BANCA D'ITALIA
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Financial Stability Report

April 2017

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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

For the abbreviations of the names of European countries used in this publication please refer to the EU's *Interinstitutional Style Guide* (http://publications.europa.eu/code/en/en-000100.htm).

Starting with this issue, the *Financial Stability Report* contains a statistical appendix, which includes some tables previously incorporated in the main text.

OVERVIEW

Global risks are diminishing but uncertainty is high

Global economic growth reduces the risks to financial stability, but economic policy uncertainty remains high. The timing and implementation of the announced fiscal expansion in the United States are not yet known. Risks could derive from a widespread adoption of measures restricting trade. An abrupt adjustment of China's rapid credit expansion could affect growth and international financial markets.

Deflation risks diminish in the euro area

In the euro area, the strengthening of the economic recovery and the reduction in deflation risks are contributing to financial stability. Banks' balance sheets are becoming sounder. Liquidity conditions on the Italian equity and government securities markets have improved after the tensions registered at the end of 2016. However, the resurfacing of uncertainty over the area's cohesion led to a rise in sovereign spreads in various countries, which were reabsorbed in part towards the end of April.

Growth bolsters households' and firms' balance sheets

In Italy, with the economic recovery and low interest rates, households' and firms' ability to repay their debts has improved; insolvency rates have returned to the levels prevailing in the mid-2000s. The share of financially vulnerable households is still low, while that of firms is falling; for both sectors the impact of a rise in interest rates would be limited. The recovery in the real estate market is also gathering momentum, reducing the risks for the financial system.

Banks' profits are affected by write-downs, but the outlook is improving …

Some banks recorded heavy losses in 2016 following the decision to increase write-downs on NPLs. The outlook is improving. Analysts have revised their earnings expectations upwards and since November Italian banks' share prices have risen by about 20 per cent, as have those of other European banks. NPL stocks have continued to fall gradually; some banks are starting to sell off bad loans in large amounts.

… and their capital position is stable

In March UniCredit successfully carried out a sizeable capital increase, fully subscribed by private investors. The government support measures introduced last December could favour the recapitalization of some banks in difficulty.

Italy's banking system is still exposed to the risk of slower growth

Despite signs of improvement, Italy's banks are still exposed to significant risks. Profits remain low and vulnerable to a weakening of the economic recovery. Increased risk aversion on the part of investors in a global and European context marked by great uncertainty could make it more difficult and costly for banks to access capital markets.

Italian insurance companies are able to withstand particularly adverse scenarios

The capital position of the insurance industry continues to be sound. Profitability remains good. The EIOPA stress test has confirmed that Italian companies would be able to withstand very adverse scenarios, such as persistently low interest rates over a long period or sharp reductions in asset values and a widening of spreads.

The countercyclical capital buffer is kept at zero per cent

While improving, Italy's macrofinancial conditions remain weak on the whole. In the absence of risks to financial stability stemming from credit growth, the Bank of Italy has kept the countercyclical capital buffer at zero per cent.

1 MACROECONOMIC RISKS AND RISKS BY SECTOR

1.1 MACROECONOMIC RISKS

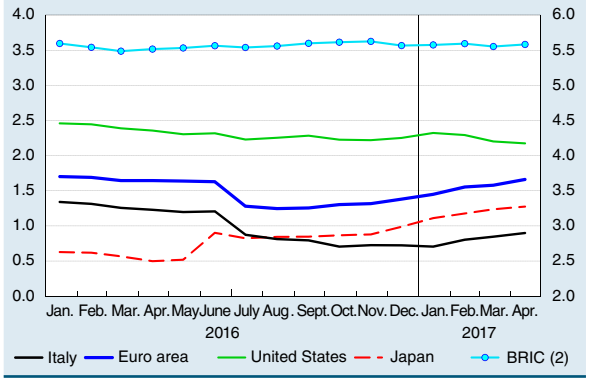
Global risks and euro-area risks

Risks have diminished at a global level …

At the international level, the macroeconomic risks to financial stability are gradually abating as economic growth strengthens (Figure 1.1). Expectations of expansionary fiscal policies and a rise in inflation in the United States have led to a sharp increase in share prices and long-term bond yields on all the main financial markets. The major emerging economies have enjoyed considerable portfolio investment inflows, which have fostered a compression of their sovereign spreads and strengthening of their currencies.

Figure 1.1

GDP growth forecasts for 2017 (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 2015 at purchasing power parity.

… but uncertainty about economic policies is acute

The outlook is still, however, characterized by heightened uncertainty. Details are still lacking as to the timing and manner of fiscal expansion in the United States. The possible adoption of trade restriction measures by a number of advanced countries poses risks to growth, with consequences for world trade and investment flows. An abrupt correction of the rapid expansion of credit in China could cause GDP growth to slow more sharply than forecast and engender tensions on international financial markets.

In the euro area, strengthening growth reduces risks …

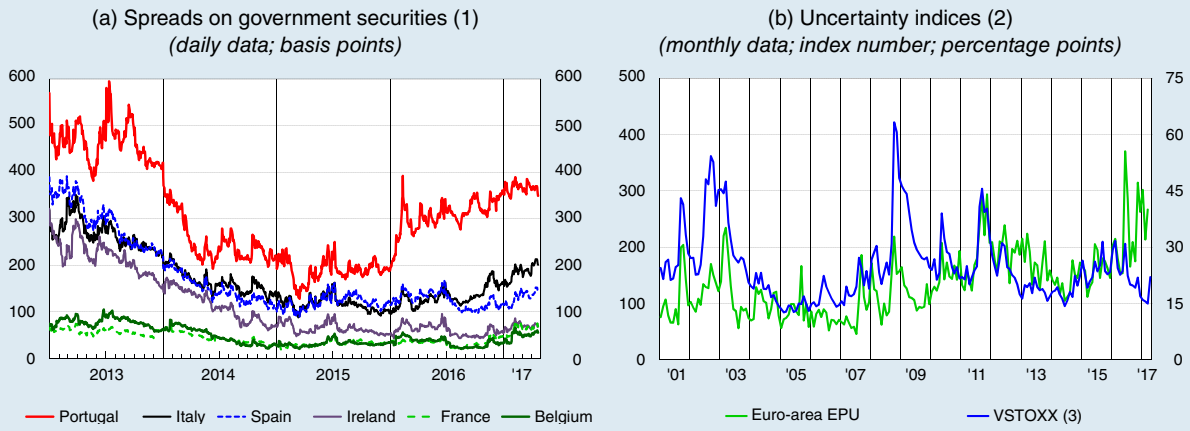
In the euro area, the improvement in growth and the reduction in deflation risks (see *Economic Bulletin*, 2, 2017) are contributing to financial stability. The strengthening of banks' balance sheets and the increase in expected profits, along with a greater risk appetite on the part of international investors, are reflected in a more pronounced increase in the share prices of banks than of non-financial companies.

… but spreads are widening

Heightened political uncertainty has, however, resulted in the re-emergence of fears for the cohesion of the euro area, manifested in an increase in sovereign spreads, partly reabsorbed in the last ten days of April (Figure 1.2.a). The economic recovery and expansionary monetary policy are contributing to keeping stock market volatility very low (Figure 1.2.b). The elevated uncertainty could, however, trigger sudden shifts in investors' expectations, with a sharp widening of the risk premiums (see the box 'The evolution of uncertainty regarding economic policy and the financial markets in the advanced countries', in *Economic Bulletin*, 2, 2017).

Figure 1.2

Spreads on government securities and uncertainty indices



Sources: Based on data from Bloomberg, Economic Policy Uncertainty and Thomson Reuters Datastream.
(1) Yield spreads between the ten-year government securities of the countries indicated and the corresponding German Bund. – (2) Economic policy uncertainty (EPU) index for the euro area calculated as the weighted average of the respective countries' GDP in the 2015 indices for Germany, France, Italy and Spain (presented in S.R. Baker, N. Bloom and S.J. Davis, 'Measuring economic policy uncertainty', *The Quarterly Journal of Economics*, 131 (4) 2016, 1593-1636), and the VSTOXX index relating to the volatility implied by the prices of 30-day stock options on the Dow Jones Euro Stoxx 50. – (3) Right-hand scale. Monthly averages of daily data; the figure for April 2017 was calculated based on data through 21 April.

Macrofinancial conditions in Italy

Lending to the private sector grows moderately …

The expansion of bank lending continues to be restrained by firms' slack demand for funds (see Section 1.2) and by persistently prudent credit supply conditions on the part of banks, which also reflect the high level of uncertainty (see the box 'The impact of uncertainty on business lending 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 still markedly negative, by about 10 percentage points if calculated using the methodology criteria proposed by the Basel Committee and by 7 points according to the model developed by the Bank of Italy, which takes account of the specific characteristics of the financial cycle in Italy.[1]

THE IMPACT OF UNCERTAINTY ON BUSINESS LENDING IN ITALY

The decisions of households, firms and banks are influenced not only by their expectations regarding the macroeconomic outlook but also by uncertainty about future developments. Other things being equal, a high level of uncertainty can act as a drag on consumption and investment – especially in the case of partially irreversible decisions such as purchases of consumer durables and investment in tangible capital – and on the supply of long-term credit.[1]

Data on the Italian firms that apply to multiple banks for loans enable an assessment of the specific impact of uncertainty on banks' credit supply policies, isolating it from the effects of changes in the

[1] N. Bloom, 'Fluctuations in uncertainty', *Journal of Economic Perspectives*, 28 (2) 2014, 153-176.

[1] For the methodology, see P. Alessandri, P. Bologna, R. Fiori and E. Sette, 'A note on the implementation of a countercyclical capital buffer in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 278, 2015.

demand for credit and in firms' soundness and profitability.[2] The degree of uncertainty is indicated by the Economic Policy Uncertainty (EPU) index, which measures the frequency of references to uncertainty in articles in the leading European newspapers.[3]

The results show that an increase in uncertainty is associated with a significant lowering of the probability that new loan applications will be granted. A high degree of uncertainty also makes the supply of credit less elastic with respect to banks' funding costs, interfering with the transmission of monetary policy. For highly capitalized banks the probability of new loan applications being approved is less sensitive to variations in money market rates (EONIA) or the EPU index; the sounder banks are thus presumably better able to insulate their credit supply policies from changes in macroeconomic conditions.

The sharp rise in the EPU index between the end of 2015 and the end of March 2017, amounting to 60 per cent, may therefore have determined a significant decrease in the probability of approval of Italian firms' new loan applications.

[2] The analysis refers to applications made between 2003 and 2012 by firms that had not previously borrowed from the banks contacted. P. Alessandri and M. Bottero, 'Bank lending in uncertain times', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

[3] The indicator, whose construction is discussed in S.R. Baker, N. Bloom and S.J. Davis, 'Measuring economic policy uncertainty', *The Quarterly Journal of Economics*, 131 (4) 2016, 1593-1636, is based on the number of articles that simultaneously contain terms relating to the economy, fiscal or monetary policy, and uncertainty. The newspapers used for the construction of the European index are: for France, *Le Monde* and *Le Figaro*; for Germany, *Handelsblatt* and *Frankfurter Allgemeine Zeitung*; for Italy, *Corriere della Sera* and *la Repubblica*; for Spain, *El Mundo* and *El Pais*; and for the United Kingdom, *The Times* and *Financial Times*.

… and should continue to do so

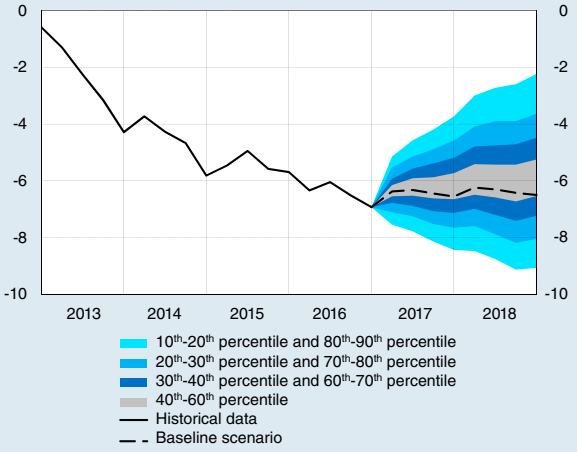
Our projections, which are consistent with the latest macroeconomic scenarios and with the forecasts of Consensus Economics, indicate that bank lending to the non-financial private sector will continue to grow moderately this year and in 2018. The credit-to-GDP gap should remain practically stable; it is likely to remain negative even if credit growth is notably faster than that posited in the baseline scenario (Figure 1.3).

The Government forecasts a reduction in the deficit in 2017

In 2016 the ratio of general government net borrowing to GDP fell by around 0.2 percentage points to 2.4 per cent, while the debt-to-GDP ratio rose by almost 0.6 points to 132.6 per cent. In the recently approved 2017 Economic and Financial Document, the Government set an objective for the deficit this year equal to 2.1 per cent of GDP. The periodic analyses conducted by the European Commission do not show any significant risks for the sustainability of Italy's public finances in

Figure 1.3

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



Sources: Based on Bank of Italy and Istat data.
(1) The probability distribution of the projections, shown here by percentile classes, makes it possible to assess the size of the risks that characterize the baseline scenario. The distribution takes account of asymmetric shocks to the main risk factors using the procedure described in C. Miani and S. Siviero, 'A non-parametric model-based approach to uncertainty and risk analysis of macroeconomic forecasts', Banca d'Italia, Temi di Discussione (Working Papers), 758, 2010.

the long term.[2] In the medium term a high debt-to-GDP ratio exposes the public finances to variations in market interest rates and acts as a brake on the economy.

Real estate markets

Risks from the residential sector emerge in some European countries

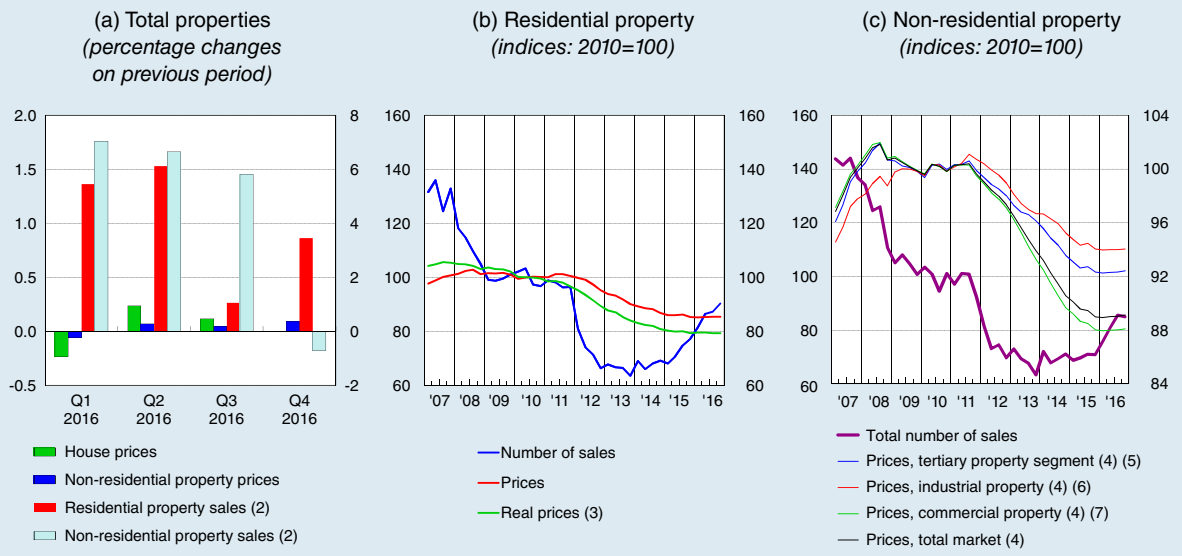
In Europe, house prices are increasing in almost all counties, but the risks for financial stability stemming from the real estate sector are confined to just some of them. Last November the European Systemic Risk Board (ESRB) published the warnings sent to eight countries[3] on the vulnerabilities caused by sharp increases in house prices at a time when household debt levels are high.

In Italy the recovery in sales gathers momentum …

In Italy, the upturn in sales has gained strength, though the levels are still lower than those prior to the sovereign debt crisis (Figure 1.4). After a prolonged decline, prices stabilized for both residential and non-residential property. The results of the survey of estate agents working in the residential sector, carried out in January by the Bank of Italy, Tecnoborsa and the Revenue Agency, indicate that the outlook for market growth continues to be favourable.

Figure 1.4

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



Sources: Based on data from the Bank of Italy, Istat, Osservatorio del Mercato Immobiliare (OMI), Nomisma and Scenari Immobiliari.
(1) Data adjusted for seasonal and calendar effects. – (2) Right-hand scale. – (3) Data deflated using the change in consumer prices. – (4) Right-hand scale. The 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.

