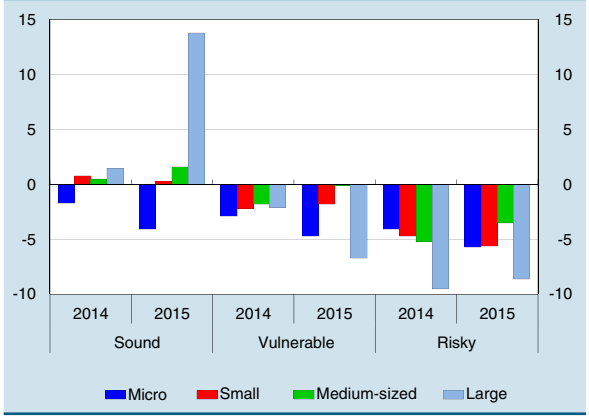
The uncertain outlook for economic activity and the still discontinuous dynamics of investment have fostered an expansion of liquidity, which rose to the historically high level of 8.3 per cent of firms' total liabilities in the third quarter. The March survey by the Bank of Italy and *Il Sole 24 Ore* reported that large firms had particularly large reserves of liquidity but other firms too were increasing them.[3]

For the first time since the onset of the crisis, the number of bankruptcies declines

Loan repayment problems are easing. In 2015, for the first time in eight years, the number of bankruptcies diminished, although it was still twice as high as in

Figure 2.4

Loans to firms by risk category and size (1)
(12-month percentage changes)



Sources: Bank of Italy and Cerved.
(1) Loans granted by banks and financial companies. Data for 2014 refer to a sample of about 423,000 companies; those for 2015 refer to about 373,000 companies whose 2014 balance sheets are available. The classification by risk category is according to the scores assigned by Cerved.

[3] Banca d'Italia, Survey of inflation and growth expectations, March 2016, in *Supplements to the Statistical Bulletin*, No. 17, 2016.

2008. The new non-performing loan rate fell sharply, by more than 4 percentage points, to 4.9 per cent, reflecting across-the-board improvements in all sectors. However, the new bad debt rate remained high at 4.1 per cent in the fourth quarter (see Section 4.2). The ratio of the entire stock of non-performing loans to total business loans rose to nearly 30 per cent (Table 2.2).

Firms are becoming less vulnerable …

According to projections based on the Bank of Italy's microsimulation model,[4] consistent with the latest macroeconomic scenarios and the forecasts of Consensus Economics, given a context of gradually strengthening cyclical recovery and low interest rates the portion of corporate debt held by vulnerable firms[5] should decrease to about 36 per cent this year, compared with 42 per cent in 2014. The improvement would be most marked among manufacturing firms, while the financial vulnerability of construction firms is likely to remain pronounced, though attenuating (Figure 2.5). Once again medium-sized firms appear to be the soundest. In the case of less favourable macroeconomic developments, a 5 per cent decline in EBITDA in 2016 would raise the share of the debt held by vulnerable firms to over 37 per cent, in any case lower than in 2014.

… but risks connected with the economic cycle persist

The main risks in the months to come continue to relate to macroeconomic developments. According to the recent survey conducted by the Bank of Italy together with *Il Sole 24 Ore*, firms' operating environment is affected by heightened uncertainty owing above all to recent geopolitical events and the increased volatility of the world economic cycle. These factors have already been reflected in a worsening of the sales expectations of export firms.[6]

Table 2.2

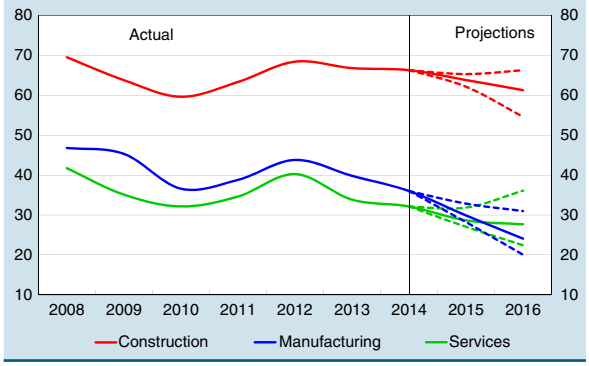
Loans to consumer households and firms (1)
(millions of euros and percentage composition)

	June 2015		December 2015	
	Consumer households			
Total	**548,507**	**100.0**	**550,812**	**100.0**
Performing	488,525	89.1	489,849	88.9
Non-performing (2)	59,982	10.9	60,963	11.1
Bad debts	38,536	7.0	39,327	7.1
Past-due	5,362	1.0	5,121	0.9
Other	16,084	2.9	16,515	3.0
	Firms			
Total	**983,917**	**100.0**	**960,673**	**100.0**
Performing	694,913	70.6	673,169	70.1
Non-performing (2)	289,004	29.4	287,504	29.9
Bad debts	166,067	16.9	169,833	17.7
Past-due	11,366	1.2	9,043	0.9
Other	111,571	11.3	108,629	11.3

Source: Unconsolidated supervisory reports of banks and financial companies.
(1) Loans include repos and are not adjusted for securitization. Firm data refer to non-financial corporations and producer households. Rounding of decimal points may cause discrepancies in totals. – (2) From the first quarter of 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.

Figure 2.5

Share of debt held by vulnerable firms (1)
(yearly data; per cent)



Source: Based on Cerved data.
(1) The latest available data refer to 2014; the microsimulation model has been used to estimate the share of debt in 2015 and in 2016. The dotted lines indicate a confidence interval of 95 per cent above and below the baseline scenario.

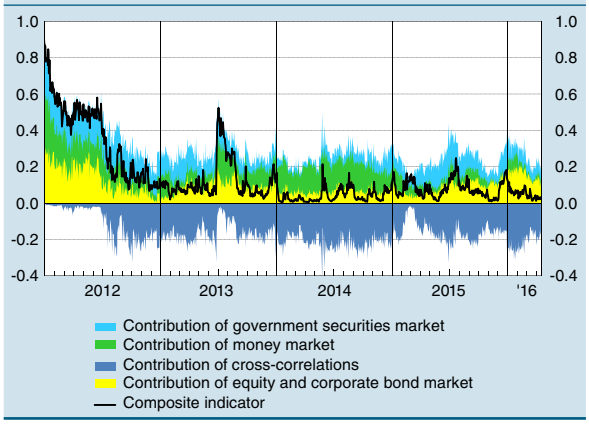
[4] A. De Socio and V. Michelangeli, 'A model to assess the financial vulnerability of Italian firms', *Journal of Policy Modeling*, forthcoming.
[5] For the purposes of this analysis, 'vulnerable' firms are those with negative EBITDA (earnings before interest, taxes, depreciation and amortization) or with a ratio of interest expense to EBITDA higher than 50 per cent.
[6] Istat, *Fiducia dei consumatori e delle imprese*, Flash estimates, 29 March 2016.

3 THE MONEY AND FINANCIAL MARKETS

The liquidity of the Italian government securities and money markets has remained good, even during the periods of high volatility in stock and private bond prices in late 2015 and early 2016 (Figure 3.1). The purchases made by the euro-area central banks had a stabilizing effect, limiting the transmission of tensions between different markets. However, sudden shifts in investor expectations, induced by the persistence of significant global risk factors (see Section 1), could result in new spikes in price 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

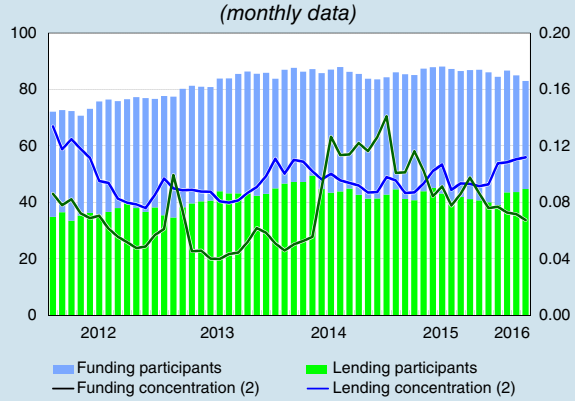
Trading volumes on the money market are high

Trading volumes on the repo market operated by MTS SpA have been very high. Contracts outstanding reached record levels (around €250 billion at the end of February). The risk associated with the concentration of trades remains low (Figure 3.2.a).

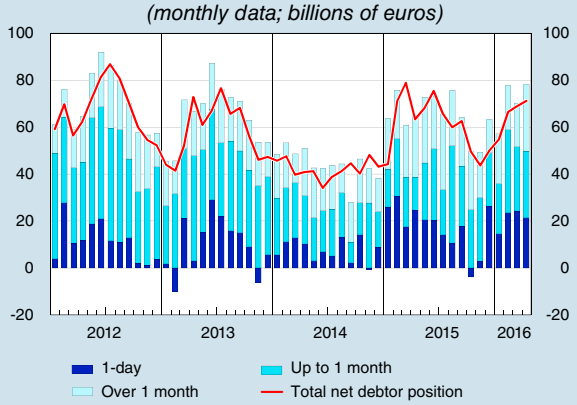
Figure 3.2

Concentration indices and net debtor position on MTS repo market

(a) Active participants and concentration indices (1)
(monthly data)



(b) Net foreign debtor position of the Italian banking system (3)
(monthly data; billions of euros)



Source: Based on MTS SpA data.
(1) Number of active market participants with a net debtor position; concentration is represented by the Herfindahl-Hirschman index. – (2) Right-hand scale. – (3) The net debtor position is calculated on the cash value of the outstanding contracts (for total net position, monthly average of daily data; for the breakdown by duration, end-of-month data).

The increase in demand for funding by some Italian banks in the first few months of the year (see Section 4.3) had no substantial impact on market rates, which remain in line with those prevailing in the euro area. Unsecured over-the-counter (OTC) trades and those on the e-MID market continue to be extremely limited.

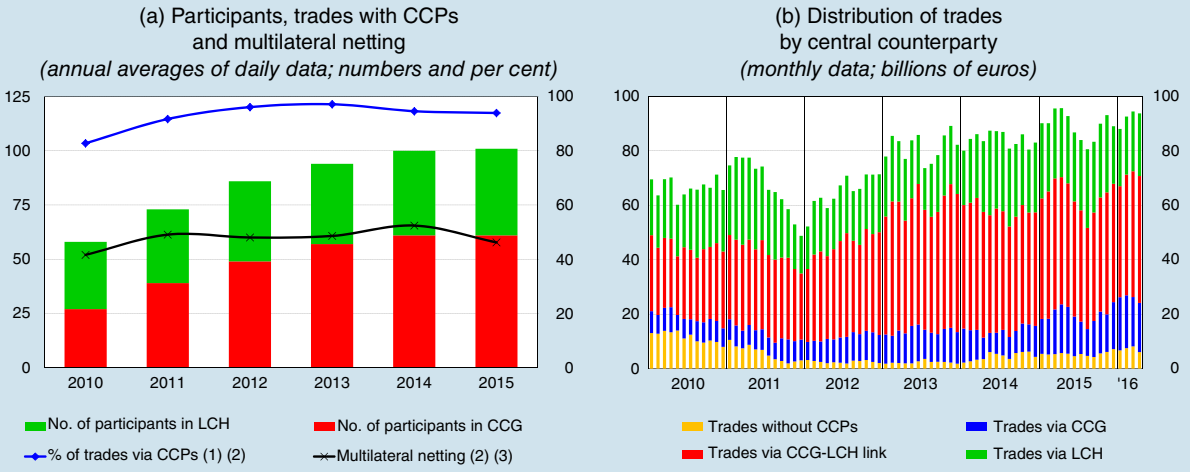
Italian banks' foreign funding on the repo market increases …

Over the first few months of the year Italian banks progressively increased their net foreign debtor position on the MTS repo market (Figure 3.2.b), reflecting particularly favourable borrowing terms by comparison with other forms of funding. The intermediation of a large proportion of trades by central counterparties (CCPs) contributes to the efficient and orderly functioning of this market segment, with positive effects on the availability and terms of funding for Italian banks (see the box 'The role of central counterparties in reducing systemic risk on the repo market').

THE ROLE OF CENTRAL COUNTERPARTIES IN REDUCING SYSTEMIC RISK ON THE REPO MARKET

In Italy it has been possible since 2002 to make use of a central counterparty (CCP) for cash trades and repos in Italian government securities. Recourse to the CCP on the MTS repo market has grown significantly in recent years in terms both of the number of users (about 100 out of a total of 130 market participants) and the share of volumes traded (over 94 per cent in 2015; see panel (a) of the figure).

Evolution and distribution of trades by central counterparty in the MTS repo market



Source: Based on MTS SpA data.
(1) Share of total trades that are made through a central counterparty. – (2) Right-hand scale. – (3) Estimate of the degree of reduction of market participants' exposures obtained by means of multilateral netting conducted by CCPs.

The presence of a CCP makes it possible to reduce systemic risk in the market in which the CCP operates through various channels.[1] To begin with, multilateral netting by CCPs enables the credit exposures and interconnections between market participants to be contained. The more numerous and diverse are the participants and their reasons for taking part in the market, the greater the benefits. According to our estimates regarding trades on the MTS repo market, multilateral netting reduces by 10 per cent the overall credit exposure of participants in the general collateral segment, used for liquidity management;

[1] The Financial Stability Board has called on the competent authorities to make a cost-benefit analysis of using CCPs in interdealer repo markets. See Recommendation 10 in FSB, 'Strengthening Oversight and Regulation of Shadow Banking. Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos', 29 August 2013.

the reduction exceeds 40 per cent if we also count the special repo segment, used to a greater extent for securities lending.[2] In the Italian case, additional advantages accrue from the possibility of including the trades concluded on the government securities cash market in the multilateral netting. In return for these benefits, CCPs often apply higher margins than the bilateral ones to both counterparties to the transactions; in some cases these higher margins can make using CCPs less advantageous.

On the Italian market, moreover, there exists an interoperability link between two central counterparties – the Italian Cassa di Compensazione e Garanzia SpA (CC&G) and the French LCH.Clearnet SA (LCH) – that facilitates cross-border transactions and fosters the efficient and orderly functioning of the secondary market in government securities. The link makes it easier for Italian intermediaries to access financing from abroad even during particularly acute phases of market tension, as happened during the sovereign debt crisis. Trades made via the link constitute about one half of total transactions (panel (b) of the figure).

