

# Financial Stability Report







# **Financial Stability Report**

Number 2 / 2014 November Other economic publications of the Bank of Italy:

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#### SYMBOLS AND CONVENTIONS

Unless indicated otherwise, figures have been computed by the Bank of Italy. In the following tables:

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

## **OVERVIEW**

Increasing risks for financial stability stem from weak growth and low inflation ... In the euro area the risks for financial stability that stem from slackening growth and persistently low inflation are increasing. Continuing

stagnation would have repercussions on the financial system and on the public finances. Excessively low inflation makes reducing the weight of public and private debt more difficult and implies a tightening of monetary conditions, with adverse effects on consumption and investment.

... and there have been increases in market volatility The growth prospects for the euro area are rendered more uncertain by the fragility and unevenness of

the world economic recovery. The financial markets appear to be exposed to spikes in volatility, like that in the middle of October due to the exacerbation of fears about the political and financial situation in Greece.

#### In Italy the property market remains weak, in line with economic conditions

The sharp rise in property prices in some European countries has led their macroprudential authorities to activate or an-

nounce measures to curb the potential risks for financial stability. In Italy the property market remains weak, in line with conditions in the economy as a whole.

# The timetable for fiscal adjustment is revised

The cyclical deterioration and the need to avoid undercutting the modest

recovery in domestic demand have led the Italian Government to make the adjustment of the public finances more gradual. The sustainability of the debt will be fostered by the performance of the main expenditure items, whose growth will continue to be modest. The speed of the reduction in the ratio of public debt to GDP will depend above all on the pace of nominal GDP growth.

#### Inflows of private capital continue

In the first seven months of the year foreign investment in Italian financial assets

continued to be substantial. The Bank of Italy's debtor position in TARGET2 improved; it subsequently increased, in part for technical reasons, such as the issuance policy of the Treasury, which elected not to roll over all its maturing securities in view of its already ample liquidity.

# The financial conditions of households are sound

With growth in incomes weak, the modest upturn in household consumption corresponded to a decline

in saving. Households' financial wealth increased as a result of a rise in the prices of the securities held. Low interest rates helped to limit the vulnerability of indebted households. According to our estimates, the share of financially vulnerable households would increase only marginally even in the case of severe macroeconomic shocks and interest rate increases.

## The heterogeneity of firms' financial conditions increases

The main risk factor for firms is a protraction of weak economic activity. A gradual financial restruc-

turing is under way, with a reduction in debt and increased recourse to the bond and equity markets. Leverage is diminishing. In addition, signs of strengthening economic conditions have emerged among larger and more export-oriented firms. Small firms, which on average are less capitalized, remain more exposed to cyclical risks and problems in accessing credit.

The comprehensive assessment of banks' balance sheets finds capital shortfalls at Banca Monte dei Paschi di Siena and Banca Carige ... The results of the comprehensive assessment of the balance sheets of the main euro-area banks were published on 26 October, in preparation for the launch of the Single Supervisory Mechanism. For Banca Monte dei Paschi di Siena and Banca Carige, the stress test found the need for additional capital amounting to  $\notin 2.9$  billion, equal to 0.2 per cent of Italy's GDP. The two banks have already announced capital increases and have submitted recapitalization plans to the supervisory authorities.

Banks' liquidityOverstrengthensbanks

Over the summer, Italian banks' liquidity conditions strengthened further, bene-

fiting from the improvement in the financial markets and the growth in deposits. In the wholesale funding markets, net bond issues remained positive, including those of mediumsized banks. The volume of immediately available eligible assets is increasing, despite the reduction in government-guaranteed bank bonds. The Bank of Italy has adopted new measures extending the range of bank loans eligible as collateral with the Eurosystem.

Economic uncertainty
still impedes
the recovery in credit
to firms

Lending has continued to diminish, if more slowly, reflecting the weakness of economic activity. According to our projec-

tions, lending to non-financial corporations will continue to contract in 2015, although at a progressively decreasing rate, while the reduction in mortgage lending to households should come to a halt in the first quarter.

The deterioration in credit quality slows further... In the first half of 2014 the flow of new nonperforming loans in relation to performing loans declined again. The decrease also involved new bad debts, above all those of firms. According to preliminary data, in recent months the flow of new bad debts has been stable.

...and the coverage ratio on non-performing exposures improves

The coverage ratio on nonperforming exposures (loan loss provisions over gross non-performing exposures)

has risen. This could help banks to dispose of these loans and eliminate bad debts from their balance sheets. Some of the major banking groups have begun operations that should lead to the liquidation of substantial amounts of nonperforming loans. The stock of these loans nevertheless remains large by international standards.