[2] The S2 sustainability indicator calculated by the Commission reflects both the current level of the debt and the future evolution of the primary surplus on the basis of long-term projections for macroeconomic and demographic trends (see European Commission, *Debt sustainability monitor 2016*, January 2017).

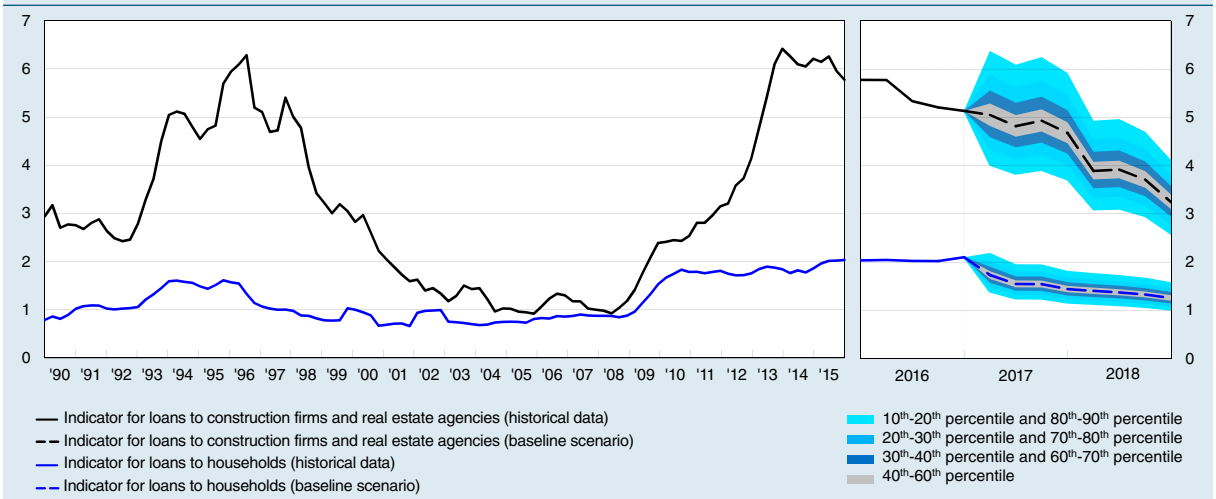
[3] Austria, Belgium, Denmark, Finland, Luxemburg, the Netherlands, Sweden and the United Kingdom. (see ESRB, 'Vulnerabilities in the EU residential real estate sector', November 2016).

… and the vulnerability of banks stemming from the real estate sector diminishes

In the fourth quarter of 2016 the ratio of new non-performing loans to the stock of performing loans at the beginning of that period fell further, both for households and for construction firms and real estate agencies. Leading indicators point to a further decrease this year and the next in the risks for banks attributable to the real estate sector (Figure 1.5, dotted lines).

Figure 1.5

Indicators of banks' vulnerability stemming from the real estate market (1)
(quarterly data; per cent)



(1) Banks' vulnerability is measured by the ratio of the flow of new bad debts in the last four quarters to the average of banks' capital and reserves in the same period. The probability distribution of the projections, shown in the graph by percentile classes, makes it possible to assess the size of the risks characterizing the median forecast (baseline scenario). For the methodology, see F. Ciocchetta, W. Cornacchia, R. Felici and M. Loberto, 'Assessing financial stability risks from the real estate market in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 323, 2016.

1.2 HOUSEHOLDS AND FIRMS

Households

The financial situation of households improves …

The increase in disposable income is boosting the financial soundness of households. Low interest rates have helped to limit debt servicing costs. The propensity to save is largely unchanged from 2015, though it is still around four percentage points below the average for the ten-year period prior to the crisis (at 8.5 as against 12.2 per cent).

… and portfolio diversification continues

The rebalancing of household portfolios continues: the share of bank bonds and government securities has been further reduced, while that of deposits and insurance policies is on the increase. The portion of wealth invested in asset management instruments (mutual funds, insurance policies and retirement products), which favour risk diversification, has reached 34 per cent (it stood at 22 per cent in 2008), though it is still below the average of 43 per cent for the euro area (Figure 1.6).

Borrowing increases

Household borrowing from banks and financial companies is increasing but remains very low by international standards (Figure 1.7.a). The favourable outlook for the real estate market (see Section 1.1) and the low level of interest rates are fuelling the demand for house purchase loans. In 2016 new loans were up by a quarter on the previous year, although they are still considerably

lower compared with the peak recorded in 2007 (Figure 1.7.b); the stock of outstanding loans grew by 2 per cent. Consumer credit increased by 6 per cent, owing above all to the sharp growth in loans for durable goods purchases.

Exposure to interest rate risk decreases …

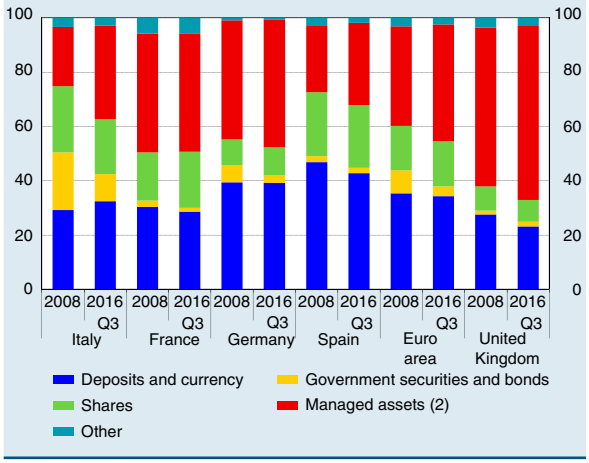
Interest rates are very low by historical standards. The narrowing of the gap between fixed- and variable-rate mortgage rates provides an incentive for fixed-rate loans (Figure 1.7.c). In terms of stocks, in 2016 the share of fixed-rate mortgages rose by 5 percentage points to 32 per cent (in 2005 it was 15 per cent).

… and debt repayment capacity improves

The expansion of debt over the last two years has not been accompanied by an increase in the flow of insolvencies, partly as a result of intermediaries' careful selection of customers. The new non-performing loan rate for loans to households has reached 1.5 per cent, the lowest in ten years (Figure 1.8), while the new non-performing loan rate for small consumer debts, which are not recorded in the Central Credit Register, has fallen to 1.8 per cent.[4] Overall, the ratio of non-performing loans to total loans has declined to 10.3 per cent (Table 1.1).

Figure 1.6

Composition of household financial portfolios (1)
(per cent)

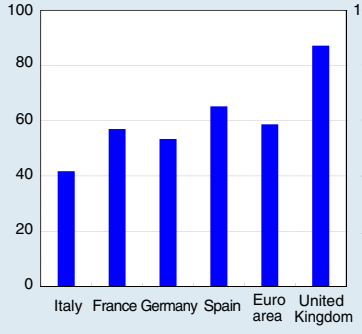


Sources: Bank of Italy and ECB.
(1) The data refer to consumer and producer households. – (2) Managed assets include mutual fund shares and insurance and pension reserves.

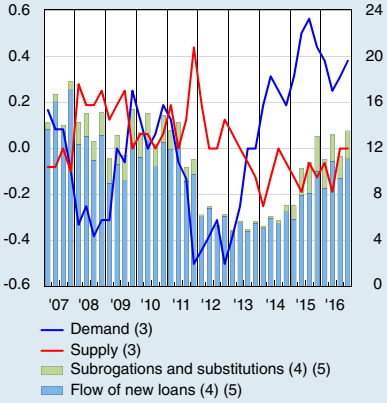
Figure 1.7

Indicators of household indebtedness

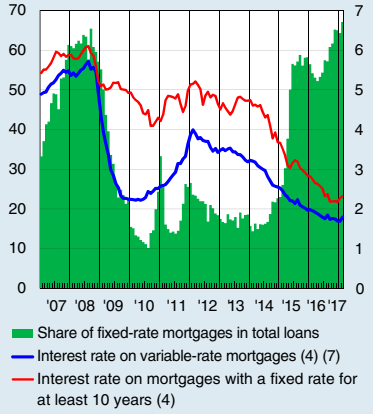
(a) Financial debts (1)
(as a percentage of GDP)



(b) Demand and supply conditions and new loans (2)
(quarterly data; diffusion indices; billions of euros)



(c) Interest rates and share of fixed-rate mortgages (6)
(monthly data; per cent)



Sources: ECB, Bank Lending Survey and supervisory reports.
(1) Loans and securities. End of Q3 2016; data for the United Kingdom refer to the end of Q4 2016. – (2) The data refer to house purchase loans to consumer households only. – (3) The diffusion index ranges from -1 to 1. For the demand index, values above (below) zero indicate expansion (contraction); for the supply index, values above (below) zero indicate tightening (easing). – (4) Right-hand scale. – (5) Billions of euros. – (6) The data refer to new mortgage loans to consumer and producer households and non-profit institutions serving households. – (7) Variable rate or rate renegotiable before the end of the year.

[4] Assofin, CRIF SpA and Prometeia, *Osservatorio credito al dettaglio*, 41, 2016.

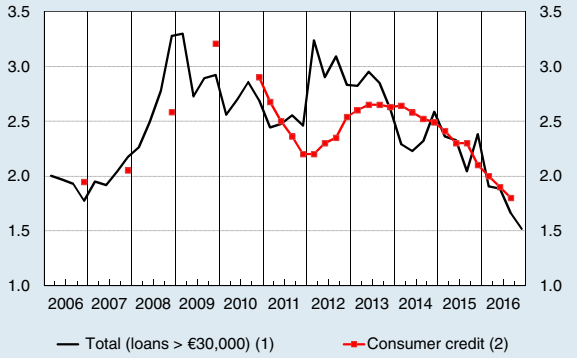
The share of vulnerable households remains modest

The projections of the Bank of Italy's microsimulation model, consistent with the latest macroeconomic scenarios, indicate that in 2017 the share of vulnerable households will remain stable at around 2 per cent, while the ratio of their debts to the total will fall by nearly one percentage point compared with 2016, to 13.4 per cent[5] (the figures for 2008 were 3 and 25 per cent respectively; see the box 'The effects of the stagnation of income on the vulnerability of indebted households', in *Financial Stability Report*, 2, 2014). A rise of one percentage point in Euribor[6] in 2017 would leave the share of vulnerable households substantially unchanged while increasing the ratio of their debts to the total to around 14 per cent. In a particularly adverse scenario, which also assumes a decrease of 3 percentage points in the growth rate of nominal income in 2017, the share of vulnerable households and of their debts would increase, to 2.4 and 15.4 per cent respectively.

Figure 1.8

New non-performing loan rate for loans to households

(annual and quarterly data; per cent)



Sources: Central Credit Register and CRIF SpA.
(1) Central Credit Register: annualized quarterly flow of adjusted NPLs (past-due by more than 90 days, other NPLs and bad debts) in relation to the stock of loans net of adjusted NPLs at the end of the previous quarter. Data seasonally adjusted where necessary. – (2) CRIF SpA: annual flow of non-performing contracts (bad debts or past-due after more than 180 days) in relation to total outstanding performing loans at the beginning of each reference period.

Firms

Firms' financial situation continues to strengthen

Firms' profitability is rapidly increasing as the economy recovers: in 2016 gross operating income grew by 6.4 per cent. In part owing to the low interest rates, net interest expense fell to around 11 per cent of gross operating income, half of what it was in 2008.

The demand for external financing is limited

Financial debt decreased slightly in the form both of bank credit and of bonds outstanding. The still low level of investment and the growth in profits are dampening the demand for external financing and fuelling the rapid accumulation of liquid assets, which have reached the highest level in more than twenty years relative to total assets. The data gathered from a large sample of companies show that in 2015 the need to finance fixed and working capital was largely met through self-financing; for large companies, recourse to debt was practically nil (Figure 1.9.a).

Credit continues to shrink for the more fragile firms

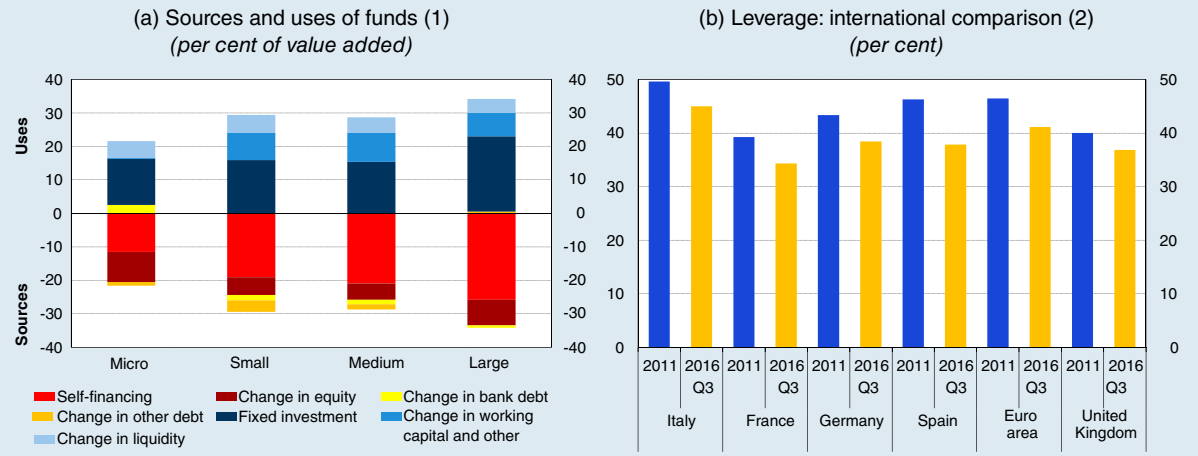
Firms in sound economic conditions are continuing to access bank credit and the bond market at generally favourable terms. By contrast, lending to micro-firms and to the more financially fragile companies, whose applications for funds are more frequently denied, continues to decrease.

[5] Households are considered vulnerable when their debt-service ratio is above 30 per cent and their disposable income is below the median (see V. Michelangeli and M. Pietrunti, 'A microsimulation model to evaluate Italian households' financial vulnerability', *International Journal of Microsimulation*, 7 (3) 2014, 53-79, also published by Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 225, 2014).

[6] The 3-month Euribor interest rate is the main reference rate for variable-rate mortgages.

Figure 1.9

Indicators of firms' financial situation



Sources: Based on data from the Bank of Italy, the ECB and Cerved.
(1) Data for 2015 taken from the financial reports of a sample of over 650,000 companies. By convention, sources are shown with a negative sign. – (2) Leverage is measured as the ratio of financial debt to the sum of financial debt and net equity at market value.

Equity financing increases …

The revival of profitability is contributing to capital strengthening. However, leverage increased in September 2016 to 45 per cent, about 1 percentage point higher than one year earlier. This was entirely due to the fall in the value of shares; without it, leverage would have decreased to 43 per cent, mainly as a result of the raising of new equity. Despite the reduction observed since the peak recorded in 2011, leverage remains high by international standards (Figure 1.9.b).

… and the ability to service debt improves

The improvement in firms' financial situation was reflected in the diminishing number of insolvencies. Cerved data indicate that in 2016 the number of bankruptcies fell for the second consecutive year. The new non-performing loan rate fell to 3.6 per cent, while the share of non-performing loans in total lending to firms held stable (29.4 per cent; Table 1.1).

Firms' vulnerability diminishes

According to projections based on the Bank of Italy's microsimulation model,[7]

Table 1.1

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

	June 2016		December 2016	
	Consumer households			
Total	**553,726**	**100.0**	**558,326**	**100.0**
Performing	494,903	89.4	500,733	89.7
Non-performing	58,823	10.6	57,592	10.3
Bad debts	38,308	6.9	38,187	6.8
Past-due	3,978	0.7	3,283	0.6
Other	16,536	3.0	16,123	2.9
	Firms			
Total	**960,485**	**100.0**	**944,847**	**100.0**
Performing	676,319	70.4	667,300	70.6
Non-performing	284,166	29.6	277,547	29.4
Bad debts	173,710	18.1	175,082	18.5
Past-due	6,831	0.7	4,764	0.5
Other	103,625	10.8	97,701	10.3

Source: Unconsolidated supervisory reports of banks and financial companies.
(1) Loans include repos and are not adjusted for securitizations. Data for firms refer to non-financial corporations and producer households. Rounding of decimal points may cause discrepancies in totals.