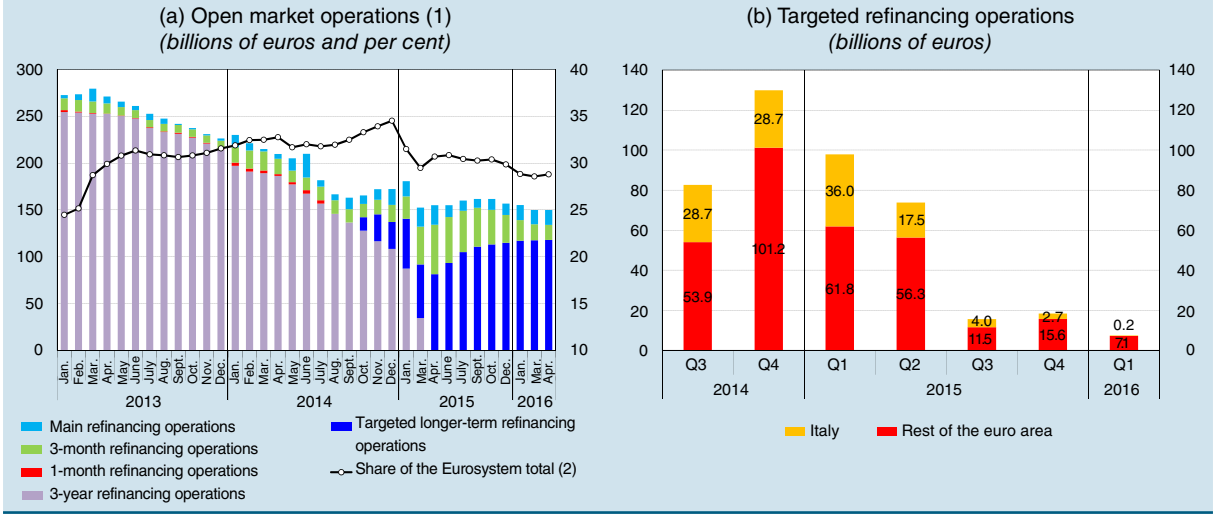
[2] The overall credit exposure is calculated as the sum of the nominal value of the buy contracts and sell contracts traded daily on the market by all the participants.

… and recourse to Eurosystem refinancing declines

The share of total Eurosystem open market operations accounted for by counterparties active in Italy has fallen below 30 per cent (Figure 3.3.a). Since the end of October, their refinancing operations with maturity up to three months have fallen by 33 per cent, while the continuing slackness of the recovery in lending to the economy (see Section 4) has stunted Italian banks' demand for targeted longer-term refinancing operations (Figure 3.3.b).

Figure 3.3

Recourse to Eurosystem refinancing by counterparties active in Italy



Sources: Based on ECB and Bank of Italy data.
(1) Averages of daily data in the reserve maintenance period. The horizontal axis gives the month in which each maintenance period ends. For April 2016, the period ends on 15 April. – (2) Right-hand scale.

Eurosystem purchases do not interfere with the functioning of the Italian government securities market

From the launch of the public sector purchase programme (PSPP) through March 2016, the Eurosystem purchased €105 billion worth of Italian securities (€97 billion by the Bank of Italy alone). The average maturity of the securities has remained stable at 9.4 years (8.1 years for all the government securities purchased by the Eurosystem). These purchases did not interfere with the price

formation mechanism on the cash market for government securities, since they impacted the entire yield curve without creating distortions between different securities. Nor did the programme create strains in the securities lending market, where volumes remain high and the cost of financing for specific securities is in line with that prevailing in the general collateral segment, thereby facilitating the hedging of market-makers' positions in the secondary market. The lending of securities purchased by the Bank of Italy through the PSPP helps to maintain orderly market conditions (see the box 'The impact of the Public Sector Purchase Programme on the Italian government securities market', *Financial Stability Report*, No. 2, 2015).

3.2 THE GOVERNMENT SECURITIES MARKET

The average cost of the debt continues to decrease …

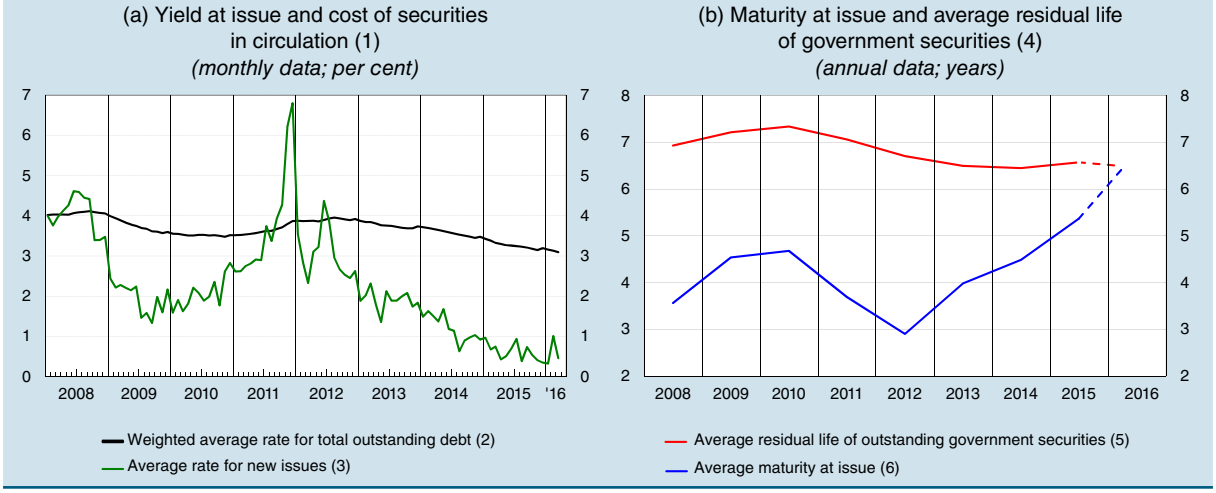
Average yields at issue continued their downward trend and only exceeded 1 per cent in the month of February, when a 30-year BTP was placed (Figure 3.4.a). The average cost at issue of the stock of securities outstanding is also decreasing and is now 3.1 per cent.

… while average maturity at issue is on the rise

Relaxed borrowing conditions are facilitating a lengthening in the average residual maturity of the debt, which stood at 6.5 years as at the end of March (Figure 3.4.b). The amount of medium- and long-term securities falling due in 2016 will be €184 billion, less than the amount maturing in 2017 (€219 billion) but similar to that of 2018.

Figure 3.4

Yields and average maturity of government securities



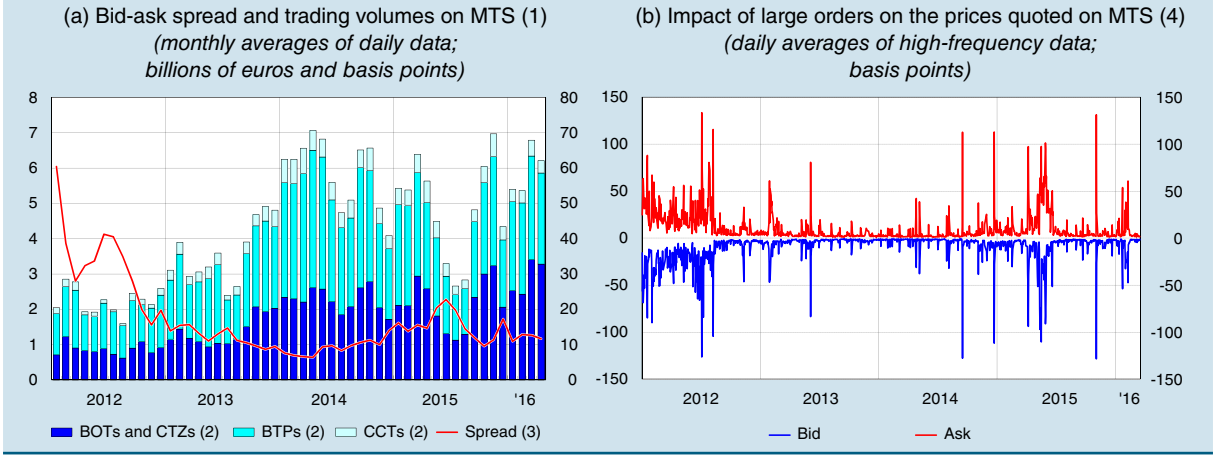
Sources: Based on Ministry of Economy and Finance and Bank of Italy data.
(1) Placements on the domestic market of non-indexed government securities. – (2) Weighted average of the yields at issue of government securities outstanding at end of month. – (3) Weighted average of the yields of government securities placed during the month, by settlement date. – (4) Government securities placed on the domestic market. The figure for 2016, indicated by the dashed line, refers to the end of March. – (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.

Liquidity conditions in the secondary market remain good

The liquidity conditions on the secondary market remain relaxed overall (Figure 3.5.a), although they have recently displayed greater intraday fragility (Figure 3.5.b), owing both to the structural changes under way in the bond markets and to recent developments reflecting, among other factors, increased volatility and the Eurosystem's purchase programme. Counting on central

Figure 3.5

Liquidity indicators on Italian government securities



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 and is based on data recorded in five-minute intervals. Estimated impact on bid and ask prices of entering a hypothetical €50 million buy or sell order in the MTS book.

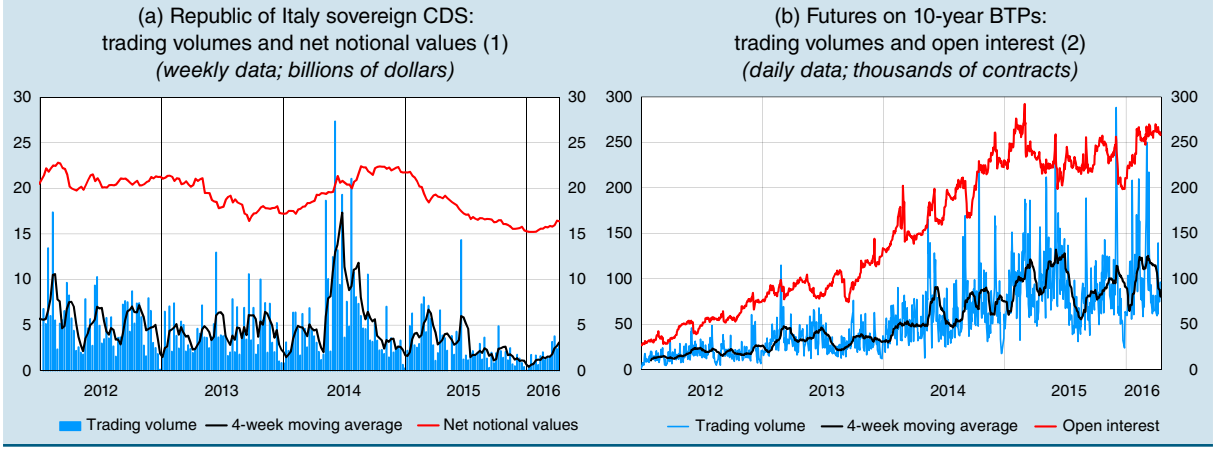
banks' steady daily purchases, market makers are now more willing to quote buy prices but at the same time less inclined to provide sell quotes. Our simulations indicate that since the inception of the public sector purchase programme (PSPP) the hypothetical number of buy orders exceeding the trading book, and their market impact, was greater than in the case of sell orders.

Trading in Italian sovereign debt derivatives grows

Net notional values and trading in credit default swaps on Italian government securities, while remaining at historically low levels, increased slightly in the first months of the year owing to tensions in the Italian and European stock markets (Figure 3.6.a). In the most recent months trading in BTP futures has gone up further (Figure 3.6.b), also owing to intensive intraday trading. Along with high

Figure 3.6

Markets in derivatives on sovereign debt



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.

price volatility, intraday trading makes it harder for market makers to operate on the MTS Cash secondary market for Italian government securities.[1]

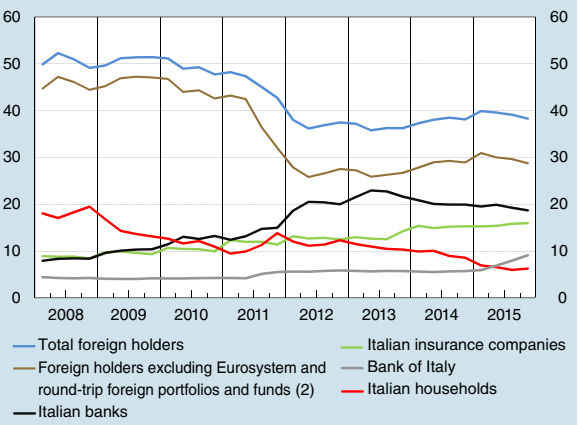
The share of Italian government securities held by the Bank of Italy increases

Last December, following purchases on behalf of the Eurosystem, the share of Italian government securities held by the Bank of Italy reached 9.2 per cent (Figure 3.7). Since the beginning of the Eurosystem's purchase programme in March 2015, the share held by insurance companies has also increased, while those of banks, foreign investors and especially households have decreased.

Figure 3.7

Italian general government securities: distribution by holder (1)

(quarterly data; per cent)



Source: Financial accounts.
(1) Percentage shares calculated at market prices net of securities held by Italian general government entities. The data refer to a subset of holders. – (2) Securities held by foreign investors net of those held by the Eurosystem (excluding the Bank of Italy) and of those held by foreign individually managed portfolios and investment funds but attributable to Italian investors.

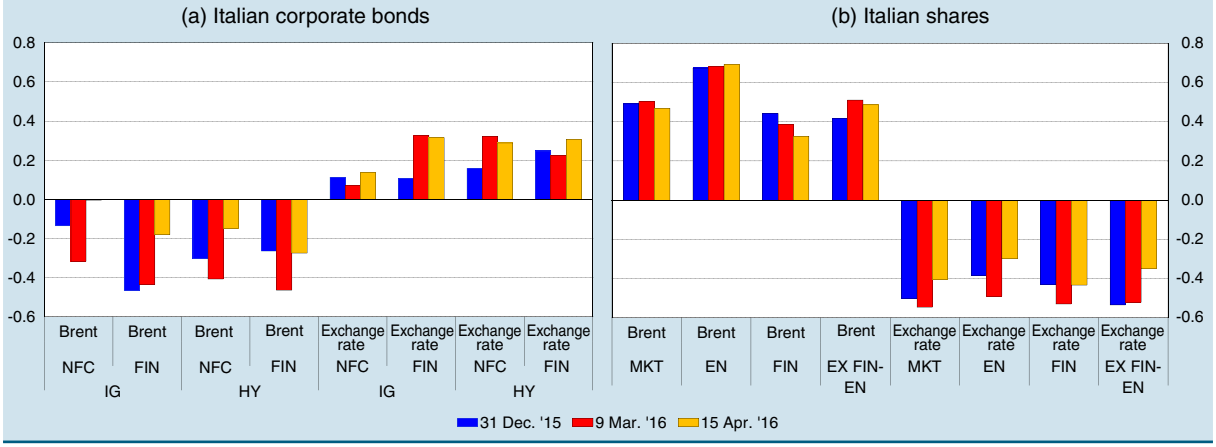
3.3 CORPORATE BOND AND EQUITY MARKETS

Italian markets feel the effects of international tensions

The high volatility of Italian bond and equity prices in the first few months of the year is mainly attributable to the tensions on the international markets (see Section 1) and to the uncertainty regarding the condition of banks (see Section 4). Between January and February the correlation of equity prices and corporate bond spreads with oil prices and the euro-dollar exchange rate increased (Figure 3.8). Following the decisions made by the Eurosystem at the beginning of March, the

Figure 3.8

Correlations between financial markets (1)



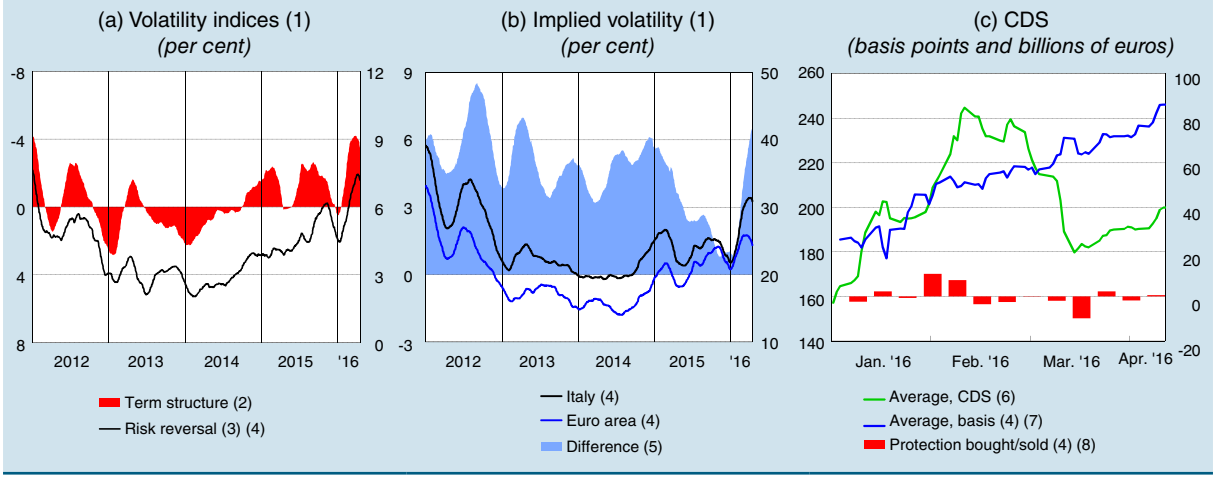
Sources: Based on Bank of America Merrill Lynch, Thomson Reuters Datastream and Bloomberg data
(1) 60-day correlations of the changes in the spreads of the sub-indices for corporate bonds (a) and in the prices of the sub-indices for equity securities (b), with respect to Brent oil prices and the euro-dollar exchange rate. Arithmetic changes for the spreads and logarithmic changes for the other variables. The sub-indices are identified by the characteristics shown on the horizontal axis: IG=investment grade; HY=high yield; NFC=non-financial; FIN=financial; MKT=market; EN=energy; EX FIN-EN=non-financial non-energy;.