Risks for the insurance For Italian insurance sector are limited companies, both risks engendered by the low level

of interest rates and liquidity risk are modest. The leading insurance groups intend to diversify their portfolios further by increasing their investment in private sector securities. The ongoing decline in policy surrenders, particularly of traditional life insurance products, has led insurers to reduce the most liquid asset components.

Italian markets remain liquid despite volatility Liquidity conditions on the Italian financial markets have remained good, notwithstanding the spike

in the volatility of the stock market and, to a lesser extent, the government securities market in the second half of October. Trading volumes have stayed high; the systemic indicator of liquidity risk remains low. The introduction of negative interest rates on Eurosystem deposits has not affected the orderly functioning of the money markets.

# MACROECONOMIC RISKS AND INTERNATIONAL MARKETS

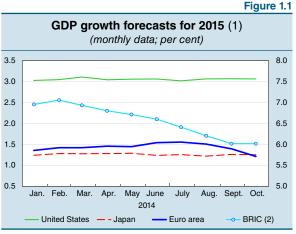
### 1.1 THE MACROECONOMIC AND FINANCIAL CONTEXT

The risks for financial stability increase owing to the weakness of the global economy

The weakening of growth prospects for the global economy, with marked differences between the main areas, has increased

the risks for financial stability. Economic activity has lost momentum in the euro area (Figure 1.1). There are signs of fragility in the emerging countries: GDP growth has slowed moderately in China and more abruptly in Russia, also as a result of the geopolitical tensions connected with the crisis in Ukraine; the rouble has depreciated sharply, making the management of the foreign currency debt more onerous. Growth instead remains robust in the United States and the United Kingdom.

Monetary conditions in the main areas tend to diverge The cyclical disparities have led to an increasing divergence of monetary pol



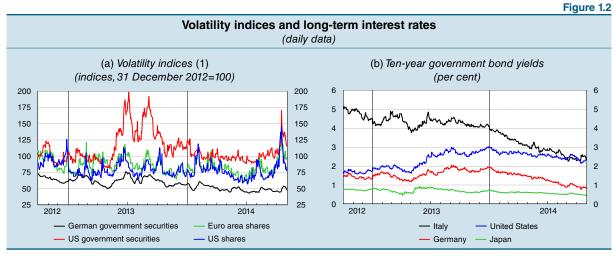
Source: Based on Consensus Economics data.

(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 2012, at purchasing power parity.

to diverge divergence of monetary policies in the different areas. In the United States the Federal Reserve has terminated its purchases of private and public securities; the markets expect an initial increase in the policy rates in the second half of 2015. Instead the European Central Bank's monetary policy stance has become even more accommodative (see *Economic Bulletin*, Nos. 3 and 4, 2014). At the end of October the Bank of Japan also decided to strengthen its quantitative easing programme and also foresaw a lengthening of the average residual maturity of the government securities in its portfolio. The growing divergence of monetary policies has not given rise to financial tensions, but there has been a contraction of capital flows towards the emerging economies. The euro has depreciated against the US dollar.

Conditions on the financial markets worsen in October Until September conditions on the financial markets were relaxed on the whole. In the following weeks the deterioration of the outlook for global growth, the further fall in inflation in the euro area, and fears concerning the political and financial situation in Greece led to a sudden rise in volatility

(Figure 1.2.a), an increase in risk premiums on corporate bonds and a temporary fall in share prices. Long-term interest rates on German and US government securities have been going down gradually since the start of 2014 (Figure 1.2.b). In the days immediately following the publication of the results of the comprehensive assessment of the balance sheets of the main euro-area banks (see Section 3.1), the broad index of euro-area bank shares declined slightly; some banks' share prices recorded sharp falls.



Sources: Based on Bloomberg and Thomson Reuters Datastream data (1) Indices derived from the volatility implied in option prices.

#### Euro-area banks' access to funding remains favourable

In the euro area, credit risk premiums on bank bonds fell and the new issues remained at high levels, although they have declined somewhat in recent months (Figures 1.3.a and 1.3.b). Credit quality improved in the first six months of this year, although it is still low on average and with considerable dispersion among

In Italy the positive signs emerging since mid-2013 have not led to a steady

recovery of economic activity. The persistence of the economic difficulties,

which have been exceptional in terms of duration and depth, and the need to

avoid a recessionary demand spiral have induced the Government to review

the timing of the budgetary consolidation: it now expects structural budget

balance to be achieved in 2017 and the debt-to-GDP ratio to begin to come down in 2016. The primary surplus, which is one of the largest in the euro

banks (Figure 1.3.c). At a time when credit supply tensions are easing, interest rates on loans to firms have fallen and the contraction in lending volume has moderated, although it is still significant in some large countries, including Italy (Figure 1.3.d.). Financial analysts' forecasts for banks' earnings in 2014 and 2015 have stabilized in recent months, in the wake of the sharp reductions in the first half of the year (Figure 1.3.e).