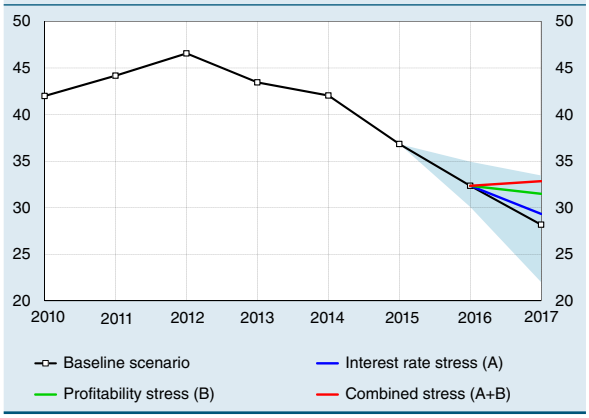
[7] A. De Socio and V. Michelangeli, 'A model to assess the financial vulnerability of Italian firms', *Journal of Policy Modeling*, 39 (1) 2017, 147-168.

consistent with the latest macroeconomic scenarios, in 2017 the portion of corporate debt held by vulnerable firms will decrease to about 28 per cent, from an estimated 32 per cent in 2016; the improvement would reflect increased profitability and low interest rates. Even assuming an increase in the cost of debt of 1 percentage point compared with 2016, the share of debt held by vulnerable firms would still decrease, to 29 per cent. In an especially unfavourable scenario in which the increase in the cost of debt is coupled with a fall of 5 per cent in gross operating income, the portion held by vulnerable firms would increase to 33 per cent, still lower than the level recorded in 2015 (Figure 1.10). In this scenario, the increase in vulnerability would be significant for medium-sized firms.

Figure 1.10

Share of debt held by vulnerable firms (1)

(yearly data; per cent)



Source: Based on Cerved data.

(1) Vulnerable firms are those whose gross operating income is negative or whose ratio of net interest expense to gross operating income exceeds 50 per cent. The latest available annual financial statements for the whole sample of firms are those for 2015. The shaded area indicates a confidence interval of 95 per cent around the baseline scenario. The assumptions underlying the stress scenarios are that, compared with the baseline scenario, in 2017 (A) the interest rate will increase by 100 basis points and (B) nominal gross operating income will fall by 5 per cent. The third scenario (A+B) is the combination of the two stress factors posited in scenarios (A) and (B).

2 FINANCIAL SYSTEM RISKS

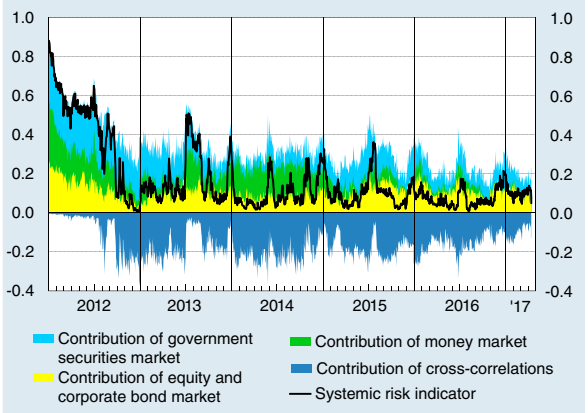
2.1 THE MONEY AND FINANCIAL MARKETS

Following the tensions of the late months of 2016, liquidity conditions have improved in the Italian equity and government securities markets; they remain favourable in the money market (Figure 2.1). In the early months of 2017, however, renewed uncertainty about the prospects of the euro area and Italy caused a widening of the spreads between Italian and German government securities, which was reabsorbed in the last ten days of April. The spread between Italian investment grade private sector bonds and those of similar quality issued in the rest of the euro area has also increased.

Figure 2.1

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 systemic risk indicator of the individual markets and of the correlations between them. For the methodology used in constructing the indicator, see *Financial Stability Report*, 1, 2014.

Repos on Italian government securities grow

Trading on the repo market operated by MTS continues to grow and the average maturity of con-tracts has begun to lengthen again after contracting in the second half of 2016 (Figure 2.2.a). The shortage of collateral, which is significant for the securities issued by some euro-area countries, had a limited impact in the case of Italian securities:[1] short-term repo rates do not diverge appreciably from the Eurosystem deposit facility rate. Volumes in the special repo segment rose, buoyed by trading in the securities included in the Eurosystem purchase programme, while those in the general collateral segment declined. Italian banks' foreign debtor position on the MTS repo market remains at the average levels recorded over the course of 2016 (Figure 2.2.b).

Recourse to Eurosystem financing increases

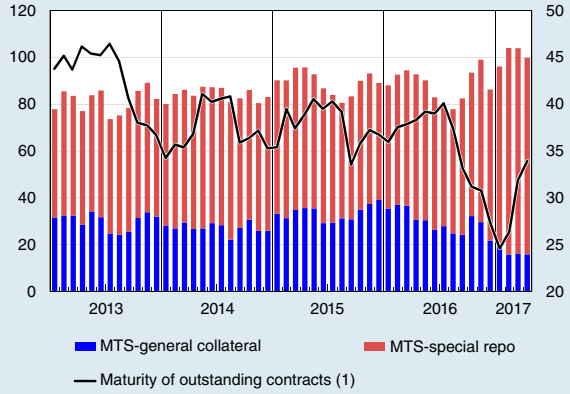
The amount of Eurosystem refinancing operations conducted with counterparties operating in Italy increased from €186 billion to €257 billion between September 2016 and April 2017 (Figure 2.3); its share of the total remained virtually unchanged at 33 per cent. Greater recourse to the second series of Targeted Longer-Term Refinancing Operations (TLTRO II) contributed to the increase in refinancing, while the gradual fall in short-term market rates made one-week and three-month loans less advantageous.

[1] Bank for International Settlements, 'Repo market functioning', CGFS Papers, 59, 2017.

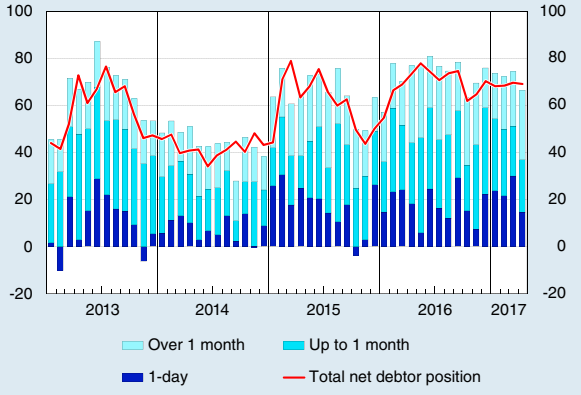
Figure 2.2

Trading volumes, maturity of contracts and net debtor position on MTS repo market

(a) Trading volumes and maturity of outstanding *contracts*
(monthly averages of daily data; billions of euros; days)



(b) Net foreign debtor position of the Italian banking system (2)
(monthly data; billions of euros)



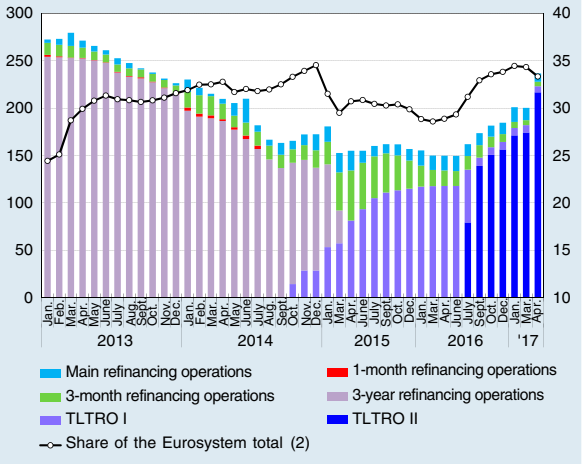
Source: Based on MTS SpA data.
(1) Right-hand scale. – (2) The net debtor position is calculated on the cash value of the outstanding contracts. For the total net position, monthly average of daily data; for the breakdown by maturity, end-of-period data.

The rise in yields has so far had no significant impact on the cost of the public debt

The average residual life of outstanding government securities was unchanged at 6.6 years.[2] Despite recent increases, the weighted average of yields at issue remained below 1 per cent and the average cost of the debt continued to decrease, dipping below 3 per cent (Figure 2.4).

Figure 2.3

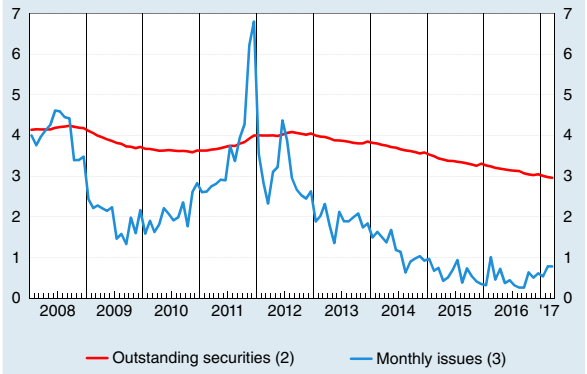
Recourse to Eurosystem refinancing by counterparties operating in Italy (1)
(billions of euros; per cent)



Sources: Based on ECB and Bank of Italy data.
(1) Average of daily stocks in the maintenance period. The horizontal axis gives the month in which each maintenance period ends. For April 2017, the maintenance period ends on 21 April. – (2) Right-hand scale.

Figure 2.4

Average yield at issue and average cost of government securities (1)
(monthly data; per cent)



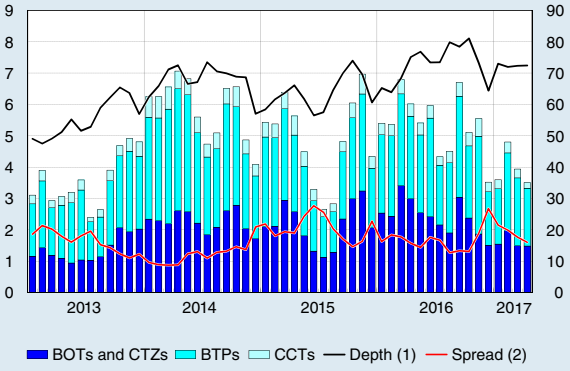
Sources: Based on Ministry of Economy and Finance and Bank of Italy data. Data as of 31 March 2017.
(1) Domestic placements of non-indexed government securities. The data for 2017 include issues with a settlement date up to 31 March. – (2) Weighted average of the yields at issue of government securities outstanding at end of month. – (3) Weighted average of the yields of government securities placed during the month, by settlement date.

[2] The figure excludes issues on international markets.

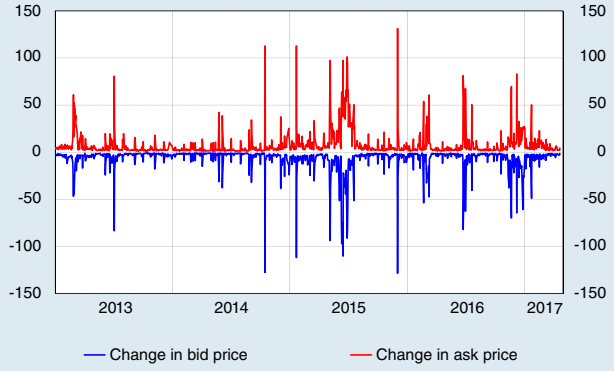
Figure 2.5

Liquidity indicators on Italian government securities

(a) Trading volumes, depth and bid-ask spread on MTS
(monthly averages of daily data; billions of euros; basis points)



(b) Impact of large orders on the prices quoted on MTS (3)
(daily averages of high-frequency data; basis points)



Source: Based on MTS SpA data.
(1) Depth is calculated as the average of the quantities of bid and ask orders for BTPs. – (2) The spread is measured as the simple average of the bid-ask spreads observed during the entire trading day for the BTPs listed on MTS. Right-hand scale. – (3) The analysis refers to the 10-year benchmark BTP and is based on data recorded in 5-minute intervals. The blue and red lines show the estimated impact on bid and ask prices of entering a hypothetical €50 million buy or sell order in the MTS book.

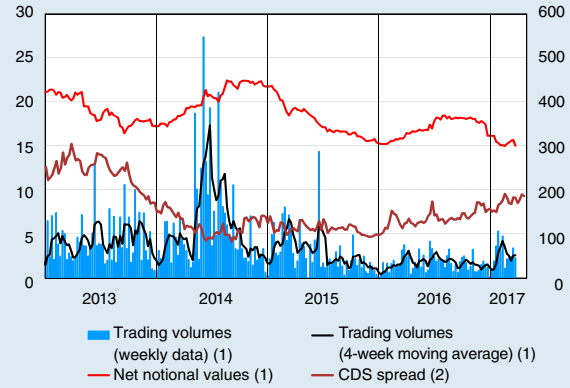
Liquidity conditions in the secondary market in government securities improve

Liquidity conditions in the secondary market in Italian government securities are improving, although trading volumes remain moderate (Figure 2.5.a). Significant fluctuations in the bid-ask spread, in market makers' bid and ask quotes on the MTS market and in the market's ability to absorb large orders occurred during the phases of greater uncertainty (Figure 2.5.b). Trading on the futures market was stimulated by the uncertainty surrounding economic policies and an increase in the dispersion of government securities yields in the euro area (see Section 1.1).

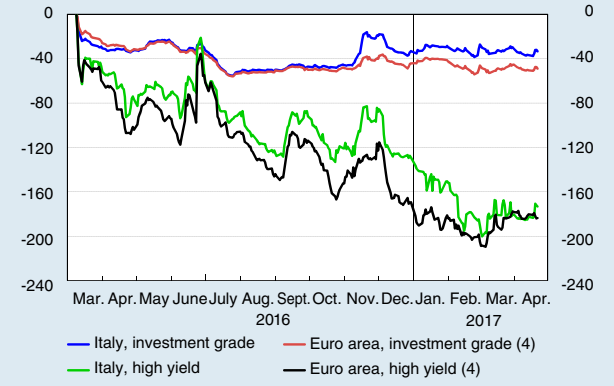
Figure 2.6

CDS on government securities and bond spreads

(a) CDS: trading volumes, net notional values and spread
(weekly data; billions of dollars; basis points)



(b) Change in asset swap spreads (3)
(daily data since 9 March 2016; basis points)



Sources: Based on data from Bloomberg, Depository Trust & Clearing Corporation (DTCC) and Bank of America Merrill Lynch.
(1) Both trading volumes (market risk transaction activity) and net notional values are measured according to the DTCC definition. – (2) Five-year maturity. ISDA 2014 Credit Derivatives Definitions. Right-hand scale. – (3) Asset swap spreads weighted by the market capitalizations of individual securities. There is no perfect correspondence between the securities included in the Bank of America Merrill Lynch indices, used in the graph, and their eligibility for the Eurosystem's Corporate Sector Purchase Programme (CSPP). On 10 March 2016 the Governing Council of the ECB announced the launch of the CSPP. – (4) The Bank of America Merrill Lynch indices for the euro area have been recalculated to exclude Italy.

CDS spreads on government securities increase

CDS spreads on Italian government securities began to increase again in the weeks leading up to the first round of the French presidential election (Figure 2.6.a), particularly those on contracts offering greater protection in case of debt redenomination.[3] The total amount of open positions (net notional values) has, however, fallen back to levels close to those recorded at the beginning of 2016.

The yield spread on Italian private sector bonds widens

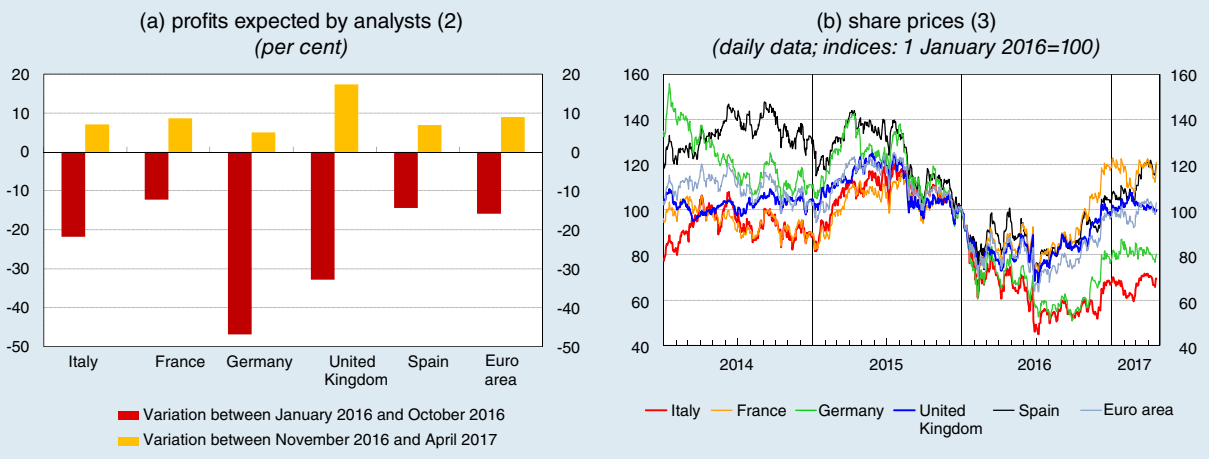
Since the beginning of November the swap spread of Italian investment grade bonds has widened, as has that vis-à-vis euro-area bonds of similar quality (Figure 2.6.b). High yield bond spreads have instead continued to decline, partly as an effect of investors' search for higher yields.