[1] For example, when the ECB announced new monetary policy measures on 10 March, brisk activity on the futures market was accompanied by a significant widening in the bid-ask spread on the cash market.

correlations decreased, but they are still greater than in the final part of 2015. The performance of Italian share indices has also been affected by the high weighting of financial and energy shares, which are generally more volatile than those of other sectors; moreover, Italian banks' share prices have fallen more steeply than those of other European banks (see Section 4.1). In recent months the level of risk of the Italian equity market perceived by market participants is high both by historical standards (Figure 3.9.a) and compared with other euro-area markets (Figure 3.9.b).

Figure 3.9

Stock market and corporate bond indicators



Sources: Based on Bloomberg, DTCC and Barclays data.
(1) 60-day moving averages. – (2) Difference of the implied volatilities on options with maturities of 12 and 2 months. – (3) 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). – (4) Right-hand scale. – (5) Difference between the implied volatilities of options on the Italian and euro-area stock market index with a maturity of 2 months. – (6) Average of the CDS spreads of non-financial Italian issuers included in the iTraxx Main and Crossover indices (daily data, basis points). – (7) Average of the differences between CDS spreads and asset swap spreads for corporate bonds relating to the same issuers and with similar maturities (daily data, basis points). – (8) Net protection bought or sold on the iTraxx Main and Crossover indices (billions of euros; weekly data; positive values indicate net purchase of protection).

The bond market benefits from the new Eurosystem measures

The tensions observed in the early months of the year have resulted in an increase in CDS and bond spreads and in a widening of the differences between the two instruments (designated 'basis'; Figure 3.9.c). Following the measures announced in March by the Eurosystem, the spreads fell sharply on both markets; however, the basis remains higher than those at the beginning of the year.

3.4 MARKET INFRASTRUCTURES

The central counterparty's margin requirements remain stable

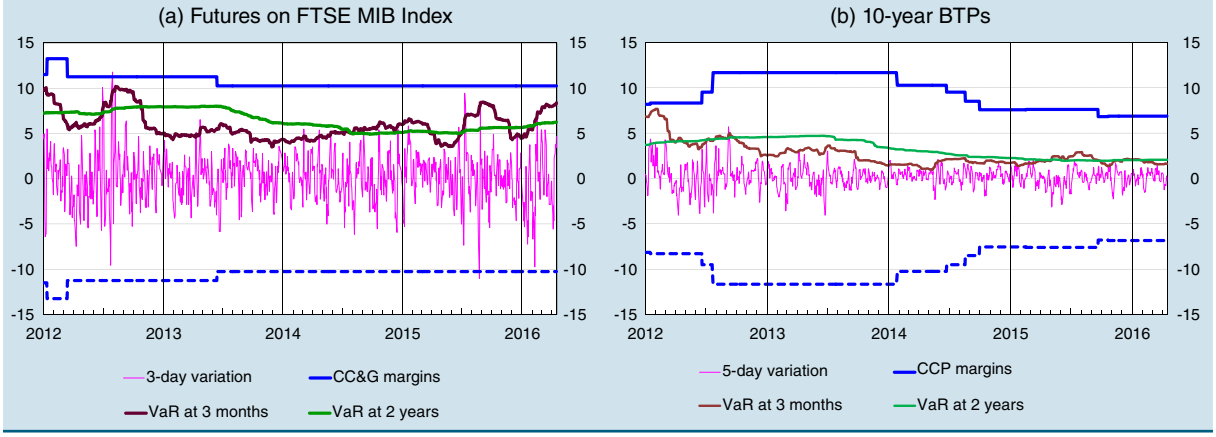
The margin requirements set by Cassa di Compensazione e Garanzia SpA (CC&G) remained stable despite the high volatility displayed by the stock markets (Figure 3.10), testifying to the mild procyclical bias of the risk management models used by the central counterparties (CCPs), in line with the requirements introduced by the European Market Infrastructure Regulation (EMIR). The number of buy-ins triggered by sellers' failures to deliver remained unchanged even though short selling on certain shares was on the rise.

European stress tests confirm the soundness of the Italian central counterparty

On 21 June central clearing for certain types of OTC derivatives will become mandatory in the EU, thereby increasing the systemic importance of the CCPs that provide this service. A stress test conducted by the European Securities and Markets Authority (ESMA) demonstrated the overall soundness

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.

of European CCPs, including the CC&G, which is endowed with a substantial default fund. However, potentially serious consequences could arise if large banks that are members of more than one CCP were to default.

Liquidity management and settlement in T2S improve

As regards securities settlement, after an initial period of fine-tuning of all the functions available on the TARGET2-Securities settlement platform (T2S), the share of transactions not settled at the original settlement date (fails) returned to normal levels (1.5 per cent). The new operating procedures did not trigger an increase in Italian banks' intraday liquidity risk, thanks in part to the platform's new optimization mechanisms and the abundant availability of collateral at the Bank of Italy. Further delays in the migration to T2S of other central securities depositories that handle large volumes of transactions could defer the benefits stemming from greater integration and smoothness of cross-border flows.

4 BANKS

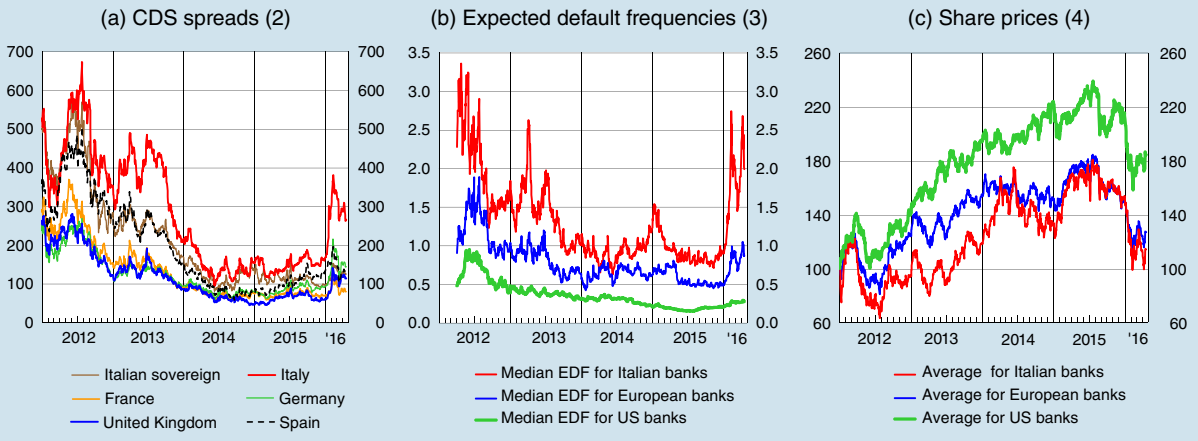
4.1 MARKET INDICATORS

Uncertainty over economic growth dampens banks' share prices

Market indicators for the major banks have worsened since last November in all the main economic areas (Figure 4.1), largely reflecting the increasingly uncertain prospects for growth (see Section 1.1). In Europe, the slump in bank shares has been amplified by the imbalances generated by the protracted crisis, such as the heavy burden of non-performing loans in the balance sheets of the banks most exposed to the recession, and by the investments by some large groups in difficult to value structured financial instruments (see the box 'Recent developments in banks' share prices in the euro area'). Investors' decisions also reflected uncertainty over some aspects of regulations, including the limits on profit distribution and, following the resolution of some banks in Portugal and in Italy at the end of 2015,[1] the application of the new bail-in rules that came fully into force in Europe at the beginning of this year.[2]

Figure 4.1

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



Sources: Based on data from Bloomberg, FTSE, I/B/E/S, 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) Daily data; basis points. Five-year CDS spreads. – (3) Daily data; percentage points. 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 one year. – (4) Average share prices are calculated with reference to price indices; closing price on 31 December 2011=100).

[1] For more details see the page of the Bank's website entitled '*The supervisory activities of the Bank of Italy and bank resolution*'.

[2] See the box 'The new rules for banking crises: transposition of the Bank Recovery and Resolution Directive into Italian law', *Financial Stability Report*, No. 2, 2015.

RECENT DEVELOPMENTS IN BANKS' SHARE PRICES IN THE EURO AREA

The decline in the share prices of euro-area banks that began in late October of last year was far sharper than that in the general stock market indices and steepened in the early months of 2016. The drop in banks' share prices is in large part attributable to the rise in the risk premiums demanded by investors, while the deterioration in earnings expectations has played a secondary role.[1]

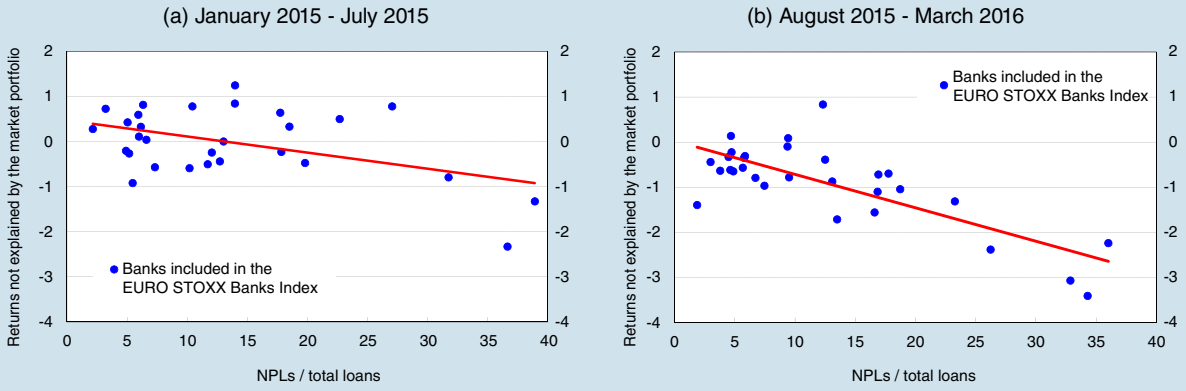
In order to identify the factors in the decline in banks' share prices, for each bank whose shares are included on the EURO STOXX Banks index we regressed the return in excess of the risk-free rate (approximated by the yield on the 10-year Bund) on the return on the market portfolio (EURO STOXX 50 index) and a constant:

$$r_{it} - r_t^f = \alpha_i + \beta_i\left(r_t^{mkt} - r_t^f\right) + \varepsilon_{it} \qquad (1)$$

The equation was estimated using weekly data for the periods from January-July 2015 and August 2015-March 2016. The estimates of the coefficients β_i capture the banks' exposures to the market portfolio, while the intercepts α_i measure the average return for each bank not explained by the market portfolio. The estimated terms α_i were then regressed on some banks' balance sheet indicators, such as net interest income, income from fees and commissions, and the ratio of non-performing to total loans (a gauge of credit quality):

$$\alpha_i = c + \gamma_1 MARG\_INT_i + \gamma_2 MARG\_COM_i + \gamma_3 NPL_i + u_i \qquad (2)$$

Returns on banks' shares not explained by the market portfolio relative to non-performing loans (1)
(per cent)



Source: Based on Bloomberg data.
(1) Returns not explained by the market portfolio are represented by the α_i intercept terms estimated in equation (1). The red line represents the regression line estimated by regressing the α_i on NPLs and measures the average relationship between the returns not explained by the market portfolio and the ratio of non-performing loans to total loans. In the first time interval, the NPL ratio refers to the fourth quarter of 2014. In the second interval, the NPL ratio refers to the second quarter of 2015. NPL ratios are calculated before writedowns.

In the first time interval considered, the return on banks' shares not explained by those of the market portfolio are positively correlated with interest income and income from fees and commissions. There

[1] The ratio between the market price of a share and its book value (price-to-book ratio, PTB) can be decomposed into the product of two components: PTB = FROE x FPE. The forward return-on-equity ratio (FROE) is the ratio of expected future earnings of a share one year ahead to its book value and measures the contribution of the expected profitability of equity to the determination of the PTB. The forward price-to-earnings ratio (FPE) is the ratio of the share's market price to expected earnings one year ahead and approximates the implicit discount rate used by investors to discount future cash flows. This rate is, in turn, the sum of a risk-free rate (generally approximated by the returns on government securities) and a risk premium.

is also a weak negative correlation between the returns and credit quality. The results change radically starting in August 2015: the correlations between the returns not explained by the general stock market index and net interest income and income from fees and commissions become insignificant, while the negative correlation with non-performing loans increases considerably (see the figure).

Analogous results are obtained if we include the country effects (dummy variables) for Italy and Germany, two countries for which the decline in banks' shares has been particularly pronounced. The country effect for Italy is not statistically significant, indicating that the market's assessments were not significantly influenced by factors other than those included in the analysis. By contrast the country effect for Germany was statistically significant, indicating the existence of other specific factors. One of these could be uncertainty about how to implement regulations concerning the maximum amount of earnings that can be distributed.[2]

[2] This uncertainty could be the source of concerns regarding the suspension of payment of coupons on additional Tier 1 capital instruments.