In Italy fiscal consolidation continues while taking account of the weakness of the economy

area, is expected to remain stable in 2015 and then increase significantly, reaching 3.9 per cent in 2018.

#### Long-term growth in public spending is low

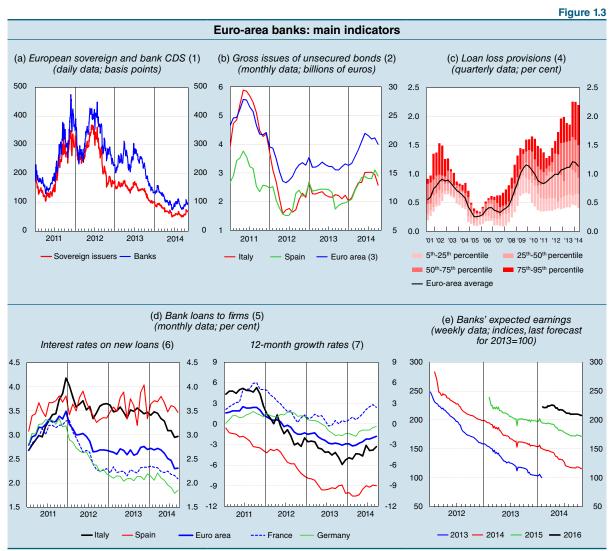
The sustainability of the public finances in Italy benefited from low growth in spending on the main items, especially following the overhaul of the pension system in recent years, which has raised the actual retirement age and linked pension benefits to contribution payments; this is reflected in the sustainability indicators. The adjustament of the debt-to-GDP ratio presupposes the capacity to maintain adequate primary surpluses over the years, as the Government plans; its speed also depends on nominal GDP growth.

The indicators of financial stability remain favourable

The ratio of corporate and household debt to GDP in Italy is still among the lowest in the euro area, together with that in Germany (Table 1.1). Companies still have a relatively high leverage, but readjustment is under way (see Section 2). The current account has been in surplus since 2012; the increase of almost

 $\notin$ 100 billion in Italy's net external debtor position in the two years 2012-13 was due entirely to changes in value of some liability items (appreciation of Italian securities held by non-residents

BANCA D'ITALIA



Sources: Based on data from Bank of Italy, ECB, Bloomberg, Dealogic, I/B/E/S and Thomson Reuters Datastream. (1) Basket of sovereign CDS: simple average of Germany, France, Italy and Spain. Basket of bank CDS: simple average of Unicredit, Intesa Sanpaolo and Banca Monte dei paschi di Siena, for Italy; BNP Paribas, Société Générale and Crédit Agricole, for France; Deutsche Bank and Commerzbank for Germany; Banco Santander and Banco Bilbao Vircaja Argentaria, for Spain. – (2) Twelve-month moving averages; bonds not backed by collateral or by a government guarantee. – (3) Right-hand scale. – (4) Four-quarter moving sum of provisions expressed as a percentage of total Ioans. The different shades of red correspond to differences between the percentiles shown in the legend. Sample of major euro-area banks, including large financial institutions that engage in various kinds of banking business, including at international level: Banco Santander, BBVA, BNP Paribas, Crédit Agricole, Commerzbank, Deutsche Bank, ING, Intesa Sanpaolo, Société Générale and UniCredit. – (5) Loans to non-financial firms resident in the euro area. – (6) The data on interest rates refer to transactions in euros and are gathered and processed using the Eurosystem's harmonized method. – (7) Loans are adjusted for the accounting effect of securitizations.

following the improvement of sovereign debt conditions) and some assets (depreciation of the official reserves because of the fall in international gold prices).

#### Foreign inflows of private capital have not been interrupted

Thanks to inflows of private capital, the Bank of Italy's debtor position vis-àvis TARGET2 improved in the first part of 2014, reaching a low of  $\in$ 130 billion at the end of July, against a peak of almost  $\in$ 290 billion in August 2012 (Figure 1.4.a). The negative balance then began to increase again, largely for

technical reasons such as substantial amounts of government securities reaching maturity, which the Treasury only partly offset by issuing new securities, given its already ample liquidity. The increase