2.2 BANKS

The balance sheets of Italian banks are benefiting from the economic recovery, which has brought the default rate of households and firms down close to pre-crisis levels. The decline in the stock of non-performing loans, already underway, will be accentuated by the completion of large value sales by some financial intermediaries. Liquidity conditions remain relaxed, in the aggregate; the volume of assets eligible as collateral for Eurosystem financing remains substantial. The measures of public support for the banking sector introduced in December have enabled some struggling banks to issue bonds guaranteed by the State.[4] The banking sector's capital ratios are stable. Banca Monte dei Paschi di Siena, Banca Popolare di Vicenza and Veneto Banca have asked the Italian government to proceed with precautionary recapitalizations, subject to prior approval by the ECB and the European Commission. The increase in write-downs on non-performing loans affected the sector's profit-and-loss accounts for 2016 which, for some banks, closed with large losses, due mostly to extraordinary transactions.

Figure 2.7

Market indicators of listed banks (1)



Sources: Based on data from I/B/E/S and Thomson Reuters Datastream.
(1) The data relate to a sample of banks listed in the FTSE Italy Banks, FTSE Germany Banks, FTSE France Banks, FTSE Spain Banks, FTSE UK Banks and Euro STOXX Banks. – (2) Net profit estimates for the next 12 months, in euros. – (3) Data relating to the indices referenced in note (1) are in euros.

[3] The CDS currently being traded have differing contractual features because they follow rules set out by the International Swaps and Derivatives Association (ISDA) in 2003 and again in 2014 (see *2003 ISDA Credit Derivatives Definitions* and *2014 ISDA Credit Derivatives Definitions*). The contracts drafted in accordance with the rules introduced in 2014 would appear to afford greater protection in case of redenomination or restructuring of the underlying debt compared with those written under the rules established in 2003.

[4] Decree Law 237/2016, converted into Law 15/2017.

The outlook is improving: analysts have revised their earnings expectations upwards (Figure 2.7.a). Since November, Italian banks' share prices have gained 20 per cent on average (Figure 2.7.b), in line with the other European banks, although they remain lower than at the start of 2016. The increase in share prices is attributable largely to the decrease in the risk premiums required by investors and to higher profit expectations.

Despite the signs of improvement, the banking system is still exposed to significant risks. A weakening of the economic recovery could worsen asset quality and profitability; the substantial uncertainty in Italy and Europe could heighten investors' risk aversion and make it more difficult and costly to access the capital markets. Lastly, the capital strengthening measures for the banks that requested government intervention are still to be finalized.

Asset risks

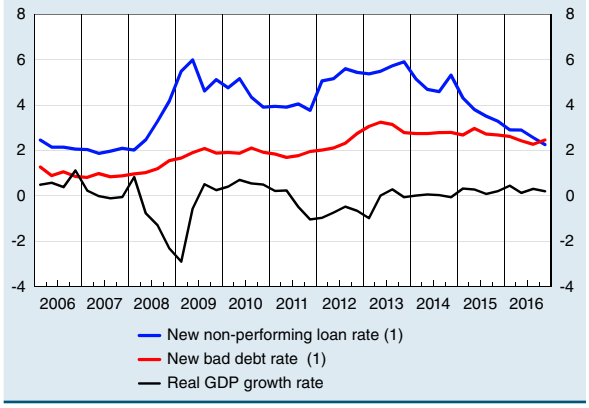
Lending increases only slightly and only to the less risky customers

Credit growth remains weak. The demand for new corporate loans is very low and banks' credit supply policies remain prudent. Banks increased lending only to households, which as a whole have a low level of indebtedness, and to firms with high credit ratings (see Section 1.2). Thanks to the economic recovery, the flow of non-performing loans in proportion of total loans came down to 2.3 per cent in the fourth quarter of 2016, near the level recorded in 2006-07 (Figure 2.8).

Figure 2.8

Credit risk indicators and GDP growth

(quarterly data; per cent and growth rate)



Sources: Central Credit Register and Istat.
(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.

Net of provisions, the stock of NPLs fell by €18 billion compared with June 2016, to €173 billion, or 9.4 per cent of outstanding loans (Table 2.1 and Figure 2.9). Gross of provisions, NPLs fell by €7 billion to €349 billion. The coverage ratio (provisions in relation to the whole stock of NPLs) rose by 4.2 percentage points to 50.6 per cent. A large part of the provisions was made by UniCredit to facilitate the sale, expected to take place over the next few months, of a substantial amount of bad debt as part of the plan to strengthen the group. The average coverage ratio for the significant Italian banking groups is more than 6 percentage points higher than that of the main EU banks.[5]

Bad debt sales are gradually increasing

In 2016, about €8 billion worth of bad debts, gross of provisions, were sold, €1 billion more than in 2015, contributing to the fall in the stock of NPLs.[6] Some intermediaries are completing transactions involving large amounts, which should be finalized within the next few months. Among these, UniCredit expects to sell €17.7 billion worth of bad debts at an average price of 13 per cent.[7] The announced price – which is much lower than the average

[5] EBA, *Risk Dashboard. Data as of Q4 2016*, April 2017. The European sample consists of 198 banks, of which 15 Italian.
[6] Not including sales by the banks for which resolution was decided in November 2015 and concluded in the first few months of 2016, amounting to some €8 billion. Also excludes sales by branches of foreign banks and intra-group sales.
[7] The price is a percentage of the gross balance-sheet value.

Table 2.1

Credit quality: amounts and shares of non-performing loans and coverage ratios (1)
(billions of euros and per cent; December 2016)

	Significant banks (2)					Less significant banks (2)					Total (2)				
	Gross exposures	Net exposures	Gross percentage share	Net percentage share	Coverage ratio	Gross exposures	Net exposures	Gross percentage share	Net percentage share	Coverage ratio	Gross exposures	Net exposures	Gross percentage share	Net percentage share	Coverage ratio
Customer loans (3)	**1,519**	**1,373**	**100.0**	**100.0**	**9.6**	**312**	**283**	**100.0**	**100.0**	**9.3**	**2,017**	**1,830**	**100.0**	**100.0**	**9.3**
Performing	1,251	1,244	82.4	90.6	0.6	252	250	80.6	88.2	0.7	1,667	1,657	82.7	90.6	0.6
Non-performing	267	129	17.6	9.4	51.7	61	33	19.4	11.8	44.8	349	173	17.3	9.4	50.6
Bad debts (4)	165	61	10.9	4.4	63.1	36	15	11.5	5.4	57.8	215	81	10.7	4.4	62.3
Unlikely to pay	98	65	6.4	4.7	33.7	22	16	7.0	5.6	27.9	126	85	6.3	4.7	32.6
Past-due	5	4	0.3	0.3	24.7	3	3	0.9	0.9	9.4	8	7	0.4	0.4	19.4

Source: Supervisory reports, on a consolidated basis for banking groups and individually for the rest of the system.
(1) 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 performing loans. Rounding may cause discrepancies in the totals. The percentage composition is calculated on the basis of the amounts expressed in millions of euros. Provisional data. – (2) Significant banks are those supervised directly by the ECB; less significant banks are those supervised by the Bank of Italy in close cooperation with the ECB. The total includes subsidiaries of foreign banks that are not classified as either significant or less significant Italian banks and account for about 9 per cent of total gross customer loans. Excludes branches of foreign banks. – (3) Unlike previous editions, it also includes 'non-current assets and groups of assets held for sale'. – (4) This non-harmonized Italian subcategory distinguishes the exposures with the worst credit quality from other non-performing exposures.

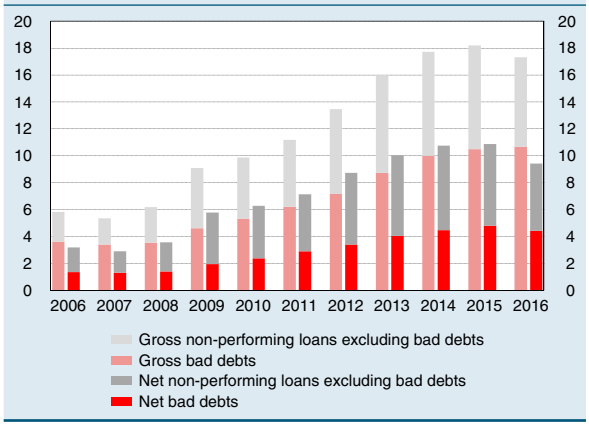
recovery rate for bad debts sold in the period 2006-15 (23 per cent)[8] and the prices obtained in other recent transactions – reflects the poor quality of the portfolio being sold, consisting of bad corporate debts, most of which are unsecured and have been classified as a bad debt for an extended period of time. Historically, such bad debts have been marked by particularly low recovery rates.

The ECB releases its guidelines on NPLs

In March, the ECB published guidelines on non-performing loans, addressed to significant banks.[9] The non-binding guidance asks banks to implement NPL management strategies and medium-term operational plans to reduce the stock of NPLs, without setting quantitative objectives. In developing their plans, banks may create a separate, specialized internal management body, make recourse to an external management company and sell their portfolios.

Figure 2.9

Non-performing loan ratios (1)
(per cent)



Source: Supervisory reports, on a consolidated basis for banking groups and individually for the rest of the system.
(1) Customer loans. Unlike previous editions, it also includes 'non-current assets and groups of assets held for sale'. Includes banking groups and subsidiaries of foreign banks; excludes branches of foreign banks. Amounts are calculated net and gross of adjustments.

[8] F. Ciocchetta, F.M. Conti, R. De Luca, I. Guida, A. Rendina and G. Santini, 'Bad Loan recovery rates', Banca d'Italia, *Notes on Financial Stability and Supervision*, 7, 2017.
[9] ECB, *Guidance to banks on non-performing loans*, March 2017.

The strategies must be implemented without delay and, at the same time, must not excessively increase the market supply of NPLs, which would lower their valuation. Sale prices for non-performing loans that are significantly below their book value would cause an increase in provisions with possible adverse effects on loan supply (see the box 'The quality of banks' portfolios and the supply of credit to firms'). These effects would be greater for the banks that use advanced internal risk measurement models, for which the sale at very low prices would imply an increase in the capital requirements even for performing loans as a whole.[10]

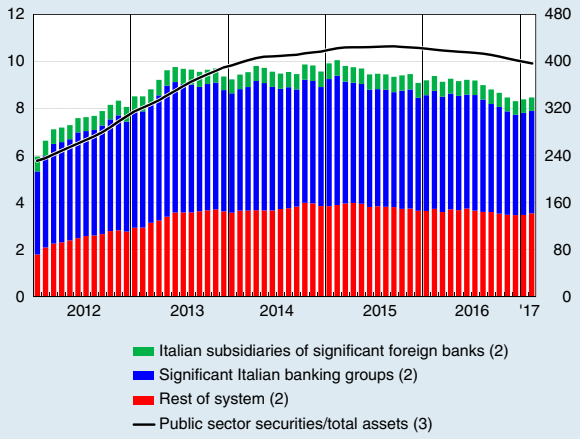
Exposure to the Italian public sector diminishes

Banks' exposure to the public sector continues to decline. In the twelve months ending in February, the volume of Italian public sector securities in bank portfolios fell by €36 billion, to €339 billion (Figure 2.10); net of market fluctuations the reduction amounted to 7.7 per cent. Their share of total assets fell from 10.4 to 9.6 per cent.

Figure 2.10

Banks' investment in Italian public sector securities (1)

(monthly data; billions of euros and per cent)



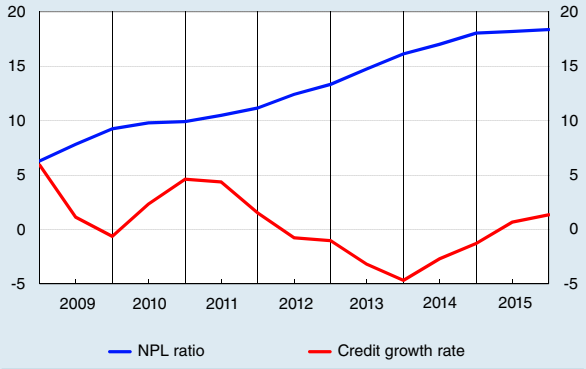
Source: Supervisory reports.
(1) All public sector securities, including those issued by local authorities. Excludes Cassa Depositi e Prestiti SpA. – (2) Right-hand scale. – (3) 12-month moving average ending in the month indicated.

THE QUALITY OF BANKS' PORTFOLIOS AND THE SUPPLY OF CREDIT TO FIRMS

In Italy, the sharp increase in non-performing loans (NPLs), following the recession triggered by the financial crisis, has been accompanied by a slowdown in lending to the economy (see the figure). This correlation is often interpreted as a causal relation: a high proportion of NPLs in relation to total loans (the NPL ratio) would diminish the banks' ability to finance the economy.

Evolution of the NPL ratio and the credit growth rate

(half-yearly data; per cent)



High levels of NPLs absorb a substantial amount of capital and by making the banks more vulnerable to external shocks they can increase the cost of finance and alter the propensity to take risks. Moreover, an increase in exposures classified as NPLs, particularly when unexpected, increases the flow of transfers to provisions needed to maintain an adequate coverage ratio; this reduces banks' profitability and may cut into their capital, making them less able to disburse credit.

[10] M. Gangeri, M. Lanotte, G. Della Corte and G. Rinna, 'Why exceptional NPLs sales should not affect the estimated LGDs of A-IRB banks', Banca d'Italia, *Notes on Financial Stability and Supervision*, 6, 2017.

A negative correlation between credit growth and the NPL ratio cannot, however, be interpreted automatically as a causal relation. Credit growth may be affected by separate factors, such as other structural characteristics of banks. Moreover, banks with a particularly high NPL ratio tend to have clients that are more risky or in a worse financial situation; this could lead simultaneously to a lower demand for credit and a higher level of asset risk compared with other types of financial intermediary.

In order to overcome these interpretation difficulties, an econometric analysis was made that exploits the variability of data on credit relationships between banks and firms.[1] The estimates show that the negative correlation between the NPL ratio and credit growth at the individual bank level disappears when account is taken of the trend in demand for bank loans and of firms' profitability and their effective riskiness. Thus there is no evidence that a high NPL level reduced the supply of credit from 2008 to 2015. The correlation between the NPL ratio and credit growth observed in recent years has presumably been due to the weak macroeconomic situation, which has not only impaired the quality of banks' assets but also eroded the opportunities for firms to invest, thereby reducing their demand for loans.

A rise in NPLs that is unexpected and due to factors other than changes in the economic cycle may, however, have a negative effect on the supply of loans. In 2014-15 credit quality was affected by the reclassifications and additional transfers to provisions made after the 2014 asset quality review (AQR) conducted by the European Central Bank and the national authorities.[2] It is estimated that, for the banks participating in the review, a 1 percentage point increase in the ratio of new NPLs to total loans will correspond on average to a decrease of about 1.5 points in the growth rate of lending to firms.

In brief, in the period under consideration, write-downs entered in the balance sheet to reflect the deterioration in credit quality had an adverse effect on the loan supply. On the other hand, the persistently high level of NPLs appears not to have exerted strong pressure on credit growth. However, this does not rule out the possibility that a high NPL ratio could lower the credit growth rate in the future if demand accelerates.

[1] M. Accornero, P. Alessandri, L. Carpinelli and A.M. Sorrentino, 'Non-performing loans and the supply of bank credit: evidence from Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 374, 20.

[2] The estimate uses the AQR as the source of exogenous change in the classification of loans in banks' portfolios; this assumes that the changes imposed by the supervisory authorities in 2014 were not connected with the cyclical evolution of each bank's client firms and were not fully envisaged by the banks themselves before the end of the review.