The large volume of non-performing loans affects Italian banks' market indicators

The worsening of the market indicators was particularly sharp for Italian banks owing to the greater attention paid by investors to the large stock of non-performing loans and, in recent weeks, to uncertainty about the outcome of some banks' capital-increase operations. Italian banks' share prices have lost 30 per cent since November (European bank shares are down 22 per cent) and their volatility has increased, with peaks of over 40 per cent. Italian banks' CDS spreads have gone up from 170 to 260 basis points (while those of a sample of large European banks have risen from 80 to 130 basis points).

Markets welcome the announcement of the Atlante fund

In April Italian banks' share prices rallied thanks to the announcement of the creation of the Atlante fund (see the box 'The launch of the Atlante fund'). It is a private fund, designed to support future capital increases of banks by intervening as buyer of last resort and investing in non-performing loans. It will help to prevent a negative spiral forming between perceived need to unload the NPLs quickly, causing banks additional losses, fall in share prices, and uncertainty about the outcome of future capital increases.

THE LAUNCH OF THE ATLANTE FUND

On 11 April a variety of banks, insurance companies, pension funds and other institutional investors agreed to participate in the launch of the alternative investment fund known as 'Atlante', which will be managed by Quaestio Capital Management Company SGR SpA. All the investors in the fund belong to the private sector, avoiding the risk that its interventions might be considered in violation of the rules on state aid.[1] The fund's regulation ensures the management company's formal and substantive independence from the investors, so in the event that it acquires control of one or more banks, the management company will be able to exercise the typical powers of shareholder with ample discretion.

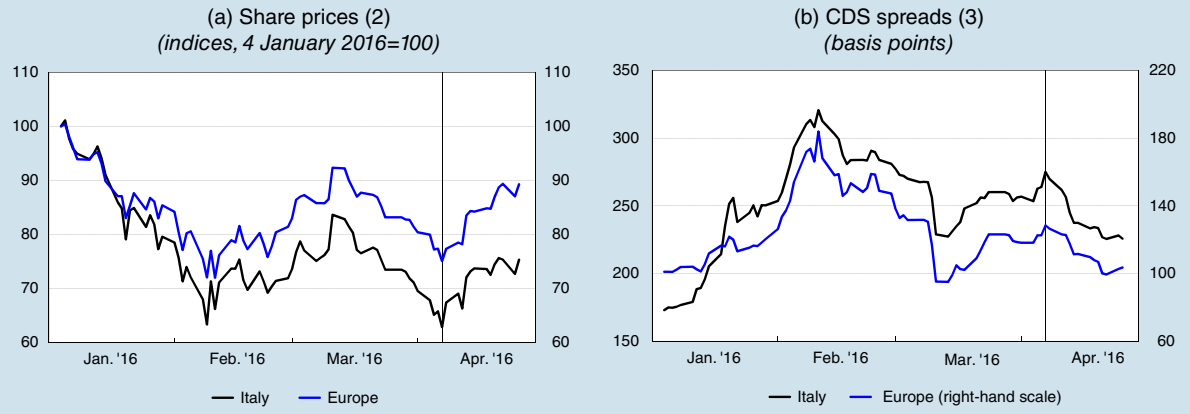
The management company intends to raise up to a minimum of €4 billion through Atlante. The resources will be invested in two types of asset: (i) shares of banks that must make capital increases at the request of the supervisory authority, and (ii) tranches of bad debt securitizations. The first type of

[1] Cassa Depositi e Prestiti SpA, a joint stock company controlled by the Italian Ministry of Economy and Finance, is outside the perimeter of general government and invests resources equal to around one tenth of the total raised by the fund.

investment is intended to create a backstop for future capital increases by banks, starting with those already planned by Banca Popolare di Vicenza and Veneto Banca. The second aims to encourage the development of the non-performing loan (NPL) market, which continues to suffer the consequences of Italy's protracted and deep recession. The investments will concentrate on the riskiest (junior and mezzanine) tranches of securitizations, whose market is particularly small. Atlante is an important complement to the other measures taken to lighten the burden of NPLs on banks' balance sheets.

The market has responded positively to the launch of Atlante. From 7 April, when the first reports of the fund's creation began to circulate, to 26 April Italian banks' share prices gained 20 per cent on average and their CDS spreads decreased by 50 basis points (see the figure).

Market reaction to the announcement of the launch of the Atlante fund (1)
(daily data)



Source: Based on Thomson Reuters Datastream data.
(1) The data in panel (a) refer to the EURO STOXX Banks and FTSE Italy Banks indices. In panel (b) the following banks are included: for Italy, UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Mediobanca, Banco Popolare, Banca Popolare di Milano and UBI Banca; for France, BNP Paribas and Société Générale; for Germany, Deutsche Bank and Commerzbank; for Spain, Banco Santander and Banco Bilbao Vizcaya Argentaria. – (2) The share prices are calculated with reference to price indices. – (3) Average of CDS spreads on 5-year senior debt.

4.2 ASSET RISKS

Credit

The recovery in credit is slow and selective

The propensity of Italian banks to assume risks remains limited, notwithstanding the stimulus of a strongly expansionary monetary policy. Although the credit supply conditions are easing, they are still governed by prudence. The increase in lending is limited to the most secure customer segments, such as households and firms, especially large ones, with sound financial conditions (see Section 2). In the coming months, lending will draw momentum from the new expansionary measures taken by the Governing Council of the ECB on 10 March 2016 (see the box 'The monetary policy measures adopted in March', *Economic Bulletin*, No. 2, 2016), but it may be limited by uncertainty regarding growth prospects.

The flow of new non-performing loans diminishes …

The risk indicators continue to improve. Already in the fourth quarter of 2015 the flow of new non-performing loans (NPLs) in proportion to total loans fell to 3.3 per cent, the lowest level recorded since the third quarter of 2008 (Figure 4.2). According to our projections, which are consistent with the latest macroeconomic

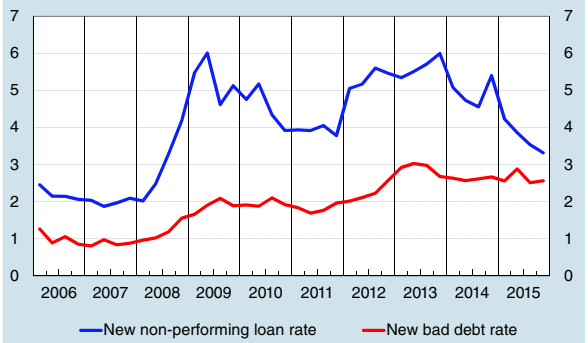
scenarios and Consensus Economic forecasts, the rate of new bad debts will gradually decline in 2016, falling to just over 3 per cent for loans to firms (currently 4.1 per cent) and 1 per cent for loans to households (currently 1.6 per cent).

… and the stock stabilizes

Even the stock of NPLs, after peaking at €363 billion in September, has fallen slightly for the first time since 2008. At the end of 2015 NPLs amounted to €360 billion, or 18.1 per cent of the stock of outstanding customer loans (Table 4.1). Net of provisions they amount to 10.8 per cent of total loans (4.8 per cent for bad debts alone). In 2015, €9 billion worth of bad debts[3] were sold and derecognized from banks' balance sheets, twice as much as in 2014. Of the bad debts sold, 80 per cent consisted of loans to firms.

Figure 4.2

New non-performing loan rate and new bad debt rate (1)
(per cent)



Source: Central Credit Register.
(1) Annualized quarterly flows of adjusted NPLs and adjusted bad debts in relation to the stock of loans at the end of the previous quarter net of adjusted NPLs and adjusted bad debts; data seasonally adjusted where necessary.

Table 4.1

Credit quality: amounts and shares of non-performing loans and coverage ratios (1)
(billions of euros and per cent; December 2015)

	5 largest groups			Large banks			Small banks			Minor banks			Total		
	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:	**1,232**	**100.0**	**9.0**	**430**	**100.0**	**8.2**	**148**	**100.0**	**8.8**	**180**	**100.0**	**8.2**	**1,990**	**100.0**	**8.8**
Performing	1,007	81.7	0.7	354	82.3	0.6	123	82.9	0.8	147	81.3	0.7	1,630	81.9	0.7
Non-performing (2)	225	18.3	46.5	76	17.7	43.4	25	17.1	47.6	34	18.7	40.8	360	18.1	45.4
Bad debts (3)	135	11.0	58.9	41	9.5	58.6	15	10.4	61.5	19	10.5	55.3	210	10.6	58.7
Other	90	7.3	27.9	35	8.2	25.6	10	6.8	26.2	15	8.3	22.5	150	7.6	26.7

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 December 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. – (3) This subcategory represents an unharmonized Italian concept that distinguishes lower-quality exposures from other non-performing exposures.

Securitized bad debts may access a state guarantee scheme …

Following an agreement reached with the European Commission, as of January a state guarantee scheme is available (*garanzia sulla cartolarizzazione delle sofferenze*, GACS) for senior tranches of securitized bad debts with investment-

[3] The figure does not include sales of bad debts belonging to banks undergoing resolution (equal to about €8.5 billion), which was completed in the first few months of 2016.

grade rating.[4] The guarantee will be offered at market conditions and as such will not constitute state aid. Its cost will be based on an average of CDS premiums on Italian issuers with ratings similar to covered securities and will grow with time, partly to create an incentive to keep securitized debt recovery times short.

… adding to the other measures in place for the development of an NPL market

The efficacy of the guarantee scheme in developing an NPL market will be assessed together with the creation of the Atlante fund and with initiatives that should improve banks' less than efficient management of NPLs (see the box 'The management of banks' non-performing loans'). The Government recently announced additional measures, which strengthen the effects of legislation adopted last summer,[5] to shorten credit recovery times and align them with international best practices.

THE MANAGEMENT OF BANKS' NON-PERFORMING LOANS

In the second half of 2015 the Bank of Italy conducted a survey on the effectiveness of the procedures for managing non-performing loans (NPLs) at 25 large Italian banking groups to gather information on recovery times and rates, the use of the different procedures, and the chief impediments to effective credit recovery.[1]

The recovery rates for liquidation procedures concluded in the period 2011-14 averaged 40 per cent, about 50 per cent for property foreclosure sales and just under 30 per cent for bankruptcies (panel (a) in the figure). Over this period the percentages recovered declined for every type of procedure, presumably because of the growing difficulty of selling defaulted firms' assets on the market in an unfavourable cyclical situation. In the absence of data on the individual loans, the average recovery rates are not directly comparable with the coverage ratios.

Most recoveries occur in the five years following the start of the liquidation (panel (b) in the figure). Examining the procedures under way at 31 December 2014, the liquidations had been open for an average of 3.5 years; nearly 60 per cent of the volumes referred to procedures open for less than three years, a proportion probably pushed up by the recession.

The survey also collected information on the characteristics of the restructuring procedures, whose purpose is to enable firms to stay in business. On average, loans to firms undergoing restructuring are backed by collateral security for about 50 per cent of the loan amount, 8 percentage points more compared with loans to liquidated firms. This suggests that the willingness of debtors to reach agreements that preserve the firm as a going concern increases with the degree of collateralization.

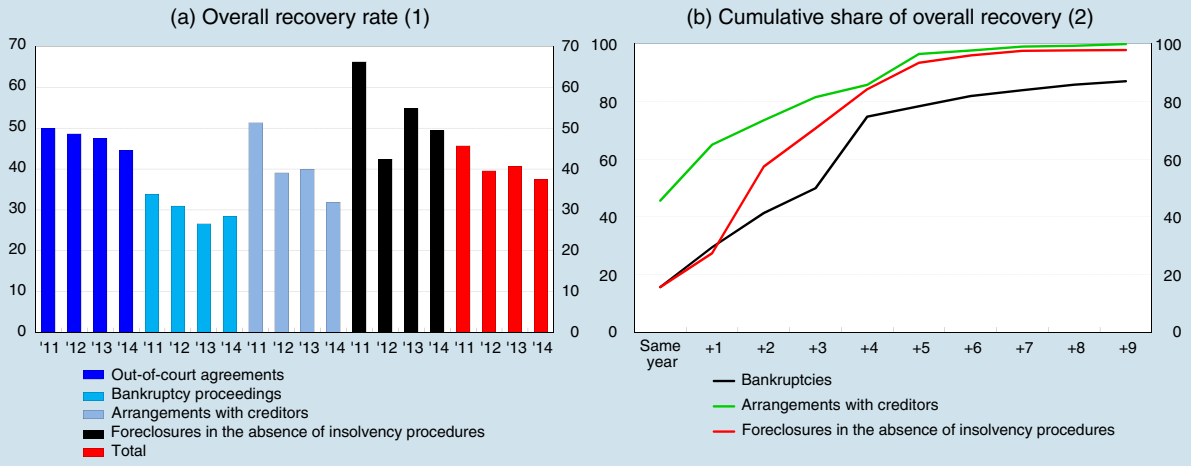
The average age of the procedures at the end of 2014 was 1.8 years; almost 90 per cent of the amounts related to procedures under way for less than three years. Restructurings are rarely definitive; four years after their inception, 62 per cent were still open and 23 per cent had been transformed into liquidations; just over 10 per cent had been concluded with a return to financial equilibrium, and the remaining 5 per cent with the acquisition or merger of the firm into other firms.

[1] See L. Carpinelli, G. Cascarino, S. Giacomelli and V. Vacca, 'The management of non-performing loans: a survey among the main Italian banks', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), No. 311, 2016.

[4] Decree Law 18/2016, converted, as amended, into Law 49/2016.

[5] See M. Marcucci, A. Pischedda and V. Profeta, '*The changes of the Italian insolvency and foreclosure regulation adopted in 2015*', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 2, 2015.

Recovery rates on liquidation procedures
(per cent)



(1) Recovery rates of the procedures closed in the period 2011-14. – (2) Procedures concluded in 2014.

Banks indicated that court backlogs and the complexity of the procedures were the chief impediments to effective credit recovery. In their view, restructurings are hindered mainly by the difficulty of disbursing new credit after the start of the procedure, professional fees, and coordination difficulties with non-financial creditors. The changes to bankruptcy law and to the Code of Civil Procedure introduced by Law 132/2015 can help to reduce non-performing-loan recovery times significantly (see the box 'The recent measures on credit recovery procedures and the tax deductibility of loan losses and write-downs', *Financial Stability Report*, No. 2, 2015).

In 2014 the management of NPLs accounted for 2.8 per cent of banks' operating expenses, a larger share than in 2008 and with respect to the findings of previous surveys. Non-performing loans are mostly managed by means of transfer to third parties or through dedicated in-house units, while for the recovery of claims involving small amounts banks often outsource the activity to specialized companies.

The survey found marked differences among banks' organizational arrangements for the management of NPLs. Some groups have specialized organizational units, typically separate for the management of liquidations and restructurings; others have more fragmented structures. The Bank of Italy recently began a statistical survey to gather detailed data on this asset class, the collateral backing them and the state of the recovery procedures under way. The data will not only assist more effective supervisory action but will also permit banks to manage NPLs more efficiently.