Table 1.1

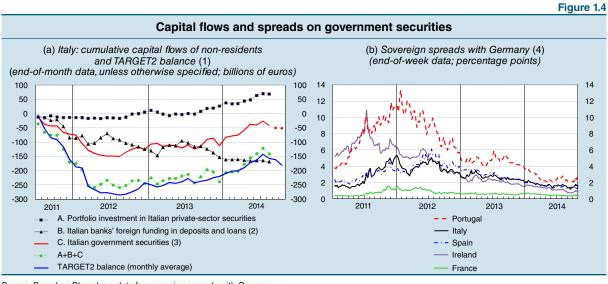
	<b>Financial sustainability indicators</b> (per cent of GDP, unless otherwise specified)											
	Budget deficit (1)		t (1)	Primary surplus (1)			Public debt (1)			GDP (annual growth rate) (2)		
	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
Italy Germany France Spain Netherlands Belgium Austria Finland	2.8 -0.1 4.1 6.8 2.3 2.9 1.5 2.4	3.0 -0.2 4.4 5.6 2.5 3.0 2.9 2.9	2.7 0.0 4.5 4.6 2.1 2.8 1.8 2.6	2.0 2.2 -1.9 -3.5 -0.8 0.3 1.1 -1.2	1.7 2.1 -2.3 -2.3 -1.0 0.1 -0.4 -1.6	1.8 -2.2 -1.2 -0.7 0.1 0.7 -1.4	127.9 76.9 92.2 92.1 68.6 104.5 81.2 56.0	132.2 74.5 95.5 98.1 69.7 105.8 87.0 59.8	133.8 72.4 98.1 101.2 70.3 107.3 86.1 61.7	-1.9 0.1 0.3 -1.2 -0.7 0.3 0.2 -1.2	-0.4 1.3 0.3 1.2 0.9 0.9 0.7 -0.4	0.6 1.1 0.7 1.7 1.4 0.9 1.2 0.6
Greece Portugal Ireland	12.2 4.9 5.7	1.6 4.9 3.7	0.1 3.3 2.9	-8.2 0.1 -1.3	2.7 0.1 0.4	4.1 1.6 0.9	174.9 128.0 123.3	175.5 127.7 110.5	168.8 125.1 109.4	-3.3 -1.4 0.2	0.6 0.9 4.6	2.9 1.3 3.6
Euro area (3)	2.9	2.6	2.4	-0.1	0.1	0.3	93.1	94.5	94.8	-0.5	0.8	1.1
United Kingdom United States Japan Canada	5.8 5.8 8.2 3.0	5.4 5.5 7.1 2.6	4.4 4.3 5.8 2.1	-2.9 -3.6 -7.4 -2.7	-2.7 -3.4 -6.3 -2.1	-1.8 -2.2 -5.0 -1.6	87.2 104.2 243.2 88.8	89.0 105.6 245.1 88.1	89.5 105.1 245.5 86.8	1.7 2.2 1.5 2.0	3.1 2.2 0.9 2.3	2.7 3.1 0.8 2.4

	Characteristics of public debt (4)			Sustainability indicators		Private sector financial debt at end-2013 (7)		External positions at end-2013 (8)	
	Share maturing plus deficit in 2014	Average residual life of govt. securities in 2014 (years)	Non- residents' share in 2014 (% of public debt)	S2 indicator (5)	IMF indicator (6)	Households	s Non-financial firms	Current account balance in 2013	Net international investment position at end-2013
Italy	27.9	6.3	35.6	-2.3	3.1	43.1	77.6	1.0	-30.7
Germany	6.6	6.4	62.4	1.4	0.6	55.6	52.8	6.8	42.9
France	17.4	6.8	62.9	1.6	5.2	55.6	119.6	-1.4	-15.6
Spain	20.5	5.8	43.4	4.8	5.3	75.2	112.1	1.4	-92.6
Netherlands	13.1	6.8	57.5	5.9	5.5	117.3	129.0	9.9	31.3
Belgium	15.3	7.4	63.0	7.4	8.9	55.8	134.8	0.1	48.8
Austria	11.7	7.9	76.8	4.1	5.5			1.0	-0.2
Finland	7.6	5.7	84.1	5.8	3.7	64.2	108.5	-1.4	8.8
Greece	14.5	20.0	85.9			64.4	71.7	0.6	-121.1
Portugal	20.8	5.6	71.4		5.2	85.9	132.1	0.7	-116.2
Ireland	7.6	12.2	63.5		5.1	92.9	207.7	4.4	-101.7
Euro area (3)				2.1		62.6	98.0	2.1	-13.5
United Kingdom	11.6	14.8	27.9	5.2	6.1	88.7	80.6	-4.2	-15.6
United States	23.6	5.6	32.7		11.1	78.6	67.4	-2.4	-32.1
Japan	58.1	6.6	7.9		13.1	63.3	104.9	0.7	67.9
Canada	16.0	6.1	20.6		5.3	93.7	99.8	-3.2	1.5