Refinancing risk and liquidity risk

Recourse to Eurosystem refinancing increases …

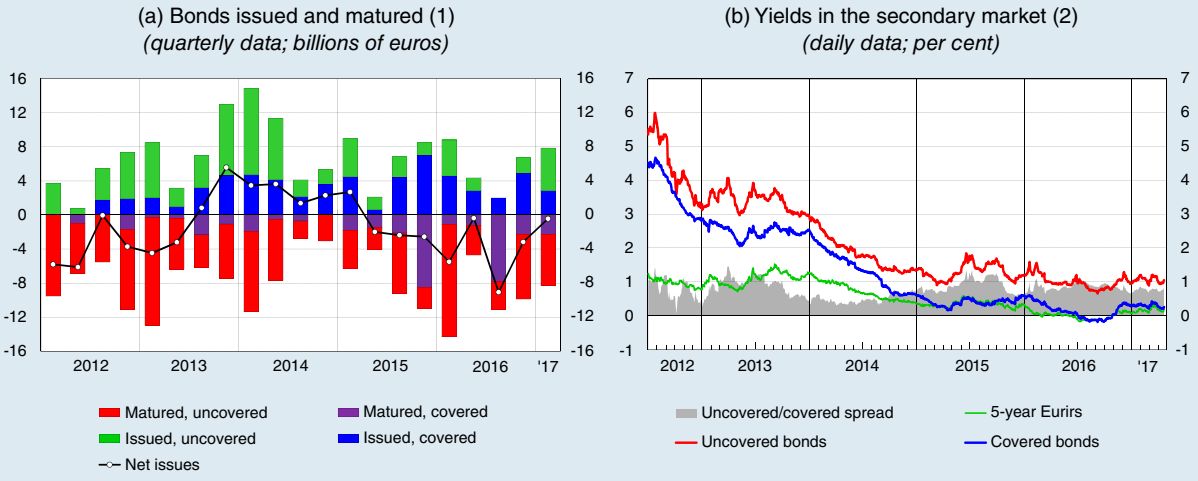
Italian banks continued to reduce their bond issues and increase their recourse to Eurosystem refinancing (see Section 2.1), mainly through TLTRO II. Again in the first quarter of 2017, net bond issues on the international markets, though recovering, remained negative (Figure 2.11.a). The yields demanded by investors, which have risen moderately since last autumn, stand at around 1 per cent (Figure 2.11.b) while the TLTRO II interest rate has been equal to zero or negative (see the box 'The monetary policy measures adopted in March', in *Economic Bulletin*, 2, 2016). Fewer bonds were placed with households, while deposits increased (Table 2.2).

… but the volume of available eligible assets remains high

Between September 2016 and March 2017 the value of assets deposited at the Bank of Italy to back credit operations with the Eurosystem (the collateral pool) increased by €55 billion to €339 billion, while overcollateralization

Figure 2.11

Italian bank bonds



Sources: Based on 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.

(the share of assets available to obtain additional liquidity) fell from 34 to 24 per cent as a result of refinancing growth of €72 billion (Figure 2.12.a). The ratio of government securities to deposited assets rose, despite the application of larger haircuts following the downgrading of Italy by DBRS in January (Figure 2.12.b). The amount of marketable securities available to the banks outside the collateral pool fell to €210 billion from €249 billion in September 2016 (Figure 2.12.c), equal to 46 per cent of total exposures with the Eurosystem and on the repo markets.

Table 2.2

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

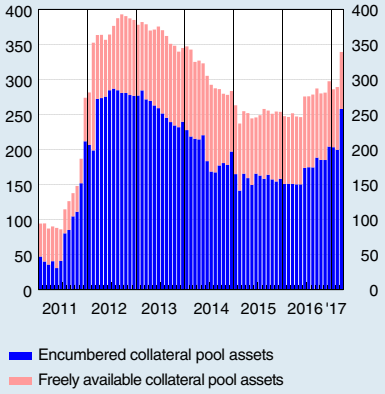
	End-of-month stocks			Change (2) Sept. 2016-Feb. 2017
	September 2016	December 2016	February 2017	
Retail funding (a)	1,568	1,603	1,579	11.5
Deposits of residents (3)	1,398	1,444	1,427	29.4
of which: households and firms	1,234	1,276	1,254	20.3
general government	50	50	55	5.0
Bonds (4)	170	159	152	-17.9
Wholesale funding (b)	543	550	553	3.1
Deposits of non-residents	296	306	303	5.2
Net liabilities to central counterparties (5)	72	70	68	-3.5
Bonds	175	174	182	1.4
Eurosystem refinancing (c) (6)	186	204	200	13.1
Total funding (a+b+c)	**2,297**	**2,357**	**2,332**	**27.7**

Sources: Individual supervisory reports; includes Cassa Depositi e Prestiti SpA.
(1) Excludes liabilities to other banks resident in Italy. The data for February 2017 are provisional. – (2) Adjusted for reclassifications, value adjustments and exchange rate variations. – (3) Excludes transactions with central counterparties. – (4) Bonds held by households. Changes are not adjusted for reclassifications, variations due to value adjustments or exchange rate variations. – (5) Repurchase agreements only, representing foreign funding via central counterparties. – (6) Includes transactions with the Eurosystem for monetary policy operations, see Statistics. Banks and Money: National Data, Tables 3.3a and 3.3b.

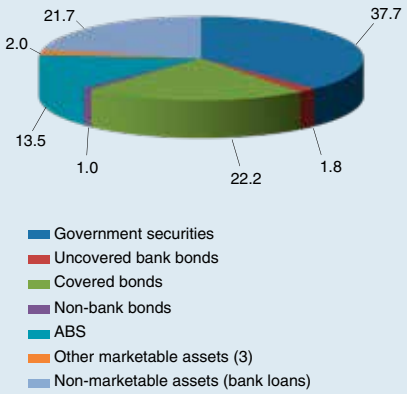
Figure 2.12

Eligible assets of the Italian banking system

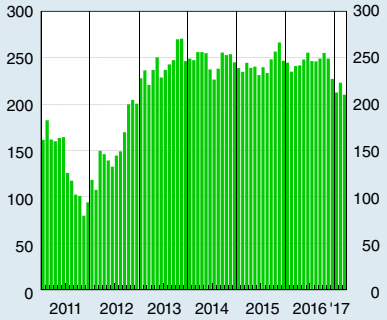
(a) Eligible assets in the collateral pool (1)
(monthly data; billions of euros)



(b) Composition of the collateral pool
(per cent; March 2017)



(c) 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 volume of encumbered Eurosystem collateral pool assets includes the part covering accrued interest and refinancing in dollars. The collateral pool is valued at the prices taken from the Common Eurosystem Pricing Hub, net of haircuts. – (2) End-of-period data for the entire banking system, excluding Cassa Depositi e Prestiti SpA and Poste Italiane 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. – (3) Includes local and regional government securities and bank bonds backed by the state guarantee scheme.

Asset encumbrance increases

Greater recourse to Eurosystem refinancing is reflected in the growth in asset encumbrance (the share of assets used as collateral) which, for the significant Italian banks, increased from 29.2 per cent in June 2016 to 30.1 per cent at the end of the year, a value almost four percentage points higher than that of the main European banks.

Fewer instruments qualify for MREL

There has been a reduction in the number of instruments that potentially qualify to meet the minimum requirement for own funds and eligible liabilities (MREL) due to reduced funding from bond issues;[11] see the box 'Minimum requirement for own funds and eligible liabilities (MREL)', in *Financial Stability Report*, 2, 2016.[12] By the end of 2019, €194 billion worth of bonds will have matured, equal to 6 per cent of Italian banks' liabilities. To comply with the MREL requirement, the banks will have to increase their wholesale funding. Calibrating this requirement, specific to each bank, and setting the date for its entry into force are still in progress.[13] In adopting their decisions the European resolution authorities will have to assess the market's capacity to absorb the new issues in order to prevent sharp rises in funding costs.

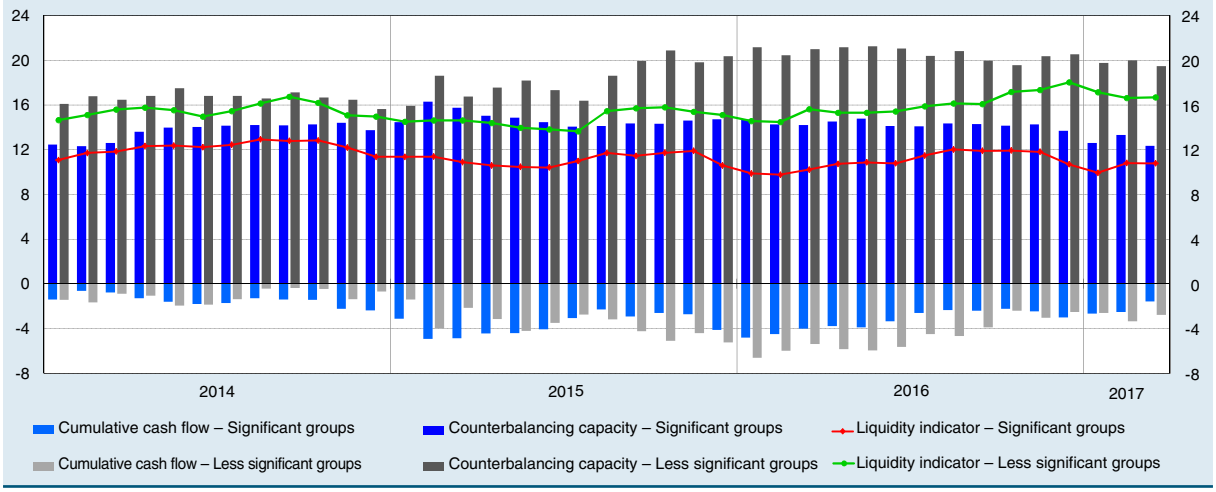
[11] In June 2016, for a sample of 15 of the largest Italian banking groups, these instruments averaged 16.1 per cent of liabilities, compared with 17.8 per cent at the end of 2015. The corresponding result for a sample of European banks, including the Italian banks, was 15 per cent of liabilities at the end of 2015 (See EBA, Report on the implementation and design of the MREL framework, 14 December 2016).

[12] Directive 2014/59/EU on bank recovery and resolution (BRRD) established that MREL can include own funds, subordinated and senior debt instruments with maturities longer than one year, and deposits that are not eligible for cover under deposit insurance schemes, again with maturities longer than a year.

[13] The requirement will be fixed by the Single Resolution Board for the significant banks and those with cross-border business; it will be fixed by the Bank of Italy for the others.

Figure 2.13

Net liquidity position (1)
(monthly data; average per cent of total assets)



Source: Data transmitted to the Bank of Italy by a sample of 28 banking groups for periodic monitoring of their liquidity positions.
(1) Simple averages for 14 significant banks (supervised directly by the ECB) and 14 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 freely available assets eligible for use as collateral for Eurosystem refinancing operations (counterbalancing capacity) and cumulative expected net cash flows over the next 30 days. The latter aggregate is calculated as the (positive or negative) difference between outflows (negative sign) and inflows (positive sign). Outflows include maturing obligations towards institutional customers and banks' estimates of expected retail customer outflows. On prudential grounds it is assumed there is no rollover of maturing obligations towards institutional counterparties.

The liquidity position of the banking system is overall sound

Last March the net liquidity position of the significant banks averaged 10.8 per cent of their assets (16.7 per cent for the less significant banks; Figure 2.13). The fall of about 2 percentage points recorded between November 2016 and January 2017 can be ascribed entirely to the funding difficulties of some banks, partly overcome in February by issues of €13.5 billion worth of bonds backed by state guarantee. The liquidity coverage ratio (LCR) declined for the top five groups but was still well above the regulatory minimum (Table 2.3).[14]

Table 2.3

Liquidity coverage ratio (LCR) of Italian banks
(per cent)

	LCR *(at 30 June 2016)*	LCR *(at 31 December 2016)*	Level 1 assets as per cent of total buffer (1) *(at 31 December 2016)*
Top 5 groups (2)	158	146	97
Other significant banks (2)	129	129	97
Less significant banks (3)	194	192	100
Total banking system	**162**	**154**	**98**

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

[14] The LCR required for 2017 is 80 per cent. From 1 January 2018, at the end of the transition phase, it will be 100 per cent.

Interest rate risk and market risk

The exposure to interest rate increases is limited

Italian banks' exposure to the risk of an increase in interest rates is low, reflecting to a large extent their high proportion of variable-rate assets, whose value is relatively insensitive to shifts in the yield curve. Based on December 2016 data, an upward shift of 200 basis points of the entire risk-free yield curve – the scenario envisaged by the European Banking Authority (EBA) in assessing interest rate risk in the banking book for supervisory purposes[15] – would result in an average reduction in the net value of assets and liabilities (economic value) equal to a modest 2.1 per cent of own funds for the 14 significant Italian banking groups.[16] The impact would be positive for six of them and negative for the other eight. For no bank would the reduction exceed the 20 per cent regulatory threshold that would trigger a more thorough capital adequacy assessment by the supervisory authorities.

In late February the ECB launched an analysis of the effects of changes in the level and the shape of the interest rate curve on banks' economic value and net interest income.[17] The results of this analysis will be taken into account in the 2017 supervisory review and evaluation process (SREP).

The share of Level 3 assets is very low

The banks' financial assets most exposed to market risk are those measured at fair value in the balance sheet, which at the end of 2016 made up an average of 21 per cent of the assets of the main Italian banking groups. Around two thirds consisted of instruments traded on active, liquid markets (Level 1 assets under IFRS), double the European average (see the box 'The composition of assets measured at fair value in banks' balance sheets'). Only 2.4 per cent of the portfolio measured at fair value was made up of Level 3 assets, the most difficult category of assets to value.

THE COMPOSITION OF ASSETS MEASURED AT FAIR VALUE IN BANKS' BALANCE SHEETS

Fair value is the measurement used to determine the value of a large part of the financial assets and liabilities held by banks that adopt the International Financial Reporting Standards. The IFRS define the fair value of an asset as the price at which a transaction between market operators would be settled at the date of measurement. They require fair value to be measured using market inputs, as far as possible, and rank the assets accordingly into three categories. Level 1 comprises instruments listed on deep and liquid markets, which are measured at quoted market prices. Level 2 assets are measured on the basis of either i) the prices of similar assets formed on deep and liquid markets, ii) the prices quoted on illiquid markets or iii) models that use market inputs such as interest rates, yield curves, implied volatility and credit spreads. Lastly, to measure Level 3 assets it is necessary to use statistical models and parameters of uncertain reliability and soundness.

Level 3 assets include complex and illiquid securities – such as derivatives, asset-backed securities (ABS) and collateralized debt obligations (CDO) – which during the global financial crisis in some cases caused banks to incur substantial losses. Level 2 assets, on the other hand, include not only instruments for which margin amounts are exchanged daily between the counterparties and valuation uncertainty is limited (as with plain vanilla swaps), but also instruments subject to greater uncertainty and with less frequent or no exchange of margin amounts.

[15] Exposures to interest rate risk in the banking book are calculated by the banks based on EBA guidelines (EBA, *Guidelines on the management of interest rate risk arising from non-trading activities*, October 2015) and are transmitted to the supervisory authorities for use in the SREP (see the box 'The methodologies for measuring interest-rate risk', in *Financial Stability Report*, 1, 2010).

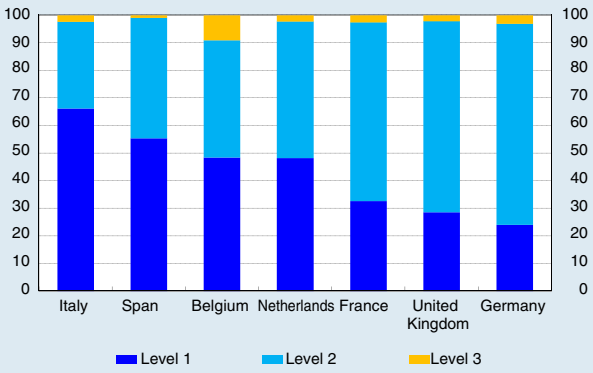
[16] According to banks' estimates, under the same scenario for a shift in the risk-free yield curve, net interest income would increase by an average of 12.9 per cent compared with that expected in their baseline scenario.

[17] ECB, ECB Banking Supervision conducts sensitivity analysis focused on effects of interest rate changes, press release, 28 February 2017.

The composition of assets in the fair value hierarchy is different from country to country. In Europe, the leading Italian banks hold on average a smaller share of assets measured at fair value (21 per cent of total assets, against a Europe-wide average of 29). The majority of assets measured at fair value are Level 1 assets, which account for 66 per cent against a European average of 34. Level 2 and 3 assets instead represent respectively 31.5 and 2.4 per cent of total assets for Italian banks and 63.7 and 2.6 per cent for European banks (see the figure).

Specifically, Level 3 assets are concentrated among European banks specializing in merchant banking and in some cases represent almost 60 per cent of common equity tier 1 (CET1), compared with an average of 11 per cent for Italian banks.

Share of Level 1, 2 and 3 assets in total assets measured at fair value in the main European countries
(per cent)



Source: Based on European Banking Authority data.

The rules on ranking financial instruments in the fair value hierarchy allow the banks ample discretion, which could be used to present a more favourable picture of the risks they have incurred and to apply less stringent regulatory requirements. Recently, the European Parliament, in its annual report on banking union,[1] highlighted the risks associated with Level 3 assets and indicated the need to progressively reduce their holdings.