Non-performing loans are covered by capital and provisions

Over the last three years, the write-downs made by banks entailed an increase of about 8 percentage points in the NPL coverage ratio (the amount of loan loss provisions in relation to corresponding gross exposures), which was 45.4 per cent at the end of 2015, a value in line with the average for the main European banks (Figure 4.3). Non-performing loans are slightly greater than the sum of common equity tier 1 capital and provisions: the Texas ratio,[6] though relatively high by international comparison, is actually only slightly more than 100 per cent.

[6] The Texas ratio is the ratio of gross NPLs to the sum of common equity tier 1 capital and loan loss provisions.

Half of non-performing loans are secured by collateral

Bank loans secured by collateral amount to €160 billion (Table 4.2), about 50 per cent of gross non-performing exposures (67 per cent including personal guarantees). With respect to bad debts, the value of the collateral exceeds the book value of the loans.

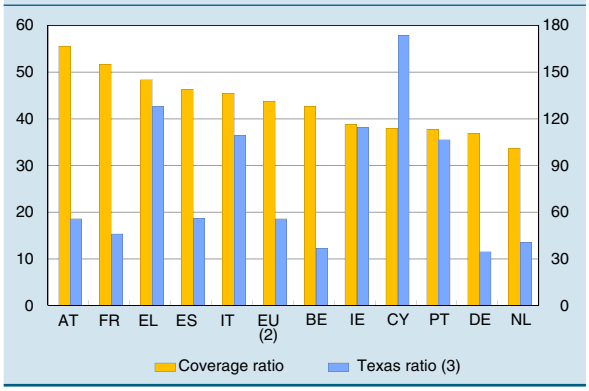
The gap remains between valuations made by banks and investors

Differences between the valuations made by banks and investors continue to hinder the development of an NPL market. Two of the factors that contribute to the gap are attributable to the use of different valuation criteria. In compliance with the IAS/IFRS accounting principles, banks discount future cash flows with the assets' original effective interest rate while investors use the expected return on the investment, presumably a significantly higher value.[7] Moreover, international accounting principles require that banks enter in their annual accounts the indirect costs of managing NPLs (legal expenses, administrative costs, etc.) on an accrual basis, while potential purchasers immediately deduct them from the actual value of the bad debt, consequently reducing its purchase price.

Figure 4.3

Coverage ratio of NPLs and Texas ratio for a sample of European banks (1)

(per cent; December 2015)



Sources: Based on European Banking Authority data.
(1) The coverage ratio is the ratio of loan loss provisions to the corresponding gross exposures. The Texas ratio is the ratio of gross NPLs to the sum of common equity tier 1 capital and loan loss provisions. The sample includes 151 European banks of which 15 are Italian. – (2) European average. – (3) Right-hand scale.

Table 4.2

Non-performing loans and guarantees by counterparty sector (1)

(billions of euros and per cent; December 2015)

	Gross exposures	Net exposures	Collateral	Personal guarantee	Coverage ratio	Coverage ratio for unsecured loans
			Firms			
Non-performing customer loans	250	136	119	49	45.5	57.7
of which: bad debts	144	58	62	35	59.7	74.5
			Consumer households			
Non-performing customer loans	54	32	36	2	41.3	66.0
of which: bad debts	34	17	22	1	52.0	76.5
			Total (2)			
Non-performing customer loans	317	175	160	52	44.7	58.6
of which: bad debts	184	76	85	37	58.5	74.8

Source: Individual supervisory reports.
(1) The data are from non-consolidated balance sheets that do not include loans granted by financial corporations belonging to a banking group or by foreign subsidiaries of Italian groups. The amount of the collateral does not necessarily correspond to its fair value but to the amount of collateralized credit. For example, for loans secured by a guarantee with a higher fair value than the amount of the loan, the amount reported is that of the actual loan. – (2) Includes general government, financial and insurance corporations, non-profit institutions serving households and non-classifiable and unclassified entities.

[7] L. G. Ciavoliello, F. Ciocchetta, F. M. Conti, I. Guida, A. Rendina, and G. Santini, '*What's the value of NPLs?*', Banca d'Italia, *Notes on Financial Stability and Supervision*, No. 3, 2016.

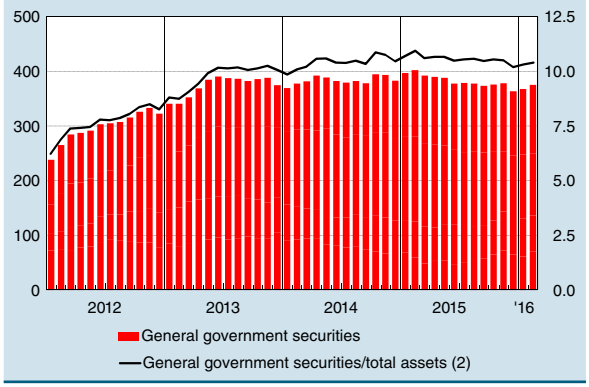
Holdings of government securities decrease

With the lessening of tensions in the sovereign debt market and the tightening in the differential between the risk-adjusted return on loans and securities, banks have reduced holdings of Italian government bonds in their portfolios. In the twelve months ending in February, the amount of government securities held by banks fell by €27 billion to €375 billion (from 10.9 to 10.5 per cent of total assets; Figure 4.4). As with other European banks, the reduction in investments ceased in the first few months of 2016 in conjunction with the tensions in the financial markets.

Figure 4.4

Banks' investments in Italian general government securities (1)

(billions of euros; per cent)



Source: Supervisory reports.
(1) Incorporates all general government securities, including those issued by local authorities. Excludes Cassa Depositi e Prestiti SpA. – (2) Right-hand scale.

The Basel Committee on Banking Supervision and the Economic and Financial Committee of the European Union are evaluating the prudential regulations on intermediaries' exposure to sovereign debt. Any ensuing modification must seek to avoid negative repercussions on financial stability (see the box 'The regulation of banks' sovereign debt exposure').

THE REGULATION OF BANKS' SOVEREIGN DEBT EXPOSURE

The tensions involving the sovereign debts of some European countries highlighted the strong ties that exist between the soundness of banks and that of public finances and sowed doubts as to the true riskiness of sovereign exposures and hence the suitability of the current prudential regulatory framework. Regulation grants preferential treatment to banks' exposures to sovereign entities of advanced economies, setting a virtually nil capital requirement for credit risk and exempting them from the rules on concentration risk (large exposures).[1]

The benefits of a possible reform are uncertain: the soundness of banks will continue to be influenced by the state of the public finances in their country of residence because of the many possible channels of contagion.[2] For example, strong tensions on the market for sovereign securities impinge on economic activity, on households' and firms' balance sheets and, through these channels, on banks' balance sheets. Moreover, existing regulation already provides for important safeguards against banks' sovereign exposures: sovereign risk is taken into account both in the European stress tests overseen by the EBA, which are used in assessing the capital adequacy of the main EU banks, and in the prudential leverage ratio, which means that a capital requirement will be applied to those exposures.

[1] M. Lanotte, G. Manzelli, A.M. Rinaldi, M. Taboga, P. Tommasino, '*Easier said than done? Reforming the prudential treatment of banks' sovereign exposures*', Banca d'Italia, Questioni di economia e finanza (Occasional Papers), No. 326, 2016.

[2] F. Panetta, *The impact of sovereign credit risk on bank funding conditions: report submitted by a study group established by the Committee on the global financial system*, Bank for International Settlements, CGFS Papers, 43, 2011.

The microeconomic and macroeconomic costs of revising the current regulatory framework could be significant. From the microeconomic point of view, analyses conducted on data provided by the EBA's EU-wide transparency exercise make it possible to assess the impact of a number of potential revisions of existing regulations using a large sample of major European banks.[3] With respect to sovereign exposures held in bank portfolios, two options were examined: (a) the weighting of exposures using risk weights consistent with the rating assigned to the sovereign issuers by rating agencies; (b) a uniform risk weight of 10 per cent for all sovereign exposures, regardless of the issuer.

In the first scenario the most penalized would be banks with large investments in sovereign securities with lower ratings, e.g. Portuguese, Italian and Spanish banks, whose average tier 1 ratios would decrease by 130, 120 and 80 basis points respectively. In the second scenario, the most affected would be banks with a large percentage of sovereign exposures in relation to total assets, regardless of the counterpart's rating; in this scenario, German and Italian banks would record the greatest drop in the average tier 1 ratio, down by 50 and 30 basis points respectively.

The potential revision of the rules governing concentration risk could have important overall effects, making it necessary, under certain circumstances, to transfer large amounts of sovereign securities. If a 100 per cent limit on tier 1 capital were to be imposed immediately, German, Italian and Spanish banks would have to reduce their sovereign exposures by 7.2 per cent, 4.7 per cent and 5.5 per cent of the amount outstanding of their country's public debt. These figures would drop to 3.7 per cent, 1.6 per cent and 0.4 per cent if the concentration limit were set at 200 per cent of tier 1 capital.

From a macroeconomic point of view, the effects on the public securities market could be destabilizing. Introducing a binding limit on the share of sovereign exposures in banks' portfolios could significantly limit the role played in dampening financial tensions by the banks of certain countries that went 'against the flow' during the sovereign debt crisis. Furthermore, a weighting system based on agencies' ratings would have a number of limitations:[4] a belated and abrupt revision of the rating would tend to exacerbate the procyclical bias of capital regulation, and, especially for financial instruments that no longer qualify as investment grade, could trigger tensions in the markets. If an international consensus were reached within the Basel Committee on Banking Supervision or at the EU level to revise the current framework, it would be advisable to use a methodology based on indicators of public finance sustainability developed by leading international institutions and published regularly.

[3] The sample includes 39 banks from 8 European countries (Austria, Germany, France, Italy, United Kingdom, Spain, Portugal, and the Netherlands).

[4] IMF (2010), Global Financial Stability Report, October, 2010.

Exposure towards energy-exporting developing and emerging countries falls

The exposure of Italian banks vis-à-vis the emerging and developing countries as a whole is low; it is centred on the European countries (Table 4.3). On the basis of internationally comparable data released by the Bank for International Settlements, these exposures represent 6 per cent of the total, a value smaller than that recorded by banks in Spain (16 per cent) and in the United Kingdom (14 per cent). In the second half of 2015, loans made by banks to residents of energy-exporting developing and emerging countries, equal to less than 1 per cent of total exposures, fell by 9 per cent.

Table 4.3

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

	Public sector	Banks	Financial corporations	Households and firms	Total	Percentage change in total from 6 months earlier	Per cent of total exposures reported to the BIS (2)	Per cent of total exposures to residents and non-residents (3)
Euro area	104.3	71.5	46.5	184.8	407.1	-0.8	7.7	15.6
Other industrialized countries	18.2	26.1	23.0	29.1	96.4	8.5	1.1	3.4
Emerging and developing countries	45.9	14.4	4.6	105.6	170.5	-0.4	4.1	6.3
Europe	42.2	7.8	4.1	95.7	149.7	-1.0	15.1	5.6
of which: Russia	1.3	1.5	0.3	12.4	15.5	-8.9	14.4	0.6
Africa and the Middle East	2.9	0.7	0.1	5.2	8.9	7.4	1.8	0.3
Asia and Pacific	0.4	3.1	0.4	2.8	6.6	-13.2	0.4	0.2
Central and South America	0.5	2.8	0.0	1.9	5.2	27.7	0.6	0.2
Offshore centres	0.2	0.5	1.4	5.1	7.2	8.4	0.3	0.2
Total	**168.6**	**112.5**	**75.4**	**324.5**	**681.1**	**0.6**	**3.2**	**25.5**
Memorandum item:								
Energy-exporting emerging and developing countries (4)	1.5	2.1	0.4	14.6	18.6	-8.6	4.1	0.7

Sources: Consolidated supervisory reports for banking groups, individual supervisory reports for banks not belonging to a group, and BIS.
(1) Exposure to 'ultimate borrowers', gross of bad debts and net of provisions. Does not include BancoPosta and Cassa Depositi e Prestiti SpA. – (2) As a percentage of the total foreign exposures to each country in September 2015 reported to the BIS by a large set of international banks. – (3) BIS data as at September 2015. – (4) Includes Algeria, Angola, Azerbaijan, Bahrain, Bolivia, Brunei, Chad, Colombia, Congo, Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kazakhstan, Kuwait, Libya, Nigeria, Oman, Qatar, Russia, Saudi Arabia, Sudan, Timor Leste, Trinidad and Tobago, Turkmenistan, United Arab Emirates, Venezuela, and Yemen.

4.3 REFINANCING RISK AND LIQUIDITY RISK

Funding conditions are stable and funding costs are falling

The liquidity of the Italian banking system as a whole has remained stable, even after the uncertainty prompted by the resolution of four banks in November and during the most acute period of market turmoil in early 2016. There have been strains at a small number of banks, but these have been of limited duration; no outflows of deposits abroad or to other investment instruments has been registered. Between the end of September and February, given weak loan growth, funding too has remained stable (Table 4.4); its average cost, following the pattern of money market rates, came down by 20 basis points to 0.5 per cent. Recourse to Eurosystem refinancing diminished. Deposits expanded further, offsetting almost two thirds of the decline of bank bonds held by households, which have been falling sharply since the start of 2012 (see Section 2.1). Foreign funding increased, especially in the form of repos (see Section 3.1).

Net bond issues are again negative

Abundant money market liquidity and the high volatility of bond risk premiums made the issuance of unsecured bonds less attractive. In the half-year that ended in March, Italian banks' issues on international markets replaced only one third of the securities reaching maturity (Figure 4.5.a).

Table 4.4

Italian banks' funding (1)
(billions of euros)

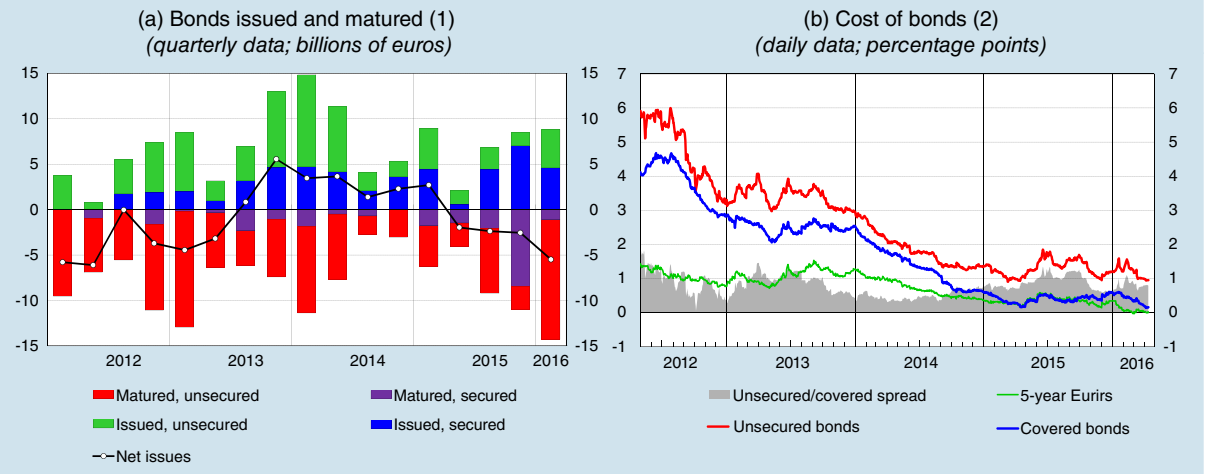
	End-of-month stocks			Change, September 2015 - February 2016 (2)
	September 2015	December 2015	February 2016	
Retail funding (a)	1,592	1,583	1,584	-9
Deposits of residents (3)	1,371	1,373	1,386	15
Bonds (4)	222	209	197	-25
Wholesale funding (b)	559	579	584	19
Deposits of non-residents	311	323	322	11
Net liabilities to central counterparties (5)	57	59	74	17
Bonds	192	197	188	-9
Eurosystem refinancing (c) (6)	164	158	152	-12
Total funding (a+b+c)	**2,316**	**2,320**	**2,318**	**-2**

Sources: Individual supervisory reports; includes Cassa Depositi e Prestiti SpA.
(1) Excludes liabilities to other banks resident in Italy. The data for February 2016 are provisional. – (2) Adjusted for reclassifications, value adjustments and exchange rate variations. – (3) Excludes transactions with central counterparties. – (4) Bonds held by households. – (5) Repurchase agreements only, representing foreign funding via central counterparties. – (6) Includes transactions with the Eurosystem for monetary policy operations; see Monetary and Financial Indicators, Money and Banking, *Supplements to the Statistical Bulletin*, Tables 1.4a and 1.4b.