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

1) Data for European and euro-area countries from European Commission, European Economic Forecast Autumn 2014, November 2014. Data for non-European 1) Data for European and euro-area countries from European Commission, European Economic Forecast Autumn 2014, November 2014. Data for non-European countries from IMF, Fiscal Monitor, October 2014. – (2) Data for European and euro-area countries from European Commission, European Economic Outlook, October 2014. – (3) Euro-area data refer to 19 countries for the budget deficit, the primary surplus, the public debt, and GDP; to 18 countries for private sector financial debt and external positions; and to 17 countries for the S2 indicator. – (4) IMF Fiscal Monitor, October 2014. – (5) European Commission, Fiscal Sustainability Report 2012, December 2012. Increase in the primary surplus/GDP ratio (with respect to 2011) needed to satisfy the general government intertemporal budget constraint, given demographic cand macroeconomic projections. The estimate takes account of the level of the debt, the outlook for economic growth, changes in interest rates and future primary surpluses, which are affected by the trend of age-related expenditure. – (6) IMF, Fiscal Monitor, October 2014. Increase in the primary surplus/GDP ratio that would need to be achieved by 2020 (and maintained for a further decade) in order to bring the debt/GDP ratio down to 60 per cent by 2030. The value includes the projected increase in health and pension expenditure between 2014 at 0203. – (7) Data for euro-area countries from ECB, Statistical Data Warehouse; data for the United Kingdom and non-European countries form actional sources: the data are compiled according to the new European system of accounts (ESA 2010) – (8) Data for our -acceuting the data are compiled accountries form ECB, Statistical Data Warehouse; data for the United Kingdom and non-European countries form ECB, Statistical Data Warehouse; data for the United Kingdom and non-European countries form acceuting to the acte are countries form ECB. Kingdom and non-European countries from national sources; the data are compiled according to the new European system of accounts (ESA 2010). – (8) Data for European countries and the euro-area from Eurostat, *Statistics Database*, ECB, *Statistical Data Warehouse*, and national sources; the data are compiled according to the new international accounting standards (see the box, "The new international accounting standards for external transactions and investment positions," Economic Bulletin, No. 4, 2014).

was also due to the decision of Italian banks to make temporary use of some of the funds supplied by the Eurosystem under the first targeted longer-term refinancing operation to reduce foreign funding on the interbank market (see Section 4). The risk premiums required to hold Italian government securities remained at low levels (Figure 1.4.b).



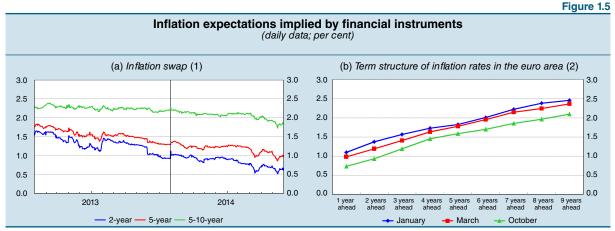
Source: Based on Bloomberg data for sovereign spreads with Germany. (1) For the Bank of Italy balance vis-à-vis the ECB in TARGET2, monthly average of daily data; for the other variables, non-residents' cumulative capital flows from July 2011 onwards. – (2) Including funding intermediated by resident central counterparties. – (3) The data for September and October 2014 are estimated on the basis of the trend in the TARGET2 balance. – (4) Spread between yields of the ten-year government securities of the countries indicated and those of Germany.

## **1.2 THE MAIN RISKS FOR FINANCIAL STABILITY**

# There are rising risks stemming from low inflation

In the euro area the risks for financial stability have increased owing to the slackening of economic activity and the persistence of inflation well below 2 per cent (Figures 1.5.a and 1.5.b). Excessively low inflation entails significant risks both for the financial system and for the sustainability of public and private debt,

whose reduction it makes more difficult (see the box "The risks of low inflation for financial stability in the euro area").



Source: Bloomberg.

(1) Inflation rates implied by 2-year, 5-year, and 5-10-year inflation swaps, 5 years ahead. - (2) 1-year-forward inflation rates, 1 to 9 years ahead.

#### THE RISKS OF LOW INFLATION FOR FINANCIAL STABILITY IN THE EURO AREA

In the course of 2014 inflation in the euro area, even excluding the most volatile components, continued to fall below forecasts, reaching 0.4 per cent in October. According to the Eurosystem staff projections released in September, if no further economic policy measures are taken, it will remain at levels inconsistent with price stability in 2015 and 2016 as well. Very modest changes in prices are being recorded in most countries in the Economic and Monetary Union (see panel (a) of the figure). In Italy harmonized consumer inflation, in decline since the end of 2012, was 0.2 per cent in October, after dipping to -0.2 per cent in August, the lowest level recorded in the harmonized statistics.

Protracted low inflation increases the risks for financial stability, directly or through its effects on the real economy. The main mechanisms transmitting these effects are the zero lower bound on monetary policy interest rates and the sustainability of public and private debt.