[1] European Parliament, Banking Union, Annual Report 2016. European Parliament resolution of 15 February 2017 on Banking Union, 2017 .

Market risk is diminishing

In the fourth quarter of 2016 both the Value at Risk (VaR) of the total portfolio at fair value (i.e. trading and banking books) and that of the trading book alone declined for a sample of six banking groups that use internal models to measure market risk. The drop is the result of the liquidation of some positions, the increased diversification of investments in bonds and the reduction in the duration of the portfolio held (Figure 2.14).

Figure 2.14

VaR for a sample of banks (1)
(daily data; indices: 1 January 2011=100)

Source: Data for a sample of six banking groups that use internal models to measure market risk.
(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 reflect the changes in VaR for all positions (securities and derivatives) valued at fair value (red line) and for the trading book alone (blue line). A decline indicates a reduction in risk.

Capital and profitability

The capital ratios of the banking system are stable

The substantial write-downs made by the UniCredit group last December temporarily reduced the common equity tier 1 ratio

(CET1) of Italy's banking system, which declined to 11.5 per cent at the end of 2016. The group subsequently carried out a €13 billion recapitalization, which was fully subscribed by private investors at the beginning of March this year. It has also drawn up a plan to sell off its non-strategic shareholdings; the benefit to its balance sheet should become apparent in the second half of this year. Including UniCredit's capital increase, the Italian banking system's CET1 ratio should be in line with the figure for June last year (12.4 per cent); the ratio for the significant banks should stand at 11.6 per cent (11.7 in June 2016), about 2.5 percentage points below the average for the leading European banks.[18]

Following UniCredit's capital increase, the prudential leverage ratio of Italy's significant banking groups, which is an indicator of capital adequacy measured on non-risk-weighted assets, is expected to reach 5.1 per cent, in line with the average for the leading European banks (5.2 per cent).

Banca Monte dei Paschi di Siena, Banca Popolare di Vicenza and Veneto Banca have applied for a precautionary recapitalization using the public support measures introduced last December.[19] Completion of the recapitalization is subject to the approval of the European Central Bank and the European Commission, which are examining the restructuring plans submitted by the banks concerned.

Profits are negative owing to substantial write-downs

Operating profit for 2016 is down by 27 per cent, mainly owing to the drop in income. Gross interest income fell by 7.6 per cent as a result of the decline of the same amount in net interest income and other income. Operating costs rose by 2.5 per cent, largely owing to higher extraordinary charges in connection with incentives to reduce the number of staff. Write-downs of credits increased by 47.4 per cent and amounted to 1.5 times the operating profit for the year. Return on equity (ROE), net of write-downs to goodwill, was -5.7 per cent, against 3.1 per cent in 2015; excluding the UniCredit group, ROE would in any case have been negative by more than 1 percentage point.

Operating profits are likely to increase in 2017

According to the latest forecasting scenario, Italian banks' operating profit should rise this year thanks to the continued growth in economic activity and the slight increase in the slope of the yield curve; however, unless action is taken to stop costs rising, it will remain below the result for 2015.

2.3 INSURANCE COMPANIES AND THE ASSET MANAGEMENT INDUSTRY

Insurance

Profitability is stable and market assessments are improving

The profitability of Italian insurance companies is stable. In 2016 the return on equity (ROE) averaged 9.2 per cent in the life insurance sector and 7.8 per cent in the non-life sector (Figures 2.15.a and 2.15.b). Over the last few months, strengthening economic growth projections have been reflected in an improvement in insurers' share prices and expected profits (Figure 2.16).

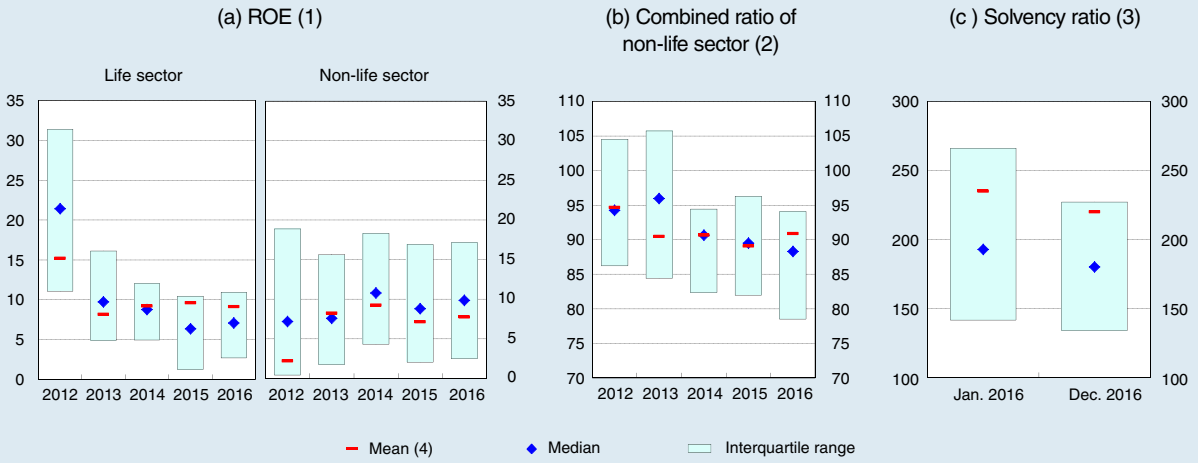
The financial position is sound

The solvency margin remains well above the solvency capital requirement (equal to 100 per cent of own funds held to cover capital requirements; Figure 2.15.c), despite the decline since the start of 2016 owing to the drop in the market value of Italian government securities, which form the bulk of insurance companies' assets (Figure 2.17).

[18] EBA, *Risk Dashboard, Data as of Q4 2016*, April 2017.
[19] Legislative Decree 237/2016, converted by Law 15/2017.

Figure 2.15

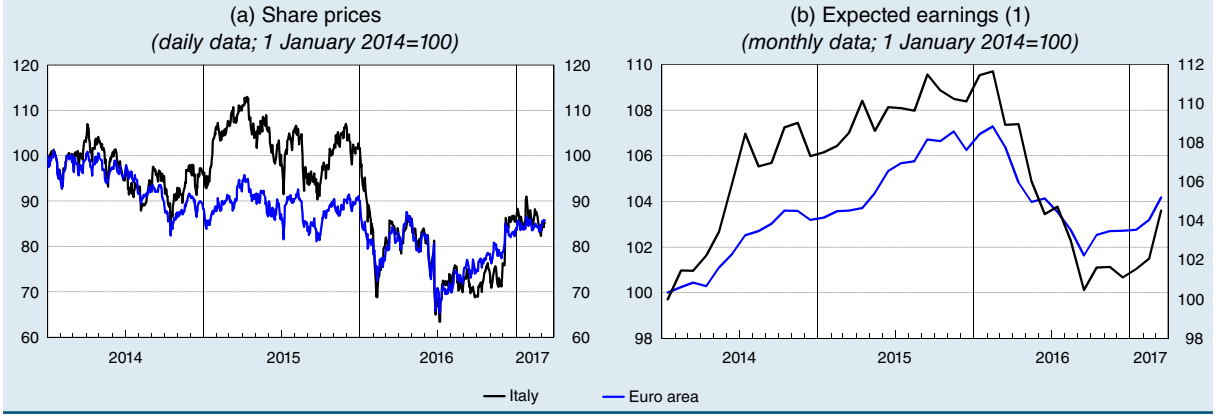
Main balance sheet indicators for Italian insurance companies
(per cent)



Source: IVASS.
(1) Ratio of earnings to shareholders' equity. – (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 held for coverage to the new solvency capital requirement calculated as required by the Solvency II Directive (2009/138/EC). – (4) Calculated for the total system.

Figure 2.16

Insurance companies in Italy and the euro area



Source: Based on Thomson Reuters Datastream data.
(1) Average, weighted by the number of shares in circulation, of expected earnings per share in the 12 months following the reference date of a sample of the main Italian and euro-area insurance companies. For Italy the data refer to the following companies: Assicurazioni Generali, Mediolanum Assicurazioni, Società Cattolica Assicurazioni, UGF Assicurazioni and Vittoria Assicurazioni; for the euro area the data refer to the main companies included in the Datastream insurance sector index.

A rise in interest rates would have only a limited impact on the financial position and surrenders …

The effects of an upward shift of the yield curve on the balance sheets of Italian insurance companies would be modest on the whole, thanks to the good matching of durations between assets and liabilities. The risk that a rise in interest rates would spur an increase in early policy surrenders is also low, owing to the relatively high yields still offered by traditional life insurance products.

… and could help to improve profitability

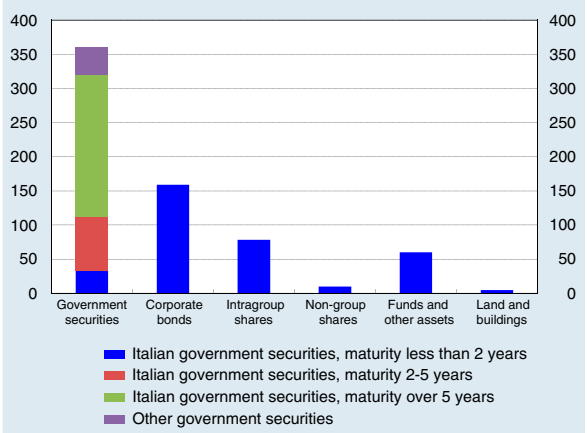
A gradual, generalized rise in market yields could improve the returns on investments of companies in the life insurance sector, boosting their profitability.

The results of the EIOPA stress test confirm the resilience of the Italian insurance sector

Last December the European Insurance and Occupational Pensions Authority (EIOPA) published the results of the stress test conducted on 236 European insurance companies.[20] The exercise assessed the vulnerability of companies in two adverse scenarios: a low-for-long yield scenario characterized by prolonged low interest rates and a double-hit scenario in which an interest rate decline is accompanied by a widening in spreads and a significant fall in asset value. The good matching of the durations of balance-sheet assets and liabilities limits the impact of these scenarios on the financial positions of the 16 Italian companies included in the sample.[21] The average fall in the excess of assets over liabilities is around 5 per cent in the low-for-long scenario, compared with a European average of 18 per cent. In the double-hit scenario the decline is much greater, more than 30 per cent, in line with the results for the insurance companies operating in the other main countries. During the stress test, European insurers assessed the impact of an increase in bond spreads on their financial position by applying the long-term guarantees envisaged by Solvency II to attenuate the effects of market price volatility on solvency ratios (see the box 'The measures envisaged by Solvency II. The impact of the volatility adjustment for Italian and European insurance companies').

Figure 2.17

Investments of Italian insurance companies
(billions of euros; data at 31 December 2016)

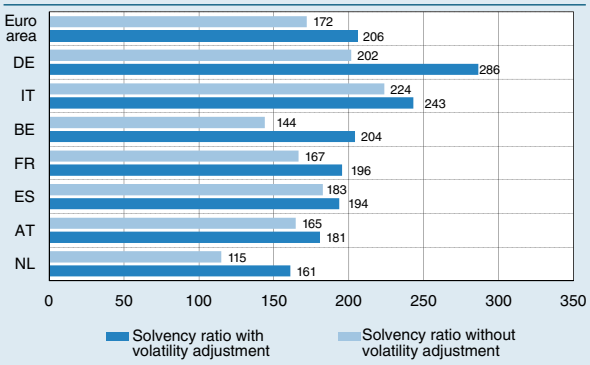


Source: IVASS.

THE MEASURES ENVISAGED BY SOLVENCY II. THE IMPACT OF THE VOLATILITY ADJUSTMENT FOR ITALIAN AND EUROPEAN INSURANCE COMPANIES

The long-term guarantee (LTG) measures introduced in Solvency II to mitigate the pro-cyclical effects of excessive volatility of market prices have major effects on the solvency indicators. The European Insurance and Occupational Pensions Authority (EIOPA) is therefore carrying out medium-term monitoring of how the measures are being applied by European insurance companies. The survey conducted at the beginning of 2016 found that, of the various measures envisaged by the rules, the volatility adjustment (VA) is the one most widely adopted in Europe and the only one used by Italian insurance companies.[1] The VA consists in raising in parallel the term

Solvency ratio with and without volatility adjustment
(per cent)



Source: EIOPA.

[1] The VA is used by 88 insurance companies in Italy (i.e. 97 per cent of the market in terms of technical provisions), 83 in Germany (more than 60 per cent of the market) and 217 in France (over 70 per cent of the market). The survey results are summarized in EIOPA, *Report on long-term guarantees measures and measures on equity risk 2016*, 2016.

[20] For a summary of the results, see EIOPA, *2016 EIOPA Insurance Stress Test Report*, 2016.
[21] These companies represent over three quarters of the domestic market in terms of technical reserves.

structure of interest rates used to compute the value of balance sheet liabilities in the event of large increases in bond spreads. It reduces the value of the liabilities, offsetting the devaluation of assets that occurs when the spreads on portfolio securities widen, thereby improving the solvency ratio.

For the euro-area countries, the volatility adjustment, calculated on a common reference portfolio for all the countries,[2] raised the average solvency ratio of insurance companies from 172 to 206 per cent.[3] The impact of the VA differed considerably among the countries concerned, favouring chiefly the insurance companies less exposed to changes in spreads: 19 percentage points for Italian companies, 29 for French companies, and 84 for German companies (see the figure).

[2] The standard methodology for calculating the VA has two components: the first, equal to 22 basis points at the reference date of the study, is the same for all the euro-area countries; the second is specific to each country (for Italy it was nil at the reference date of the study). The common component for the euro-area countries is calculated on the credit spreads of a reference portfolio currently consisting of 27 per cent of European government securities, 44 per cent of private sector bonds diversified according to sector and rating, and the remainder of other categories of assets. The country-specific component is based on a portfolio that is representative of each country's domestic market. It is only used to calculate the VA in the case of exceptionally large increases in spreads: so far it has had no effects in the European countries, with the exception of Greece.

[3] Without using the VA the technical provisions of European insurance companies would increase in value by 0.8 per cent on average (0.6 per cent for Italian companies).

In implementing EIOPA's recommendations to national authorities, the Italian insurance supervisory authority IVASS required insurance companies, in conducting their own risk and solvency assessment (ORSA), to take account of the risks that would stem from a prolonged low interest rate scenario and from a sudden and significant widening of credit spreads (see the box 'Insurance undertakings' own risk and solvency assessment', in *Financial Stability Report*, 2, 2016).[22]

The asset management industry

Subscriptions of funds have increased again

Subscriptions of open-end investment funds turned upward again, following the slowdown recorded in the last quarter of 2016 owing to tensions on the financial markets (Figure 2.18.a). In the medium term, a phase of progressively rising interest rates could nonetheless curtail households' propensity to invest in asset management products.

Liquidity risk is low

There is a low risk that increased requests for redemptions could lead to the rapid unwinding of portfolios and greater market volatility, both because the share of illiquid assets in Italian funds' portfolios, despite growing in recent years, remains modest overall (Figure 2.18.b), and by virtue of a regulatory framework with rules designed to limit precisely this risk (see the box, 'The risks to financial stability arising from the activity of open-end investment funds').

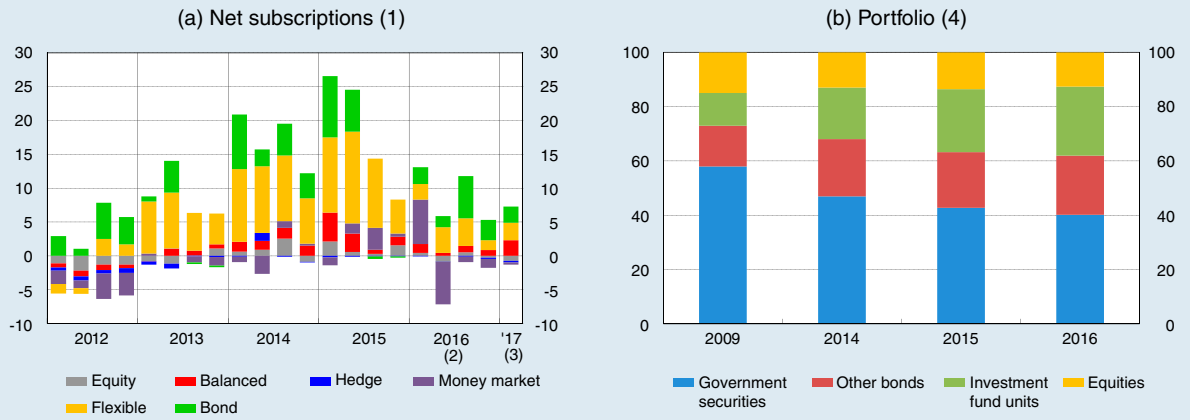
Conditions in the property fund segment are improving slightly

In the last few years the property fund segment has been adversely affected by the protracted weakness of the real estate market, recording a sharp deterioration in both financial conditions and results. Sectoral financial tensions are gradually easing, however, thanks in part to the recent recovery in the property market (see Section 1.1 and the box, 'The impact of the real estate cycle on Italy's property fund sector').