Credit institutions in the other leading euro-area countries also made net redemptions. In the secured bond segment, less costly and with less volatile yields (Figure 4.5.b), there were positive net issues of €2 billion. In the first quarter of 2016 medium-sized banks also placed secured bond issues.

Figure 4.5

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, or those of Italian banks' foreign subsidiaries. Includes bonds deriving from securitizations. – (2) Yields at maturity of Italian banks' bonds with residual maturity of 5 years.

Subordinated bond yields rise

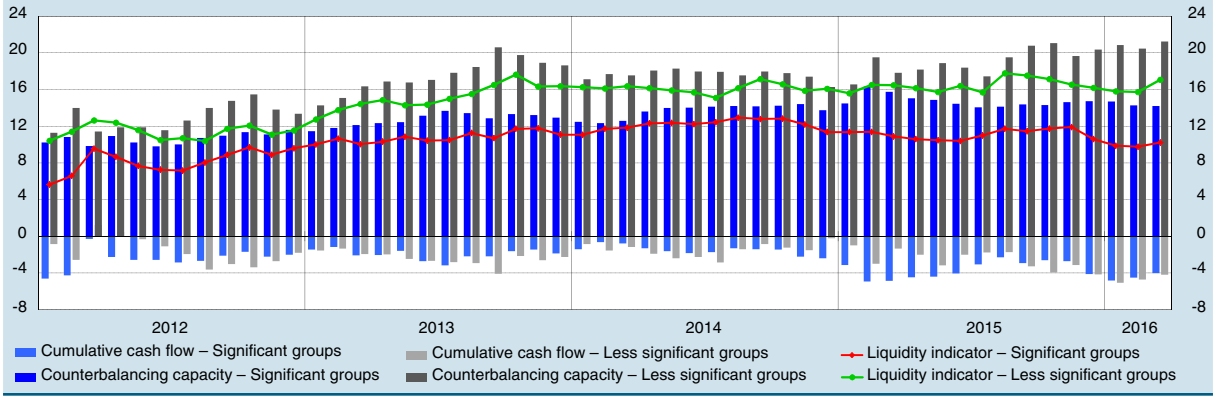
The turmoil in the financial markets caused a substantial rise in the yields of subordinated bonds, which was partially reversed in March. The increase, common to the banks of other European countries, was significantly greater for banks with higher shares of non-performing loans. Last February the total amount of Italian banks' outstanding subordinated bonds was €66 billion, equal to 11 per cent of total bank bonds.

Liquidity buffers are ample

The Italian banking system has ample liquidity reserves, sufficient to cope with possible net outflows in stress situations. In March the net liquidity position tracked weekly by the Bank of Italy was 10 per cent of assets at the significant banks, those supervised directly by the ECB, and 17 per cent at the less significant ones supervised by the Bank of Italy in close cooperation with the ECB (Figure 4.6). The decline observed between November 2015 and the beginning of 2016, owing to a contraction of customer deposits at a small number of banks, was temporary. In March the liquidity position improved also at the banks that had suffered the reduction in funding. The liquidity coverage ratio (LCR) was well above the minimum requirement in December 2015, the latest month for which data are available (see the box 'The liquidity coverage ratio').[8]

Figure 4.6

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



Source: Data transmitted to the Bank of Italy by a sample of 29 banking groups for periodic monitoring of their liquidity positions.
(1) Simple averages for 14 significant banks (supervised directly by the ECB) and 15 less significant banks (supervised by the Bank of Italy in close cooperation with the ECB). 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 rollover of maturing obligations towards institutional counterparties.

THE LIQUIDITY COVERAGE RATIO

Commission Delegated Regulation (EU) 2015/61 came into effect on 1 October 2015, introducing a liquidity requirement for credit institutions to ensure they maintain adequate liquidity to meet cash outflows expected over a 30 calendar day period.

The liquidity coverage ratio (LCR) is the ratio of a credit institution's liquidity buffer to its expected net liquidity outflows over a 30 calendar day stress period. The liquidity buffer comprises highly liquid uncollateralized financial assets. The Regulation identifies the asset categories eligible for inclusion in the buffer (cash, government bonds, covered bank bonds and securities from securitizations with certain characteristics) and the haircuts to be applied to the market value of each depending on how rapidly they can be liquidated. The net liquidity outflows expected over a 30 calendar day stress period are equal to expected income less expected outflows over a month, calculated by applying haircuts set by the Regulation to the various categories of assets and liabilities.

[8] Regulatory LCR differs from the net liquidity position tracked by the Bank of Italy in that for the latter aggregate net outflows are estimated by bank treasuries, whereas for the LCR they are calculated from balance sheet data, applying regulatory ratios designed to quantify the reduction in asset values and the outflow of liabilities under predetermined stress scenarios.

From 1 January 2016 the LCR requirement is equal to 70 per cent; it will increase progressively until it reaches 100 per cent starting on 1 January 2018.

The liquidity coverage ratio of Italian banks
(data at 31 December 2015; per cent)

	LCR	Expected outflows over 30 days as per cent of total assets	Liquidity buffer as per cent of total assets	Level 1 assets as per cent of liquidity buffer (1)
Top 5 groups (2)	147	9	13	97
Other significant banks (2)	113	8	9	96
Less significant banks (3)	217	6	13	100
Total system	**155**	**8**	**13**	**98**

Sources: Consolidated supervisory reports for banking groups; individual supervisory reports for banks not belonging to a group.
(1) Article 10, Commission Delegated Regulation (EU) 2015/61. – (2) Banks under direct supervision by the ECB. – (3) Banks supervised by the Bank of Italy in close cooperation with the ECB.

At the end of last year the LCR for the Italian banking system as a whole was equal to 155 per cent (see the table); for the five largest banking groups it was 147 per cent, higher than the average of 121 per cent recorded in June 2015 for a sample of 36 internationally active European banks. The assets in the liquidity buffer are high quality: 98 per cent consist of securities defined as 'level 1' by the Regulation, i.e. those that can be converted most quickly into cash during a stress period.

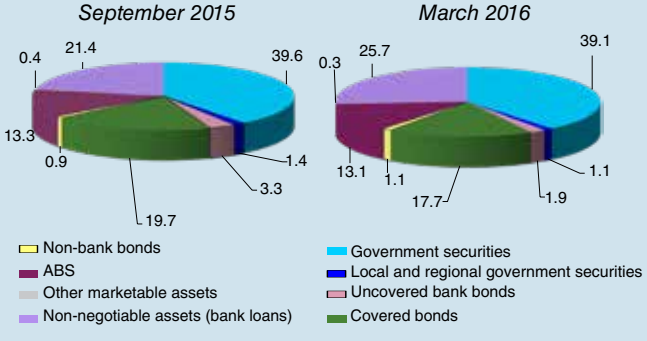
The share of bank loans in collateral posted with the Bank of Italy increases …

Between September and March the collateral pool posted with the Bank of Italy against borrowing from the Eurosystem shrank by €5 billion to €252 billion. While refinancing operations declined by €13 billion, the overcollateralization rate rose from 36 to 40 per cent. The share of the collateral pool consisting in bank loans increased further to 26 per cent (Figure 4.7.a), among the highest in any euro-area country.

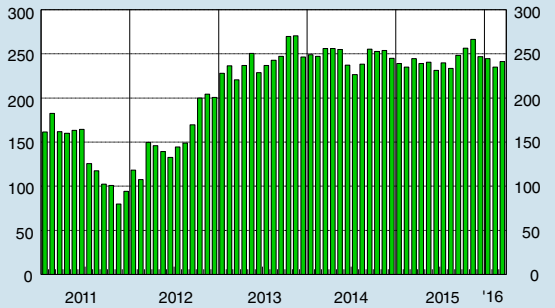
Figure 4.7

Eligible assets of the Italian banking system

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



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



Sources: Based on Eurosystem data and supervisory reports.
(1) End-of-period data for the monetary policy counterparties of the Bank of Italy. The collateral pool is valued at the prices taken from the Common Eurosystem Pricing Hub (CEPH) net of haircuts. – (2) End-of-period data for the entire banking system, excluding Cassa Depositi e Prestiti SpA. Securities eligible as collateral for the Eurosystem are deemed to be marketable. Amounts at market values as reported by banks, net of the haircuts applied by the Eurosystem.

… and unencumbered eligible assets remain abundant

The amount of negotiable securities outside the collateral pool, mostly government securities, remains substantial at €241 billion (Figure 4.7.b), equal to 164 per cent of the banks' exposure to the Eurosystem and 95 per cent of their repo market exposure.

4.4 INTEREST RATE RISK AND MARKET RISK

Exposure to interest rate risk is low and falling …

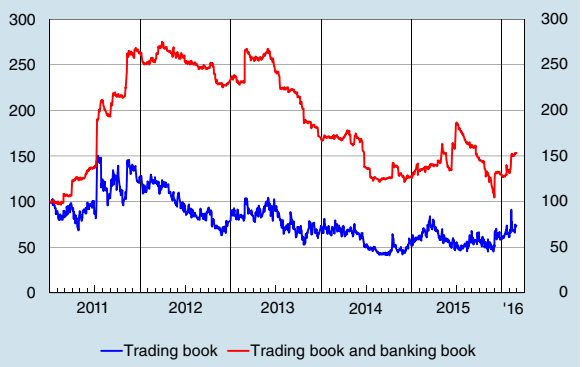
The prolonged period of low interest rates has not induced banks to take on greater interest rate risk, which instead has diminished. An upward shift of 200 basis points in the entire risk-free yield curve would result, for the 13 major Italian banking groups, in a decrease in the economic value of assets net of liabilities equal on average to 4.1 per cent of own funds in December 2015, compared with 4.8 per cent in June.[9] The exposure of all the major groups is well below the current early warning threshold of 20 per cent of own funds established by international regulations. The contrary scenario – namely a decline in interest rates such as to bring the yield curve down to zero for the maturities that posted positive rates in December 2015 while leaving the negative rates unchanged – would result in an average increase in the net economic value of the largest Italian banking groups equal to 2.8 per cent of own funds (compared with 3.9 per cent in June 2015).

… but market risk is growing

The value-at-risk (VaR) of all portfolios at fair value, i.e. both trading and banking books, and that for the trading book alone turned back upward in December in response to increased volatility in the main financial markets (Figure 4.8).

Figure 4.8

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 strengthening is proceeding

At the end of last year Italian banks' common equity tier 1 capital (CET1) was equal on average to 12.3 per cent of risk-weighted assets. For significant banks the CET1 ratio was 11.5 per cent, about 2 percentage points lower than the average found by the European Banking Authority for a sample of large European banks.[10] Two significant Italian banks are now carrying out capital increases for €2.5 billion that will enable them, like all the other significant Italian banks, to comply with the requests made by the ECB following the supervisory review and evaluation process concluded at the end of last year. A contribution to the good outcome of these operations will come from the recent creation of the Atlante fund. On the occasion of an important

[9] The change in the economic value of assets net of liabilities is calculated on the basis of the estimates of the 13 banks participating in the survey, using models that refer in particular to early loan repayment and the responsiveness of demand deposits to interest rate changes.

[10] For further details, see EBA, *Risk Dashboard. Data as of Q4 2015* (http://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard).

consolidation, another significant bank announced a €1 billion capital increase to ensure that the new banking group is well capitalized from the outset.

Capital ratios differ considerably by size class of bank: at the end of 2015 the average CET1 ratio for the top five banking groups was 11.8 per cent, while it was 16.6 per cent for smaller banks, especially mutual banks. The gap in favour of mutual banks has nearly halved since 2007, when it was almost 9 percentage points. For a growing number of these intermediaries, internal cash flows are no longer sufficient to provide all the funds needed to cope with the increasing coverage ratio of non-performing-loans and to sustain business expansion. Mutual banks' ability to strengthen their capital is limited by the constraints inherent in their cooperative form, which impinge on their ability to access capital markets. These features make it difficult for single mutual banks, where necessary, to increase their capital by the amount and with the rapidity required by the new regulatory and institutional framework. The recent reform of mutual banks, while preserving their cooperative nature, will make the system sounder and improve its corporate governance arrangements (see the box 'The recent reform of Italian mutual banks').

THE RECENT REFORM OF ITALIAN MUTUAL BANKS

The reform of the mutual banking sector has been enacted by Legislative Decree 18/2016 converted, as amended, into Law 49/2016. Its objective is to make the sector more integrated, encourage capital strengthening, and help smooth any difficulties due to the new European regulatory environment and banking union. At the same time, the reform preserves the essentially cooperative and territorial nature of this category of banks.

The reform introduces in the Consolidated Law on Banking the concept of the mutual banking group, consisting of a parent company incorporated as a joint stock company with net assets of at least €1 billion and the mutual banks (*banche di credito cooperativo* – BCCs) affiliated to it under a cohesion contract, as well as the other banking, financial and instrumental corporations controlled by the parent company.

The cohesion contract sets out, among other things, (a) the parent company's powers to direct and coordinate the BCCs belonging to the group, which must be proportional to their risk level; (b) the joint and several guarantee of the obligations assumed by the parent company and the BCCs; and (c) the requirements for admission to the group. In the event of a breach of the strategic orientation and operational objectives established by the parent company, the latter may adopt corrective measures and impose sanctions, including removing and replacing the management boards of the BCC and expelling it from the group.

As a rule, the majority of the share capital of the parent company is held by the BCCs in the group. However, where necessary, the Ministry of Economy and Finance, after consulting the Bank of Italy, can change the capital threshold to allow other shareholders to participate, even to the extent of reducing the BCCs' holding to less than a majority.