In a situation of near-zero nominal monetary policy rates, it can become impossible for central banks to cut real interest rates when inflation falls to low levels or below zero. The consequent tightening of monetary conditions has a negative impact on consumption and investment and increases the burden of debt service. Accordingly rates of inflation close to zero have more serious repercussions when there are high levels of public or private indebtedness and make it more difficult to reduce financial leverage, with negative consequences for the solidity of the public finances and the sustainability of private debt. The prospect of a deterioration in credit quality following an increase in the debt service burden can also lead banks to adopt more restrictive lending policies, with further negative effects on the economy.

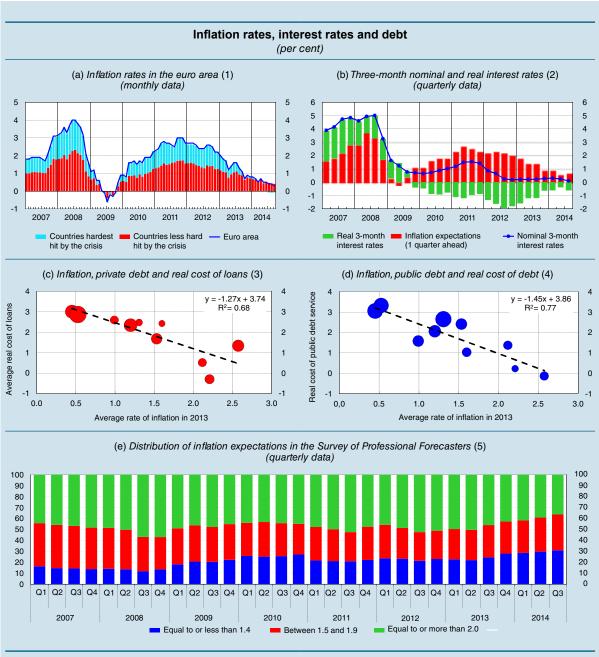
The implications of low inflation are compounded if it dampens expectations and distances them from the monetary policy objective. The formation of expectations is a non-linear process; even drastic changes can materialize, sporadically and rapidly, if these are not adequately countered by monetary policy action.

The protracted fall in inflation in the last two years has effectively led to a marked increase in real interest rates: between end-2012 and mid-2014 the real three-month interest rate in the euro area increased by 1.5 percentage points, from around -2.0 to -0.5 per cent (see panel (b) of the figure), while there was a slight decline in the corresponding nominal rate, which reached levels close to the zero bound. The cost in real terms of bank lending to firms and households and public debt service also increased, especially in the countries in which public and private indebtedness is high (see panels (c) and (d) of the figure). The prolonged drop in inflation has also been associated with a downward revision of analysts' expectations for the growth of prices over a five-year time horizon: according to the ECB's Survey of Professional Forecasters conducted in August, the probability that inflation will drop to below 1.5 per cent is around one third, up from 15 per cent in the survey for the second quarter of 2007 (see panel (e) of the figure).

Low inflation hinders the reabsorption of debt in the euro area as a whole. In Italy it is contributing to a slower decline of the debt-to-GDP ratio. An accounting exercise (limited to modifying the denominator), based on the scenario outlined in the 2014 Economic and Financial Document Update, shows that if the rate of change in the GDP deflator were to approach 2 per cent starting next year (above the current forecasts), in 2017 the ratio would be almost 3 percentage points below that envisaged in the Government's Economic and Financial Document. The effect would be greater if the impact of the increase in prices on revenues were also taken into account and hypothesizing constant expenditure in nominal terms.<sup>1</sup>

To counter the risk of a negative spiral that could disanchor inflation expectations from the price stability objective, the Governing Council of the ECB has reaffirmed its commitment to adopt further measures if necessary.

<sup>1</sup> See L. F. Signorini's testimony before the Chamber of Deputies delivered in Rome on 13 October 2014, *Audizione preliminare all'esame della Nota di aggiornamento del Documento di Economia e Finanza 2014.* 



Sources: Based on ECB, Eurostat, Thomson Reuters Datastream and Consensus Economics data.