[22] IVASS, Letter to the market of 21 April 2017.

Figure 2.18

Open-end Italian investment funds
(billions of euros; percentage shares)



Sources: Assogestioni and supervisory reports.
(1) Data on funds based in Italy and abroad, managed by asset management companies belonging to Italian groups. – (2) Data on the money market segment for the first two quarters of 2016 comprise several large transactions by institutional investors. – (3) Provisional data. – (4) End-of-period data referring to Italian funds only.

THE RISKS TO FINANCIAL STABILITY ARISING FROM THE ACTIVITY OF OPEN-END INVESTMENT FUNDS

The risks to financial stability associated with the activity of open-end investment funds stem mainly from the undesirable effects on the financial asset prices of transactions carried out by fund managers. As there are no limitations on the redemption of fund shares by the investors, heavy demand may lead to fire sales, which can in turn make financial asset prices more volatile, jeopardizing the stability of other financial intermediaries.[1]

In recent years, following the sharp increase in the volume of assets managed by the funds and in the proportion of the portfolio invested in less liquid assets, several attempts at regulation have been made globally to mitigate the risks that the activity of investment funds poses for financial stability. The Financial Stability Board (FSB) has published recommendations[2] addressed to the supervisory authorities, designed to improve disclosure and transparency regarding the liquidity of the open-end funds' portfolios and to offer managers a broader range of tools to reduce liquidity risk.[3] It has also begun to develop a system-wide stress test to assess the impact of a large volume of redemptions of open-end investment fund shares on the liquidity of bond markets.

In Italy the risks to financial stability associated with open-end investment funds are limited, partly because the funds themselves are fairly small by international standards and partly thanks to a regulatory framework that is generally in line with the FSB's recommendations. In fact, in Italy

[1] For an exhaustive discussion of the risks to stability of open-end investment funds see IMF, *Global Financial Stability Report April 2015. Navigating Monetary Policy Challenges and Managing Risks*, 2015.
[2] FSB, *Policy recommendations to address structural vulnerabilities from asset management activities*, 2017. See also SEC, *Investment company liquidity risk management programs*, 2016.
[3] The options include introducing a requirement for a minimum share of liquid assets in investment funds' portfolios. A recent study of Italian open-end equity investment funds confirms that a portfolio with a sufficient proportion of liquid assets can safeguard funds against the risk of having to sell off securities to meet a large volume of demand to redeem units. See N. Branzoli and G. Guazzarotti, 'Liquidity transformation and financial stability: evidence from the cash management of open-end Italian mutual funds', Banca d'Italia, Temi di Discussione (Working Papers), forthcoming.

managers are allowed to suspend redemptions temporarily when the volume of requests is particularly high, making it unnecessary to resort to large sales of portfolio assets. Moreover, investment funds are required to conduct periodical stress tests to assess their liquidity risk and adopt suitable investment strategies to mitigate it. Lastly, there is a limit on the amount of the portfolio that can be invested in securities not traded on a regulated market,[4] which are typically less liquid than listed securities and so more susceptible to fire sales.

[4] The limit is 10 per cent for open-end funds subject to the UCITS Directive and 20 per cent for investment funds that are not UCITS.

The profitability of property investment funds remains low …

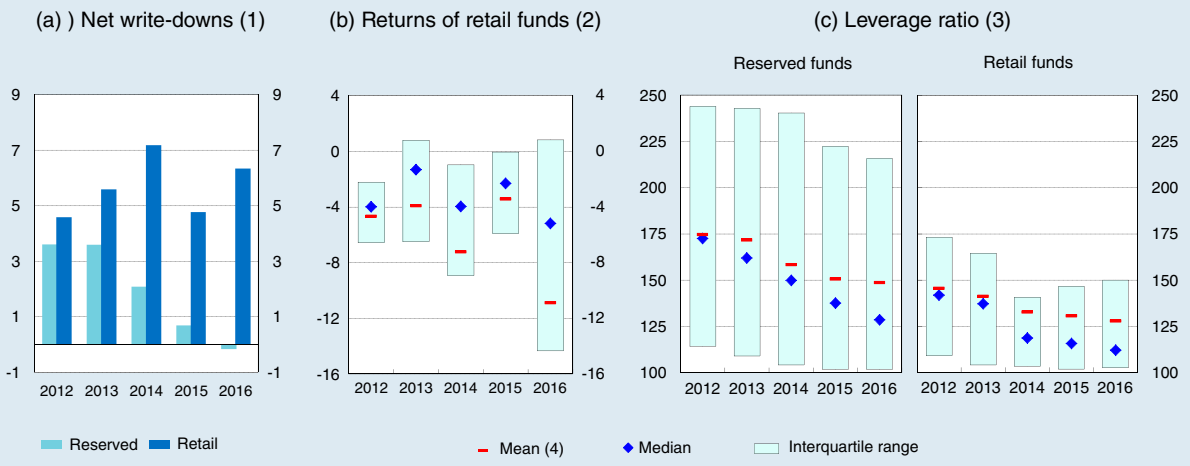
In 2016 the overall profitability of real estate investment funds addressed to retail investors was sharply reduced following asset write-downs connected with lower than expected sales prices (Figures 2.19.a and 2.19.b). The disappointing results of some funds that have reached maturity have amplified the reputational risks for managers, as well as for the intermediaries that have placed these products with retail customers.

… while average indebtedness continues to decline

In the property fund segment reserved to professional investors, where average indebtedness levels are higher than those of retail funds, financial leverage has continued to decline gradually (Figure 2.19.c). The effects on funds' interest expenses of a phase of rate rises would be modest on the whole, thanks to the widespread adoption of hedging strategies.

Figure 2.19

Main indicators for Italian property funds
(per cent)



Source: Supervisory reports.
(1) 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. – (2) Ratio of profits to the average of net assets at the end of the reference year and of the previous year. – (3) Ratio of total assets to net asset value. – (4) Total system.

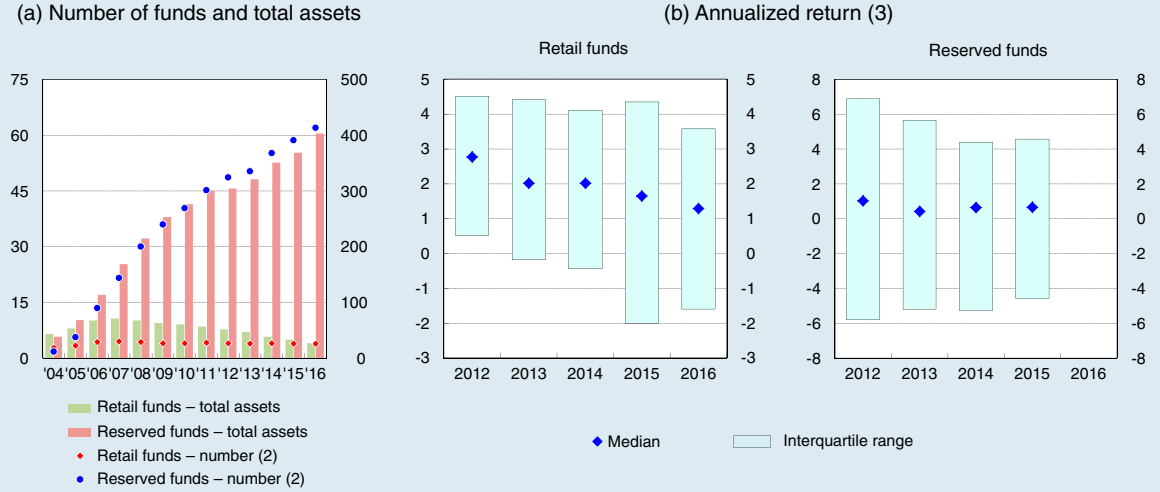
THE IMPACT OF THE REAL ESTATE CYCLE ON ITALY'S PROPERTY FUND SECTOR

The growth of the Italian property fund industry, which began in the early 2000s, slowed during the financial crisis mainly as a consequence of the downturn in the property cycle (see the figure, panel a).

The number of specialized fund management companies decreased, owing both to mergers and, in some cases, exits from the market. Retail investors' appetite for property funds has cooled also because stock market listing proved an unsatisfactory tool for enhancing the liquidity of fund units, given the very large gap between the funds' net asset value recorded in the financial reports and their market value.[1] Between 2004 and 2016 the share of the sector's total assets accounted for by retail funds dropped from over 50 per cent to a mere 6 per cent.

In recent years the profitability of property funds has plummeted as a consequence of the real estate market crisis, which has led to substantial asset write-downs and falling rentals. At the end of 2015, the last year for which data are available for both types of fund, about half of the reserved funds and a third of the retail funds had recorded an overall negative return since their inception (see the figure, panel b). Property sales carried out very close to the maturity date of the funds were frequently made at prices far lower than the values estimated by independent experts and entered in the financial statements. Some funds have deferred their end date pending market recovery.[2] In the retail segment these difficulties were accentuated by the bunching of maturity dates within a short time span. Barring further deferrals, the value of the property to be sold off by 2020 amounts to €3 billion.

Main market indicators for Italian property funds (1)
(billions of euros; number of funds; per cent)



Source: Supervisory reports.
(1) End-of-period data. – (2) Right-hand scale. – (3) Annualized return calculated on the basis of the change in the value of a given fund since its inception. The 2016 reports concerning the funds reserved to professional investors are not yet available.

In the segment reserved to professional investors, the sharp drop in the value of assets and the financial difficulties faced by investors undermined solvency conditions, above all for some funds started before 2008. In some cases the fund managers' objective is to limit investors' losses by seeing to an orderly liquidation of portfolios. In recent years average debt has gradually declined, mostly owing to the lower leverage of the newly instituted funds.

[1] Italian legislation requires property funds to be closed-end, which means that units can only be redeemed on pre-set dates.
[2] The decision to defer end dates was based on the conditions laid down in the fund rules or in specific legislation passed in 2014, which required the approval of the bodies representing investors.

While the conditions for property funds remain generally difficult, the risks to financial stability are limited, given the small size of the sector and the limited exposure of banks and other intermediaries to it (just over €18 billion at the end of 2016, or about 1 per cent of Italian intermediaries' total lending). The total assets of funds that at end-2016 registered negative net asset value (almost exclusively small funds) account for less than 3 per cent of the sector's total assets. In the future, a strengthening of the property market recovery should help to improve profitability.

3 MACROPRUDENTIAL MEASURES

As national designated authority the Bank of Italy is empowered to activate in Italy the macroprudential instruments for banks provided for in European legislation (Table 3.1).[1] This includes setting the countercyclical capital buffer (CCyB) and capital reserve requirements for global systemically important institutions (G-SIIs) and, at domestic level, other systemically important institutions (O-SIIs); these decisions are taken, within the framework of the Single Supervisory Mechanism (SSM), in coordination with the European Central Bank, whose powers are concurrent with those of the national authorities.[2]

Table 3.1

The main macroprudential instruments for the banking sector (1)

Instrument	Purpose
Instruments harmonized at European level (2)	
Countercyclical capital buffer (CCyB)	To reduce the procyclicality of the financial system by building up capital reserves during expansions in the financial cycle for absorbing potential losses during contractions
Capital reserves for global systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs)	To increase the ability of systemically important institutions to absorb losses
Systemic risk buffer (SRB)	To avert or mitigate long-term structural systemic risks
Higher capital requirements for exposures to the real estate sector	To avert or mitigate systemic risks stemming from exposures to the real estate sector
Instruments not harmonized at European level (3)	
Limits on loan-to-value, loan-to-income, and debt service-to-income ratios	To attenuate the phases of the credit cycle and to reinforce the resilience of banks, by reducing risk-taking by borrowers

(1) For a more detailed list of the instruments, see Recommendation ESRB/2013/1 issued by the European Systemic Risk Board (ESRB). – (2) Instruments provided for in EU legislation: CRD IV and CRR. – (3) Instruments not envisaged under EU legislation but which can be activated in individual member states based on national legislation, where this is permitted.

[1] Legislative Decree 72/2015 empowers the Bank of Italy to implement the macroprudential tools envisaged in: Directive 2013/36/EU (Capital Requirements Directive, CRD IV) on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms; Regulation (EU) No. 575/2013 (Capital Requirements Regulation, CRR) on prudential requirements for credit institutions and investment firms.

[2] The ECB can amend the decisions of national authorities by interpreting them more strictly. This is in view of the fact that the failed or insufficient activation of macroprudential instruments by a national authority could have adverse repercussions on the stability of the area's financial systems (see Council Regulation (EU) No. 1024/2013 instituting the SSM and conferring specific tasks on the ECB relating to the prudential supervision of credit institutions).

In Italy the CCyB rate remains at zero …

The Bank of Italy has maintained the countercyclical capital buffer rate at zero per cent (Table 3.2). The ratio of credit to GDP is below its long-term trend and, based on our projections, will stay that way at least until the end of 2018 (see Section 1.1). The assessment that the growth of credit poses virtually no risks to financial stability is corroborated by other cyclical indicators:[3] the rate of unemployment is still high, in real terms property prices are below their long-term trend, and growth in business lending continues to be close to zero.

Table 3.2

Recent macroprudential policy decisions of the Bank of Italy (1)

	Decision	Capital requirement for this year *(per cent)*	Fully phased in capital requirement *(per cent)* (2)
30 November 2016	Identification of the UniCredit, Intesa Sanpaolo and Monte dei Paschi di Siena banking groups as O-SIIs authorized to operate in Italy for 2017 and setting of the related capital requirement ratios:		
	UniCredit	0.00	1.00 (2021)
	Intesa Sanpaolo	0.00	0.75 (2021)
	Banca Monte dei Paschi di Siena	0.00	0.25 (2021)
15 December 2016	Identification of the UniCredit Group as a G-SII and setting of the related capital requirement ratio (3)	0.50	1.00 (2019)
24 March 2017	Setting of the CCyB rate for the second quarter of 2017	0.00	–

(1) The main legislative source on which the Bank's decisions are based is Bank of Italy Circular No. 285/2013 ('Supervisory Instructions for Banks'), transposing in Italy the provisions of CRD IV and CRR. The date refers to that on which the decision was published. For a complete list of the macroprudential policy decisions see the Bank's website. – (2) In brackets, the year of full implementation. – (3) In accordance with European legislation, the UniCredit Group will apply only the higher between the G-SII and the O-SII requirements.

… as in most EU countries

In the European Union the CCyB rate is positive in Sweden (2.0 per cent), the Czech Republic (0.5 per cent) and, starting next August, Slovakia (0.5 per cent; Table 3.3). This mainly reflects the weakness of financial cycles in the other countries, as indicated by the negative deviation of the ratio of credit to GDP from its long-term trend (credit-to-GDP gap) in most member states (Figure 3.1). In the United Kingdom the authorities had set the rate at 0.5 per cent in March 2016, to take effect at the end of March 2017; last July they nonetheless brought it back to zero, following the increased uncertainty about economic prospects after the referendum on Brexit.

One Italian banking group has been identified as a G-SII …

The Bank of Italy has identified the UniCredit Group as a global systemically important institution (G-SII). The methodology used measures banks' systemic importance based on a number of indicators, including size, complexity, interconnectedness and internationalization.[4] As of 1 January 2017 the UniCredit

[3] For more details on the main indicators used to make decisions on the CCyB rate, see P. Alessandri, P. Bologna, R. Fiori and E. Sette, 'A note on the implementation of a countercyclical capital buffer in Italy', Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers), 278, 2015.

[4] For more details on the methodology for the identification and classification of G-SIIs, see also Commission Delegated Regulation (EU) No. 1222/2014, containing provisions similar to those set out by the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Board (FSB). The UniCredit Group belongs to the first subcategory of global systemic importance identified by the BCBS and the FSB.

Table 3.3

Countercyclical capital buffers in the EU countries

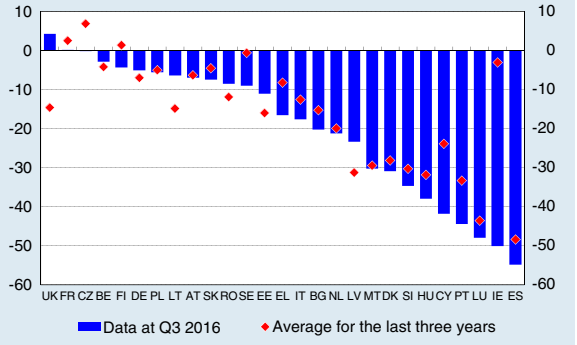
	Rate *(per cent)*	As of
Austria, Belgium, Bulgaria, Cyprus, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, **Italy**, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, United Kingdom	0.0	1 January 2016
Czech Republic	0.5	1 January 2017
Slovakia	0.5	1 August 2017
Sweden	2.0	19 March 2017

Source: ESRB.