The parent company can recapitalize BCCs in difficulty through 'financing shares', a special category of shares that fully qualify as Common Equity Tier 1 of the issuing BCC and in the past could be purchased only by certain operators (guarantee schemes and mutual funds for the sector). In order to allow a large investment in relation to a BCC's capital and ensure that the financial intervention entails sufficient rights of governance, intervention by the parent company is not restricted to the limits as to amount, location and voting rights usually applyng to any cooperative shareholder of the BCC. To assist the capitalization of individual BCCs, the maximum share capital in a BCC that can be held by a single shareholder is increased from €50,000 to €100,000

and the minimum number of shareholders of a BCC is increased from 200 to 500. The mutualistic nature of the BCCs is safeguarded insofar as all such banks must conduct business chiefly with their shareholders and within their geographical area; compliance with this requirement qualifies a BCC as a predominantly mutualistic cooperative, even for the purpose of tax concessions.

The Ministry of Economy and Finance and the Bank of Italy have been assigned the power to issue secondary legislation to implement the reform. The Ministry, after consulting with the Bank of Italy, will be responsible for setting a minimum level of net assets of over €1 billion for the parent company; restricting the amount of share capital of the parent company that the BCCs can hold to less than a majority holding; and establishing procedures and criteria for safeguarding the linguistic and cultural heritage of BCCs located in special status regions and in the autonomous provinces of Trento and Bolzano. The Bank of Italy, on the other hand, is tasked with issuing provisions regarding the minimum organizational and operational requirements of the parent company; the minimum content of the cohesion contract; the details of the joint and several guarantee; and the procedure for setting up and joining a group.

There will be a transitional period for the changeover to the new system not exceeding 18 months from the entry into force of the secondary regulations implementing the reform. Membership of a banking group is compulsory in order to keep or obtain authorization to operate as a BCC. Rules have been introduced allowing BCCs that do not want to become part of a group to opt out if they comply with certain conditions. This 'opt-out clause' is available to BCCs singly or jointly provided that at least one of them has net assets exceeding €200 million at 31 December 2015 and that they apply to the Bank of Italy, within 60 days of conversion of the legislative decree, to sell the bank to a joint stock company, even one newly-established. BCCs choosing this alternative must pay the State a tax equal to 20 per cent of net assets. The rest of the capital reserves, kept by the seller, is transformed into a non-bank cooperative with the obligation to retain the clauses of a mutualistic nature in its by-laws, including the rule that reserves cannot be distributed among shareholders. If a BCC fails to obtain authorization from the supervisory authorities, it has 90 days to join one of the new cooperative banking groups or, failing that, to be transformed into a joint stock company or to be wound up, in both cases devolving all its assets to the mutual aid funds.

At the time the legislative decree was converted, provisions were introduced instituting an interim fund for mutual insurance and consolidation of the sector to operate in the interlude before the creation of the cooperative banking groups. The Fund will be set up under the aegis of the Association of BCCs by private charter and will decide autonomously on the appropriate contribution system and limits on the commitment of participants.

The leverage ratio is high by international standards

The prudential leverage ratio, an indicator which, compared with the more traditional capital adequacy ratios, captures the overall dimension of banks' balance sheets,[11] is higher than the European average. For the top five banking groups the leverage ratio is 4.9 per cent, higher than both the minimum of 3 per cent[12] and the average value calculated last June on a sample of 36 large internationally active European banks (4.2 per cent).

[11] The leverage ratio is calculated as the ratio of tier 1 capital to total non-risk-weighted assets. The international comparison exercise presented here uses the definition of tier 1 capital that will come into force at the end of the transitional period provided for in the Capital Requirement Regulation 2013/575/EU (CRR).

[12] The 3 per cent minimum is a non-binding value set by the Basel Committee on Banking Supervision in 2010 for monitoring purposes only, the goal being to introduce a binding value starting in 2018 once the adequacy of the minimum value has been assessed.

Italian banks' profitability improves …

Banks' profitability is benefiting from the cyclical recovery. In 2015 Italian banks' return on equity (ROE), net of goodwill impairments, was 3.1 per cent (4.6 per cent for the five leading groups). Revenues grew by slightly less than 2 per cent, thanks mainly to a sharp increase in asset management fees. The contributions paid by banks into the National Resolution Fund in December (€2.3 billion)[13] for the resolution of four banks engendered a 4.8 per cent increase in operating expenses. Barring new interventions, Italian banks' annual contribution to the Fund (envisaged for the next eight years) should fall to about one third of the amount paid in 2015 (see the box 'The financing of the Single Resolution Fund').

THE FINANCING OF THE SINGLE RESOLUTION FUND

The Single Resolution Mechanism (SRM), which became operational in the euro area at the start of 2016, provides that banks will share the costs of any crises involving a major euro-area bank in order to limit moral hazard and increase financial stability (see the box 'The new rules for banking crises: transposition of the Bank Recovery and Resolution Directive into Italian law' in *Financial Stability Report*, No. 2, 2015).

Banks make annual contributions to the Single Resolution Fund,[1] which by 1 January 2024 must amount to 1 per cent of the covered deposits of all euro-area banks (approximately €55 billion). The contributions are paid to the national resolution authorities and will be gradually mutualized within the euro area, according to the steps indicated in the intergovernmental agreement of May 2014. The agreement includes: (a) the constitution of separate national 'compartments' within the Fund; (b) the transitional allocation to these compartments of the contributions from the single states; and (c) the parallel progressive transfer of resources from the national compartments to the Fund so that by 1 January 2024 all the resources will have been definitively pooled to support the Fund's operations and functioning.

The financial resources of the Fund also include the assets deriving from resolutions and the proceeds of investments of the Fund's own resources. If the contributions due are not immediately accessible or prove insufficient, the Resolution Board can arrange loans or other forms of financing with third parties, at the best financial conditions offered by the market. If the resources are insufficient it is also possible to resort to forms of public funding. In this case a bridge loan has been agreed (approved in December 2015 by the member states participating in the banking union) for up to a maximum of €55 billion. Starting in 2016 each member state in fact provides the Board with a credit line to support its own national compartment within the Fund, with the aim of ensuring the ready availability of the necessary resources. National credit lines will be used as a last resort after all other sources of financing have been exhausted and the member states will have the right to reclaim from their national banking

[1] The contribution amounts are calculated annually by the decision-making body of the SRM, ie. the Single Resolution Board (SRB), following consultation with the ECB or the competent national authority and in close cooperation with the national resolution authorities. The annual contribution is determined in relation to the share of each individual bank's liabilities (excluding own funds and covered deposits). The basic contribution is then adjusted in proportion to each bank's risk profile, leading either to a discount (up to 20 per cent) or a surcharge (of up to 50 per cent) in relation to the basic contribution. Given that it is unlikely that smaller banks will access the resources of the Resolution Fund, they will pay a fixed amount of between €1,000 and €50,000. If the funds deriving from the ex ante ordinary contributions are insufficient to cover the losses and the Fund's own costs, extraordinary additional contributions may be collected ex post; the annual total of ex post contributions cannot exceed three times the annual total of ordinary contributions.

[13] The amount refers to the ordinary and extraordinary contributions of individual banks based in Italy. It does not include the contributions paid by the foreign components of Italian banking groups into their respective national resolution funds.

system the amounts advanced. This solution limits the burden on the public finances in the medium term and ensures compliance with the rules on state aid in the internal market.

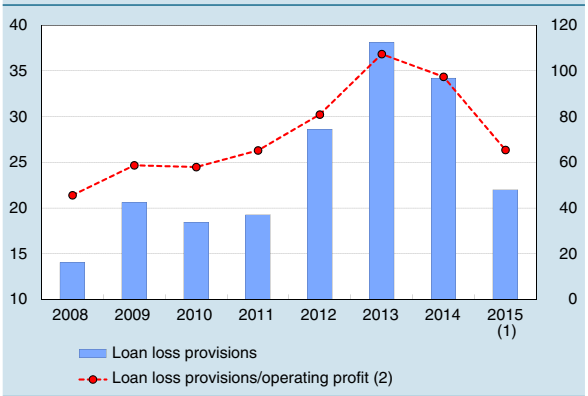
The decisions on the use of the Fund will be taken by the Single Resolution Board. The Fund will only participate in the financing of resolutions after the application of the bail-in tool, which must cover at least 8 per cent of the total liabilities of the bank under resolution; in any event the Fund's contribution cannot exceed 5 per cent of the liabilities.

The reduction in the number of branches and staff continued. A decisive factor in profit growth was the 34.8 per cent decline in loan loss provisions, whose ratio to operating profit decreased to 65.4 per cent (Figure 4.9). The reduction was more pronounced for larger banks.

Figure 4.9

Loan loss provisions and operating profit for Italian banks and banking groups

(billions of euros; per cent)



Source: Supervisory reports.
(1) Provisional data. – (2) Right-hand scale.

… bringing it closer to that of other European banks …

The profitability of Italian banks, while improving, is still lower than that of other EU banks. With the economic recovery the gap is narrowing. The difference is largely explained by the magnitude of the contraction of output suffered during the crisis and by the business model. Banks that get a substantial share of their revenues from lending to households and small or medium-sized enterprises were hit harder by the recession owing both to the decrease in net interest income and the increase in loan loss provisions.[14] In 2015 the cost-to-income ratio of Italian banks (65 per cent) was only 2 percentage points higher than that of other EU banks. The difference in the ROE was 1.6 percentage points, down from 7.1 points in 2014.[15]

… and will continue to grow, albeit at a moderate pace

According to our estimates, which are consistent with the most recent macroeconomic scenarios and with Consensus Economics' forecasts, Italian banks' profits will continue to grow this year, albeit at a moderate pace. Profit growth would be mostly attributable to the economic recovery, which would further reduce loan loss provisions; decreasing costs will also play a part in the rise in profitability.

[14] E. Bonaccorsi di Patti, R. Felici and F.M. Signoretti, '*Euro area significant banks: main differences and recent performances*', Questioni di economia e finanza (Occasional Papers), No. 306, 2016.

[15] For further details, see EBA, *Risk Dashboard. Data as of Q4 2015* (http://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard).

5 INSURANCE COMPANIES AND THE ASSET MANAGEMENT INDUSTRY

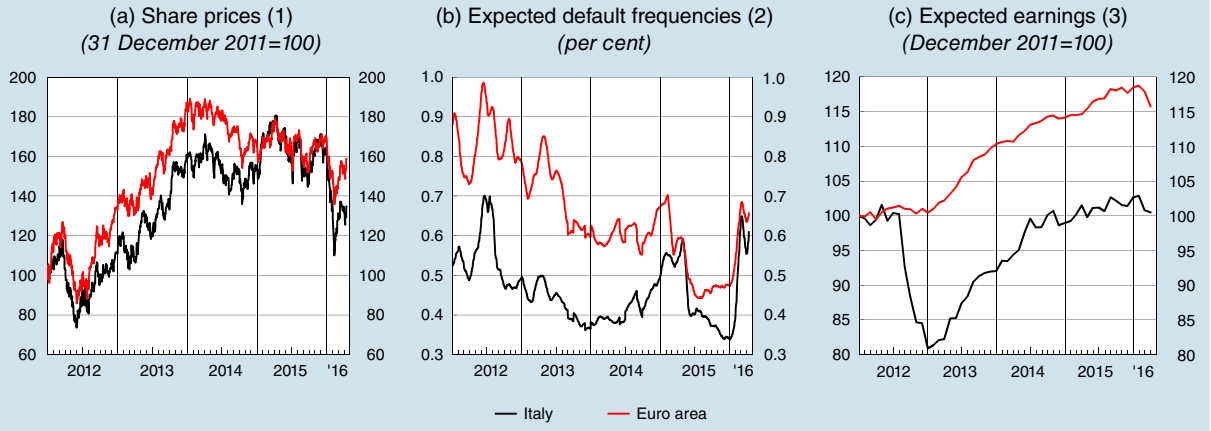
5.1 INSURANCE COMPANIES

Market indicators worsen …

Italian insurance shares have fallen substantially (Figure 5.1.a), reflecting international market tensions (see Section 1). The decline in prices and the increase in their volatility resulted in a sharp rise in the expected default rates implicit in the share prices (Figure 5.1.b). Profit expectations for Italian insurers, despite falling in February, remain on a par with the average for 2015 (Figure 5.1.c).

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) Thirty-day averages of daily data. The expected default frequencies (EDF), calculated on the basis of the price and volatility of the shares of the companies to which they refer, measure the probability of the market value of assets becoming lower than that of liabilities within one year. The graph shows the average values of the EDF weighted for the book value of the assets of the insurance companies considered. 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 Moody's KMV European insurance sector index. – (3) Average, weighted by the number of shares in circulation in March 2016, of expected earnings per share, in the 12 months following the reference date, of the Italian insurance companies considered and a sample of the main euro-area insurance companies.

… but profitability remains positive and the capital position is sound

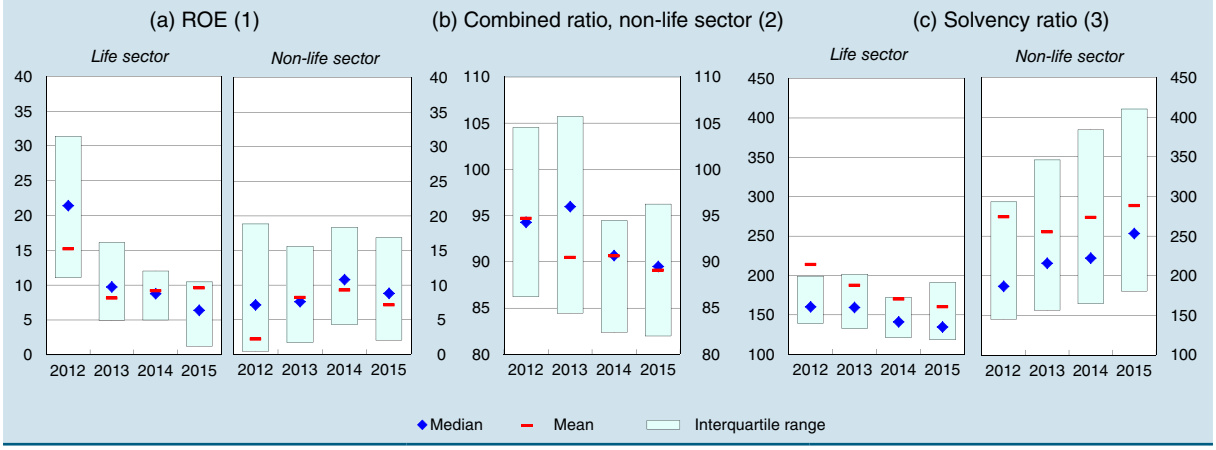
Italian insurers' actual earnings have remained at a high level (Figure 5.2.a), with ROE averaging 9.6 per cent in the life sector and 7.2 per cent in the non-life sector in 2015. In life insurance, profitability continued to benefit from the gain in premium income, while non-life earnings were sustained by a decline in claims (Figure 5.2.b), despite a further decrease in premiums (down by 2.4 per cent in comparison with 2014). The own funds of insurance companies are still well in excess of the solvency capital requirement (Figure 5.2.c).