(1) The rate of inflation in the countries less hard hit by the sovereign debt crisis is the weighted average of the rates of inflation in Austria, Belgium, Finland, Germany, France, and the Netherlands. The rate of inflation in the countries hardest hit by the sovereign debt crisis is the weighted average of the rates of inflation in Greece, Ireland, Italy, Portugal and Spain. The rates of inflation are calculated on the basis of harmonized consumer price indices. The weighting is based on the weights used to calculate harmonized consumer inflation in the euro area. – (2) The 3-month Euribor rate is calculated as the average of daily data in the quarter; inflation expectations for the following quarter are those of the professional operators polled in the quarter; calculated as the difference between the nominal interest rate and inflation expectations. - (3) Inflation is calculated based on the harmonized index of consumer prices. The real average cost of loans is calculated as the difference between the average interest rate on the stock of lending to firms and households and the average rate of inflation in the same year. The size of the spheres is proportional to the ratio of private sector debt to nominal GDP. The countries are: Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal and Spain. – (4) Inflation is calculated on the basis of the harmonized index of consumer prices. The real cost of public debt servicing is calculated as the difference between the total interest expenditure on government securities in proportion to the stock of public debt rates are. Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal and Spain. – (5) Inflation in the same year. The size of the spheres is proportional to the ratio of public sector debt to nominal GDP. The countries are: Austria, Belgium, Finland, France, Germany, Ireland, Italy, the Netherlands, Portugal and Spain. – (5) Inflation expectations at 5 years inferred from the quarterly ECB survey of

## The fears of protracted stagnation ...

The euro area's prospects are made more uncertain by the risks to which global economic activity is exposed. The weakness of world growth and the repeated downward revisions of output forecasts could be the harbingers of a prolonged period of economic stagnation,

with repercussions on the financial system and the public finances. The risk is more pronounced for the euro area, where output and employment are still below their 2008 levels.

#### ... translate into higher volatility and possible strains for the financial system

The persistent fragility of world economic growth has made markets highly sensitive to political and economic news, as was demonstrated by the sudden increase in volatility in the middle of October in connection with the heightened fears about the political and financial situation in Greece. The prospect of low growth is also the main source of risk for banks in the euro area. However, the results of the

Comprehensive Assessment have demonstrated that the large European banks would remain solvent even in severely adverse cyclical conditions. Additional risks stem from geopolitical tensions and the slowdown in the emerging economies, which could produce new pressures on some large international banks.

#### The risks posed by monetary policy divergence diminish

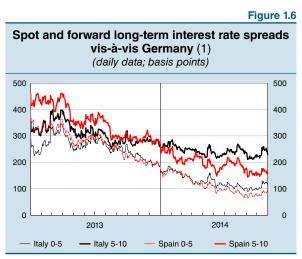
The adoption of unconventional monetary policy measures by the ECB has helped to attenuate the risk that the removal of expansive monetary conditions in the United States might lead to a rise in medium- and long-term interest rates in the euro area. Until last spring there was evidence that long-term US interest rates influenced those

of the euro area (see the box "The transmission of US interest rate rises to euro-area interest rates", *Financial Stability Report*, No. 1, 2014). But since May the measures taken by the ECB have fostered a further decline in long-term euro rates that has been reflected in dollar rates as well. There remains the risk that a future widening of interest rate differentials could trigger an expansion of the carry trade, which would increase the volatility of exchange rates.

Conditions in the sovereign debt markets remain favourable but fragile

Sovereign risk premiums in the euro area have stayed low, benefiting from the expansive measures of the ECB and investors' search

for yield. Forward premiums, which are less affected by the monetary policy stance, are significantly higher than spot premiums (Figure 1.6). The government securities markets continue to be exposed to sudden changes in investors' risk appetite, as in the second half of October.



Source: Based on Bloomberg data.

(1) Interest rate spreads of each country vis-à-vis Germany for 5-year zerocoupon bonds (0-5) and 5-year forward rates 5 years ahead (5-10).

### **1.3 THE REAL ESTATE MARKETS**

The improvement in the real estate market strengthens in many European countries ... The United States real estate market began to improve last spring after nearly a year of stagnation; futures contracts indicate that house prices are likely to continue to increase in the coming months. House prices began to rise again in the euro area as well in the second quarter, gaining 0.7 per cent on the previous quarter and ending the decline under way since the end of 2013 (Figure 1.7). Further increases of 1.3

per cent in Germany and 0.7 per cent in the Netherlands were accompanied by upturns in France and, more sharply, in Spain. House prices essentially stabilized in Belgium, while they began to rise rapidly again in Ireland after temporarily declining at the start of the year.

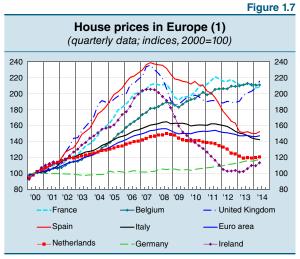
#### ... and macroprudential measures are adopted in some

In some European countries the macroprudential authorities have taken or are taking measures to contain the emergence of systemic

risks associated with the rise in property prices.<sup>1</sup> In the Netherlands, the maximum loan-to-value ratio for mortgages was lowered. In Belgium and Sweden, the authorities increased the risk weights for the mortgage loans of banks that use internal models for risk assessment. In the United Kingdom, they introduced measures to curb lending to borrowers with less repayment capacity.