Group is required to maintain an additional capital buffer equal to 0.50 per cent of its total risk-weighted exposure. This represents an increase of 0.25 percentage points in the requirement compared with 2016. The buffer will rise to 0.75 per cent in 2018 and reach 1.00 per cent in 2019.

Figure 3.1

Credit-to-GDP gap in the EU countries (1)
(percentage points)



Sources: ESRB and ECB, Statistical Data Warehouse.
(1) Calculated with reference to total domestic credit. The data for Croatia are not available.

… and three banking groups as O-SIIs

The Bank of Italy has identified the UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena banking groups as O-SIIs. The identification was made in November 2016 based on data at 31 December 2015, using the indicator envisaged in the Guidelines of the European Banking Authority (EBA), which considers four characteristics: size, importance in the national economy, complexity and interconnectedness with the financial system.[5] When fully phased in, the capital buffers for the three groups will amount respectively to 1.00, 0.75 and 0.25 per cent of their total risk-weighted exposure. To stem potential adverse effects on the supply of credit and the economic recovery, the reserves will be built up gradually beginning on 1 January 2018, with regular annual increments until 2021 (Table 3.4). In accordance with European legislation, the UniCredit Group will have to apply only the higher between the G-SII and the O-SII requirements. The decisions on the identification of O-SIIs and the related capital reserve requirements will be revised at least once a year.

About 200 systemically important banks have been identified in the EU

Within the EU about 200 domestic systemically important banks have been identified in member states (Figure 3.2.a), of which 13 are also G-SIIs. In addition to Italy, the latter are located in France, Germany, the Netherlands, the United Kingdom, Spain, and Sweden. Some countries have also identified as O-SIIs institutions with a systemic importance score below the EBA's threshold

[5] EBA, *Guidelines on the criteria to determine the conditions of application of Article 131(3) of Directive 2013/36/EU (CRD) in relation to the assessment of other systemically important institutions (O-SIIs)*, 16 December 2014.

Table 3.4

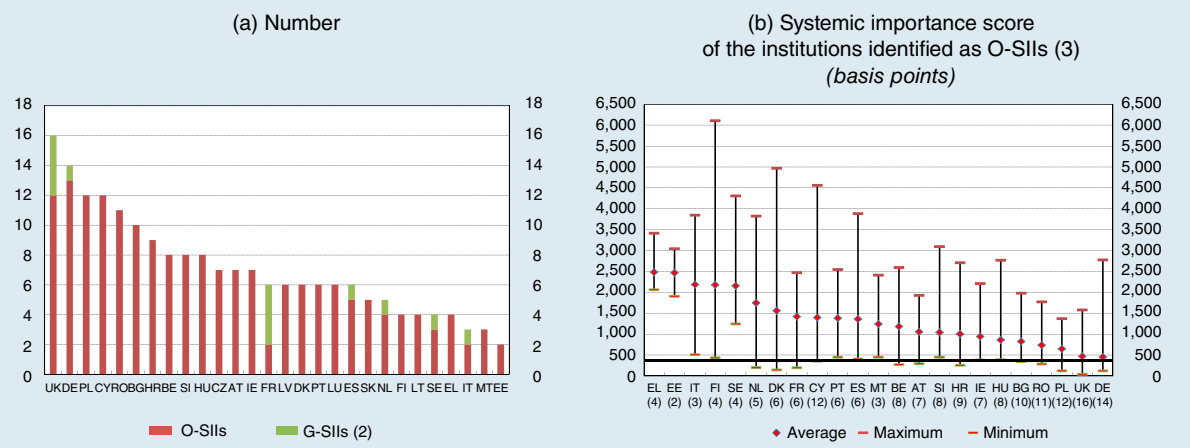
Transitional regime applicable to the O-SII buffers
(per cent)

Banking group	From 1 Jan. 2017	From 1 Jan. 2018	From 1 Jan. 2019	From 1 Jan. 2020	From 1 Jan. 2021
UniCredit	0.00	0.25	0.50	0.75	1.00
Intesa Sanpaolo	0.00	0.19	0.38	0.56	0.75
Banca Monte dei Paschi di Siena	0.00	0.06	0.13	0.19	0.25

(Figure 3.2.b).[6] In most countries the capital reserves for O-SIIs will be built up gradually; in some member states, the buffer will be kept at zero this year and next. In three cases no additional reserves were required.[7] In order to avert and mitigate the risks posed by these institutions, a number of countries[8] have activated, in addition to or instead of the O-SII requirement, the systemic risk buffer (SRB).[9] This buffer, which is envisaged under EU law but not compulsory, has not been introduced in Italy.

Figure 3.2

Systemically important institutions in EU countries (1)



Sources: Based on ESRB and national data.
(1) The data refer to the latest available information on the websites of the ESRB and of the national authorities. For Cyprus, the O-SIIs include six investment firms. – (2) All the G-SIIs in the EU have also been identified as O-SIIs. – (3) The numbers in brackets below the countries on the horizontal axis correspond to the number of O-SIIs in each country. The graph shows the countries for which the ESRB or the national authorities have published the scores assigned to individual institutions based on the methodology outlined in the EBA Guidelines. The horizontal line indicates the threshold of 350 basis points set by the EBA for the identification of O-SIIs.

[6] The threshold for identifying O-SIIs is 350 basis points; the guidelines nonetheless make it possible to apply, within certain limits, other thresholds to take account of the specificities of national banking systems.

[7] The Czech Republic, Denmark and the United Kingdom.

[8] Austria, the Czech Republic, Denmark, the Netherlands, Slovakia and Sweden.

[9] The maximum capital reserve requirement envisaged by CRD IV for O-SIIs amounts to 2 per cent of total risk-weighted exposure. For the SRB the minimum is 1 per cent but there is no maximum; the procedures for its activation vary as the level of the requirement rises, from simply notifying the relevant EU and national authorities to the need to obtain prior authorization from the European Commission.

SELECTED STATISTICS

CONTENTS

Table A1

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)			House-holds	Non-financial firms	Current account balance	Net international investment position
	2017	2018	2017	2018	2017	2016	2017	2015	2016	2016	2016	2016
Italy	0.8	0.8	132.8	131.6	6.7	38.8	1.1	0.5	41.7	76.6	2.6	-14.9
Germany	1.6	1.5	64.7	62.0	6.1	63.4	1.5	2.0	53.4	53.4	8.3	54.4
France	1.4	1.6	97.4	97.4	7.3	65.2	-1.6	0.7	57.0	127.5	-0.9	-15.8
Spain	2.6	2.1	98.5	97.9	6.7	50.6	-0.9	1.9	65.2	102.3	2.0	-85.7
Netherlands	2.1	1.8	59.7	57.8	6.6	55.1	0.8	3.1	110.9	125.3	8.4	75.9
Belgium	1.6	1.5	104.3	103.3	9.0	66.7	0.0	3.1	59.1	161.2	-0.4	49.5
Austria	1.4	1.3	81.2	78.3	8.5	85.2	0.6	2.4	51.8	92.8	1.7	5.2
Finland	1.3	1.4	64.4	64.4	6.3	81.2	-2.0	3.2	67.5	111.9	-1.1	7.1
Greece	2.2	2.7	180.7	181.5	....	....	1.8	....	60.6	62.4	-0.6	-136.5
Portugal	1.7	1.5	128.6	127.1	6.5	64.3	2.1	1.3	74.5	115.0	0.8	-105.1
Irland	3.5	3.2	74.8	73.4	11.1	68.6	1.6	0.5	55.3	231.1	4.7	-185.3
Euro area	1.7	1.6	90.1	88.6	....	....	0.3	1.5	58.7	104.3	3.3	-5.9
United King-dom	2.0	1.5	89.0	88.7	14.9	33.9	-1.0	3.0	86.9	74.2	-4.8	12.5
Unites States	2.3	2.5	108.3	108.9	5.8	31.5	-1.9	....	79.5	72.6	-2.6	-43.7
Japan	1.2	0.6	239.2	239.4	7.6	10.1	-3.9	....	59.9	95.4	3.8	66.7
Canada	1.9	2.0	91.2	89.8	5.5	24.0	-1.7	....	100.1	117.3	-3.3	9.3

Sources: IMF, Eurostat, ECB, European Commission, national financial accounts and balance of payments data.
(1) IMF, *World Economic Outlook*, April 2017. – (2) IMF, *Fiscal Monitor*, April 2017. – (3) European Commission, *Debt Sustainability Monitor 2016*, January 2017. S2 is a sustainability indicator defined as the immediate and permanent increase in the structural primary surplus that is necessary in order to meet the general government inter-temporal budget constraint. – (4) Loans and securities. End of Q3 2016; data for the United Kingdom, Canada, the United States, and Japan refer to the end of Q4 2016. Data for the euro area countries are from ECB, Statistical Data Warehouse; data for the non-European countries and the United Kingdom are from national sources. – (5) The data refer to Q4 2016. Data for the European countries and for the euro area as a whole are from Eurostat, Statistics Database and ECB, Statistical Data Warehouse; data for the non-European countries are from national sources.

Table A2

Italian banks' non-performing loans and guarantees by counterparty sector (1)
(billions of euros; per cent; December 2016)

	Gross exposures	Net exposures	Collateral (2)	Personal guarantees (2)	Coverage ratio for unsecured loans
			Firms		
Non-performing customer loans	243	118	119	46	63.3
of which: bad debts	150	54	66	35	77.4
			Consumer households		
Non-performing customer loans	53	30	36	2	66.9
of which: bad debts	35	16	24	1	77.7
			Total (3)		
Non-performing customer loans	312	156	160	49	62.8
of which: bad debts	191	72	92	36	77.3

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. Provisional data. – (2) The amounts correspond to the gross exposure that is collateralized or backed by personal guarantees. – (3) Includes general government, financial and insurance corporations, non-profit institutions serving households, and non-classifiable and unclassified entities.

Table A3

Exposures of Italian groups and banks to foreign residents by counterparty sector (1)
(billions of euros; per cent; December 2016)

	Public sector	Banks	Financial corporations	Households and firms	Total	Percentage change in total compared with the end of the previous 6 months	Per cent of total exposures reported to the BIS (2)	Per cent of total exposures (3)
Euro area (excluding Italy)	113.3	57.5	43.9	189.2	403.8	-1.3	2.5	15.5
Other industrialized countries	18.0	18.3	27.1	27.5	90.9	-5.6	0.2	3.5
of which: United Kingdom	1.3	8.8	15.7	7.9	33.7	-6.6	0.8	1.3
Emerging and developing countries	38.8	19.3	7.7	82.9	148.8	-13.8	2.5	5.7
Europe	35.3	9.9	5.7	72.8	123.7	-18.8	10.6	4.8
of which: Russia	2.5	1.9	0.3	13.5	18.2	9.8	18.8	0.7
Africa and the Middle East	2.3	2.1	1.2	4.4	10.0	-8.5	2.3	0.4
Asia and Pacific	0.7	4.1	0.8	3.9	9.5	48.1	0.2	0.4
Central and South America	0.6	3.2	0.0	1.8	5.7	-11.5	0.6	0.2
Offshore centres	0.2	0.4	1.7	5.4	7.6	7.0	0.3	0.3
Total	**170.3**	**95.5**	**80.4**	**304.9**	**651.1**	**-5.4**	**1.0**	**25.0**
Memorandum item:								
Energy-exporting emerging and developing countries	2.8	3.6	1.5	16.0	23.9	9.5	5.1	0.9

Source: Consolidated supervisory reports for banking groups, individual supervisory reports for the rest of the system.
(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 reported to the Bank for International Settlements (BIS) by a large set of international banks. The numerator and denominator refer to 30 September 2016. – (3) Total exposures to residents and non-residents.

Table A4

Investment by Italian and euro area banks in public sector securities issued in the banks' country of residence (1)

(billions of euros; per cent)

	Italy (2)			Euro area		
	Stocks	Net purchases	Share of total assets	Stocks	Net purchases	Share of total assets
2011	211,680	18,457	5.6	1,009,414	72,378	3.0
2012	322,686	90,128	8.3	1,251,226	213,410	3.8
2013	374,529	45,312	10.1	1,313,179	46,354	4.3
2014 – Q1	381,775	785	10.2	1,355,157	23,132	4.4
Q2	382,673	-3,298	10.4	1,370,453	3,515	4.5
Q3	378,435	-6,142	10.3	1,378,601	-985	4.4
Q4	382,915	4,124	10.5	1,370,727	-18,872	4.4
2015 – Q1	392,323	2,604	10.6	1,380,572	2,841	4.3
Q2	377,980	-2,877	10.5	1,343,751	-11,321	4.3
Q3	373,776	-8,803	10.5	1,337,991	-13,332	4.3
Q4	363,520	-11,930	10.2	1,295,539	-44,385	4.2
2016 – Jan.	367,855	3,713	10.3	1,326,277	29,821	4.2
Feb.	375,209	8,029	10.4	1,341,614	15,603	4.2
Mar.	365,487	-11,184	10.2	1,328,566	-15,163	4.3
Apr.	370,520	7,070	10.4	1,325,852	268	4.2
May	366,582	-4,808	10.3	1,321,028	-8,061	4.2
June	368,616	1,642	10.2	1,325,190	2,101	4.2
July	367,533	-1,525	10.3	1,309,177	-16,994	4.1
Aug.	359,864	-7,930	10.1	1,284,081	-24,890	4.1
Sept.	352,326	-6,892	9.8	1,257,273	-27,857	4.0
Oct.	346,789	-1,311	9.7	1,245,541	-6,414	4.0
Nov.	338,644	-4,105	9.5	1,232,203	-6,509	3.9
Dec.	332,611	-9,216	9.4	1,205,141	-30,518	3.9
2017 – Jan.	335,595	6,594	9.5	1,198,915	1,715	3.8
Feb.	338,792	2,998	9.6	1,202,512	2,874	3.8

Sources: Individual supervisory reports and ECB.
(1) The data on net purchases refer to the whole period; the data on stocks and share of total assets refer to the end of the period. Purchase amounts are shown net of variations in market prices; holdings are shown at market value. All public sector securities are counted, including those issued by local government authorities. – (2) Cassa Depositi e Prestiti SpA is excluded.

Table A5

Italian banks' bonds by holder and maturity (1)

(millions of euros; February 2017)

	Maturity					
	by 2017	between 2018 and 2019	between 2020 and 2021	between 2022 and 2026	beyond 2026	total
Households (2)	37,642	64,154	25,476	23,159	1,259	151,689
Banks in the issuer's group (3)	9,238	17,677	11,864	10,301	3,182	52,261
Other Italian banks	3,436	8,799	7,253	3,509	245	23,241
Other investors	32,445	47,937	35,513	53,489	8,089	177,473
Total	**82,759**	**138,568**	**80,105**	**90,457**	**12,775**	**404,664**

Source: Individual supervisory reports.
(1) Data are indicated at nominal value and refer to bonds entered on the liability side, net of buybacks by the issuer. Rounding may cause discrepancies in the totals. – (2) Consumer and producer households and non-profit institutions serving households. Only resident customers. – (3) Resident banks belonging to the issuer's banking group.

Table A6

Composition of the assets deposited with the Bank of Italy as collateral for Eurosystem credit operations (1)

(billions of euros; end-of-period values)

	2013	2014	2015	2016		2017
				June	December	March
Total	**344.8**	**283.5**	**253.7**	**275.6**	**297.3**	**339.1**
Government securities	101.4	119.8	97.6	96.0	88.8	128.0
Local and regional government securities	2.6	2.9	2.6	2.3	1.7	2.0
Uncovered bank bonds	11.5	10.4	5.8	5.4	5.3	6.3
Government-guaranteed bank bonds	69.8	15.0	0.4	0.3	0.3	2.1
Covered bonds	61.5	49.8	46.4	62.7	76.3	75.3
Non-bank bonds	1.6	1.0	2.5	2.5	3.0	3.4
Asset-backed securities	50.6	40.0	35.5	36.4	44.0	45.9
Other marketable assets	2.3	0.4	0.6	0.5	0.8	2.5
Non-negotiable assets (bank loans)	43.5	44.3	62.4	69.4	77.1	73.6

Source: based on Eurosystem data.
(1) The collateral pool is valued at the prices taken from the Common Eurosystem Pricing Hub (CEPH), net of haircuts.