Liquidity risk in life insurance is reduced

In the first quarter the ratio of life insurance surrenders to premiums – an indicator of liquidity risk – was 3 percentage points lower than a year earlier at 30.2 per

Figure 5.2

Main indicators for Italian insurance companies
(per cent)

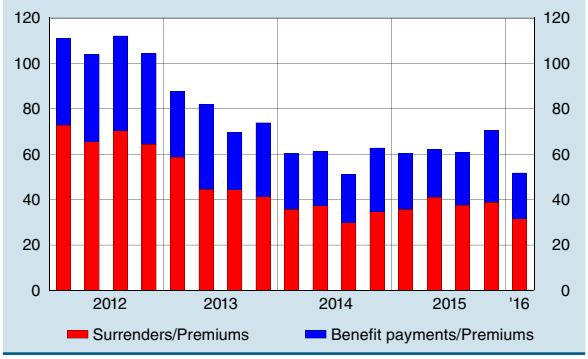


Source: Ivass.
(1) Ratio of earnings to shareholders' equity. Average weighted according to shareholders' equity of Italian insurance companies. – (2) Ratio of incurred losses plus operating expenses to premium income for the period. – (3) The solvency ratio is calculated as the ratio of own funds to the solvency capital requirement under the Solvency I rules.

cent, the lowest level since 2012 (Figure 5.3). The improvement was due chiefly to a decrease in surrenders.

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. A ratio higher (lower) than 100 indicates a net outflow (inflow) of funds.

Investment in government securities remains strong

The insurance industry's investment has continued to be concentrated in government securities, chiefly Italian (Figure 5.4.a). Net capital gains remain substantial, despite an increase in volatility in recent months in connection with financial market developments (Figure 5.4.b). IVASS's periodic surveys of the investment policies of the main insurers indicate that the companies are diversifying by investing in private sector bonds and investment funds but have not undertaken a strategy of raising the risk-return profile of their portfolios. Direct investment in mini-bonds issued by unlisted firms and in the related securitization issues remains minimal (respectively €13 million and €10 million in 2015).[1] No insurance company has engaged in direct lending.

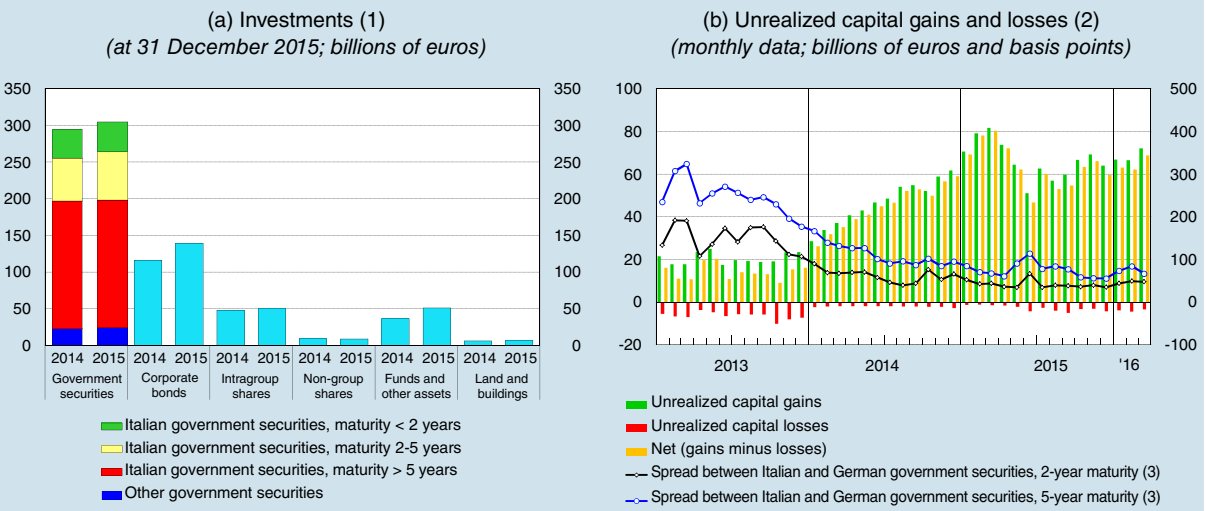
The risk stemming from low interest rates is modest

The low level of interest rates has limited impact on profitability in the life sector, by virtue of the good matching of duration and yields between assets and liabilities. This is the result both of investment policies, which in the past

[1] These amounts are far below the ceilings set by the regulations in force up to the end of 2015. The new Solvency II prudential regulations do not set any explicit quantitative limit.

Figure 5.4

Investments and unrealized capital gains and losses of Italian insurance companies

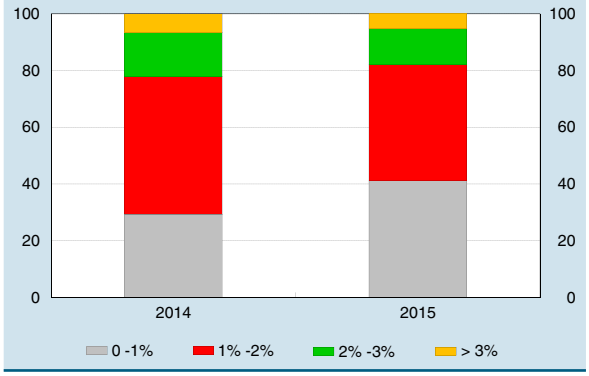


Sources: Ivass and Bloomberg.
(1) Balance-sheet values. The composition of government securities holdings is partially estimated. – (2) Unrealized capital gains and losses are the difference between the market value and the balance sheet value of the securities held. – (3) Right-hand scale.

focused on relatively high-yielding Italian government securities, and of supply policies designed to limit yield guarantees. More than 95 per cent of total mathematical reserves are earmarked for products with guaranteed yields of under 3 per cent, and in the last twelve months there has been a significant increase in the portion of the reserves that relates to products guaranteeing less than 1 per cent (Figure 5.5). In order to reduce the earnings impact of low interest rates still further, in 2015 insurers increased the share of unit-linked and multi-class products, the risk on which is borne wholly or in part by the insured (see the box 'Multi-class insurance products'). IVASS's periodic survey on guaranteed-yield life insurance policies indicates that the amount of additional reserves required to cover the risk of failing to meet obligations to policyholders remains modest (barely above 0.3 per cent of the companies' mathematical reserves).

Figure 5.5

Distribution of mathematical reserves by level of guaranteed yield (1)
(per cent)



Source: Ivass.
(1) Mathematical reserves of the life insurance sector.

MULTI-CLASS INSURANCE PRODUCTS

The low level of interest rates is prompting life insurance companies to market more multi-class insurance products, which combine traditional with-profits policies with policies that have a significant financial component (unit-linked policies). The initial division of the premium among different types of policy can be altered in the course of the contract at the instance of the policyholder

or of the company. The portion invested in traditional insurance products protects the policyholder's invested capital and, in some cases, also guarantees a minimum return. On the other hand, the portion invested in unit-linked products is exposed to investment risk. According to a survey by IVASS, in 2015 premium income from multi-class products exceeded €30 billion (see the table), or about a quarter of total life insurance premiums for the sample companies. Premium income on these policies nearly tripled between 2013 and 2015.

The increasing availability of these instruments is insurers' response to the protracted period of low interest rates. The hybrid nature of multi-class products offers policyholders higher expected yields than traditional products, while at the same time lowering the capital requirement on companies against the risk of failing to meet obligations to policyholders in connection with the guarantees offered by traditional policies.

Premium income on multi-class life insurance products
(billions of euros)

	2013	2014	2015	2016 (1)
Written premiums	11.2	18.3	30.5	36.2
traditional products	8.4	12.0	18.0	20.7
unit-linked products (2)	2.8	6.3	12.5	15.5
Memorandum item:				
Total premiums (3)	89.3	107.4	118.8	....

Source: IVASS, based on insurance company data.
(1) For 2016, estimated by the insurance companies; the data refer to a sample of 86 per cent of the total number of insurance companies. – (2) Unit-linked policies are linked either to internal investment funds or UCITS. – (3) Life insurance premium income of the sample companies.

The possibility of modifying the original allocation of the premium on these policies after the contract is signed complicates the insurers' risk measurement and management. Where the option is in favour of the policyholder its exercise could necessitate a rapid change in the insurance company's portfolio allocation, with market risk repercussions that require proper assessment by the company both in designing the product and in formulating investment strategy. The increasingly widespread use of these policies also entails heightened legal and reputational risk because of their complexity.

5.2 THE ASSET MANAGEMENT INDUSTRY IN ITALY

Net funding in the main sectors remains positive

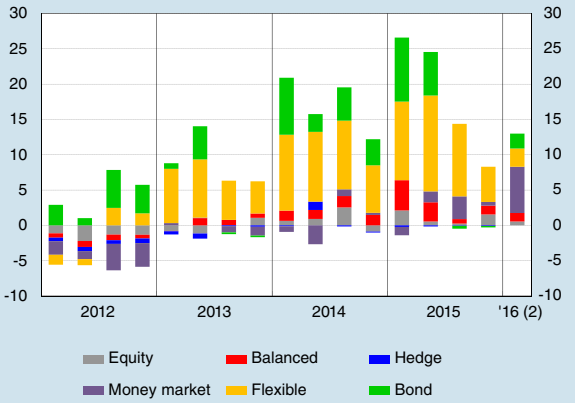
Italy's asset management industry continued to expand, even during the recent phase of heightened market volatility. Investors' pursuit of protection from risks led to an increase in subscriptions of shares of money market funds and a contraction in flows to the riskiest segments (Figure 5.6).

The proportion of illiquid assets in portfolios is basically unchanged

Asset managers' propensity to increase the proportion of capital invested in less liquid but higher yielding assets diminished: at the end of 2015, the share of investment fund units and private sector bonds in the portfolios of open-end funds amounted to 43 per cent (Figure 5.7). Maturity transformation and financial leverage, which are subject to specific prudential constraints, remain confined to segments representing just 5 per cent of the industry's total managed assets.

Figure 5.6

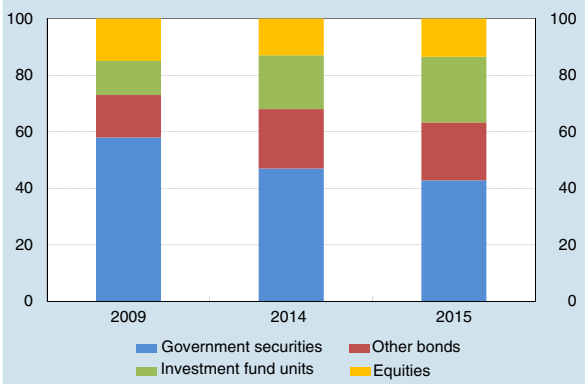
Net funding of open-end investment funds (1)
(quarterly data; billions of euros)



Source: Assogestioni.
(1) Data on funds based in Italy and abroad, managed by asset management companies belonging to Italian groups.– (2) Provisional data.

Figure 5.7

Portfolio of open-end investment funds (1)
(percentage shares)



Source: Supervisory reports.
(1) Italian funds only.

Pension funds pose no risk to financial stability

Management services linked to private (closed and open-end) pension funds account for less than 10 per cent of the Italian asset management industry and pose very limited risks to financial stability. Capital-guaranteed pension funds (such as defined benefit funds) – which are vulnerable to asset price variations, as well as to interest rate and demographic risk – represent less than 10 per cent of Italy's pension funds. Even the risks associated with investment by these funds are limited, given the low variability in funding flows, stable allocation of investments and long duration of liabilities. Analyses of Italian and European pension funds show that during the financial crisis investment funds' operations were moderately countercyclical.[2]

Earning prospects improve for real estate investment funds …

Risks for the property fund segment, which had risen during the crisis, are receding again thanks to the modest recovery in the construction industry (see Section 1.3). According to provisional data, average profitability, though still negative, improved overall in 2015, especially for retail funds (Figure 5.8.a). Write-downs as a proportion of total assets managed declined on average from 2.6 to 0.6 per cent, the lowest level in five years (Figure 5.8.b). Returns continue, however, to be adversely affected by difficulties in selling portfolio assets. Although the extension of maturities has enabled retail funds to mitigate the risks connected with repayment difficulties, uncertainties remain about the earning prospects of investments and possible reputational risk. The potential variability of real estate portfolio valuations, given the illiquid nature of the assets and the variety of estimation criteria, is one of the main risks to the sector. To guard against it, in 2015 measures were introduced to tighten the organizational requirements that guarantee the autonomy of the internal functions in charge of assessment.

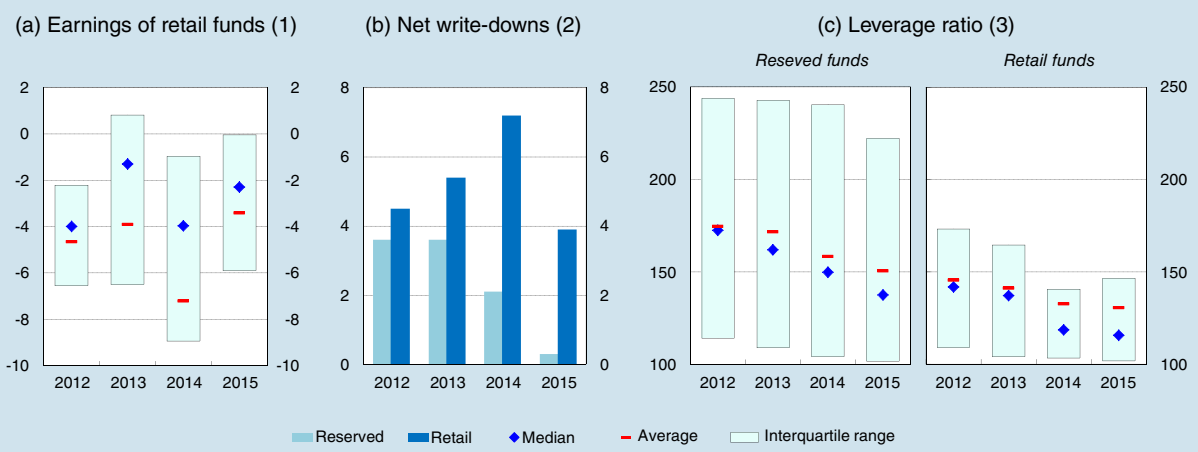
… and their average indebtedness declines

The average indebtedness of real estate funds continued to decline (Figure 5.8.c), both in absolute terms and in proportion to their total assets; the reduction is mainly ascribable to newly-established funds with more balanced capital structures. Solvency conditions remain difficult for the funds launched prior to 2008, which have been

[2] COVIP, Report on 2009, 2010 and EIOPA, IORPs Stress Test Report 2015, 2016.

Figure 5.8

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



Source: Supervisory reports.
(1) Ratio of profits to the average of net assets at the end of the reference year and of the previous year. – (2) Ratio of balance sheet write-downs net of revaluations to the average of total assets at the end of the reference year and of the previous year. – (3) Ratio of total assets to net asset value.

penalized by a sharp contraction in the value of assets and the financial difficulties of investors. Several of these funds have benefited from the intervention of new investors replacing the original subscribers, or the acquisition of the portfolio's assets. On average, the level of indebtedness of the retail funds segment is lower, in part due to specific prudential constraints. For this segment the national laws implementing EU regulations on alternative funds, approved in 2015, have reduced the maximum leverage allowed for newly-established funds.