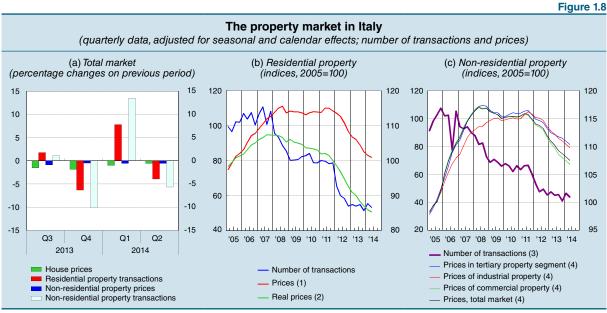
#### The Italian real estate market is still weak slipped by 0.6 per cent in the second quarter, follow-

ing a 1.0 per cent fall in the first (Figure 1.8.a), but the decline in the prices of new houses came



Sources: Based on national sources and ECB data. (1) Nominal prices.

to halt. According to OMI, the Revenue Agency's property market observatory, the number of sales – measured net of the fluctuations caused by the reduction in land and registration taxes at the beginning of the year – stabilized at the very low levels of the first half of 2013 (Figure 1.8.b). For non-residential buildings, both the number of transactions and prices continued their moderate downward path (Figure 1.8.c).



Sources: Based on data from Bank of Italy, Istat, OMI, Nomisma, and Scenari Immobiliari.

(1) Right-hand scale. – (2) Deflated using the change in consumer prices; right-hand scale. – (3) Total market. – (4) Right-hand scale. This experimental price indicator uses data drawn from transactions actually concluded on the market. The tertiary segment comprises office buildings and credit institutions; commercial property comprises shops, shopping centres and accommodation; industrial property consists of buildings for industrial use.

<sup>1</sup> See D. Ciani, W. Cornacchia and P. Garofolo, "Le misure macroprudenziali introdotte in Europa per il settore immobiliare", Banca d'Italia, Questioni di Economia e Finanza *(Occasional Papers)*, No. 227, 2014.



Sources: Based on data from Bank of Italy, Istat, OMI and Consulente Immobiliare.

(1) With respect to new rental contracts. – (2) Right-hand scale. The indicator is given by the ratio of debt service on new mortgage loans – proxied by the product of house prices and interest rates – to household disposable income; a decrease indicates that housing is more affordable.



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

#### House prices in Italy are in line with the fundamentals

According to our estimates, the fall in house prices in Italy is in line with the weakness of households' disposable income, with the conditions of the credit market and with the adverse effects of uncertainty over property taxes. The risk of house price overvaluation is modest, even in terms of the affordability index (Figure 1.9).

The ratio of house prices to rents is the lowest in more than a decade.

The prospects for the real estate market in Italy remain uncertain ... After a period of improvement, the leading indicators have weakened. In October, the indicator of construction firms' confidence recouped only part of its summer loss but was however above its end-2013 level. Activity in the sectors supplying intermediate inputs to the construction industry turned downwards. According to the quarterly survey conducted in October by the Bank of Italy together with Tecnoborsa and the

Revenue Agency, estate agents' pessimism about the short-term prospects eased, despite expectations of a fresh downturn in prices (Figure 1.10). There are signs of a narrowing of the spread between demand and supply prices. However, medium-term expectations regarding the performance of the national market worsened slightly. According to our estimates,<sup>2</sup> house prices, down again in the third quarter, will continue to decline in the fourth, with the change for the year as a whole likely to be negative, though less so than in 2013; they are expected to begin to pick up moderately in the course of 2015 against a backdrop, consistent with the main forecasters' projections, of gradually increasing disposable income and improving credit conditions.

#### ... partly owing to changes in the taxation of property

Developments in the real estate market are subject to risks connected with taxation, which has undergone repeated revisions in recent years. The tax on the value of first homes, introduced in 2012 and practically repealed for non-luxury houses in 2013, was reinstated this year as part of the tax on indivisible services

(TASI). In regional capitals, the taxation of the value of first homes is slightly lower on average than in 2012 and also lower than the prevailing levels in the other EU countries. The tax burden on residential property other than first homes is only a little higher than it was two years ago, owing to the reinstatement of the taxation of income from land and buildings. In the context of persistent income difficulties, uncertainty over the tax treatment of property could increase the imbalance between housing supply and demand, with adverse effets on market prices.

<sup>2</sup> The estimates were obtained using the model described in A. Nobili and F. Zollino, "A structural model for the housing and credit markets in Italy, Banca d'Italia, *Temi di Discussione (Working Papers)*, No. 887, 2012.

## THE FINANCIAL CONDITION **OF HOUSEHOLDS AND FIRMS**

### 2.1 HOUSEHOLDS

Net wealth starts to In the first half of 2014 the trend in income growth was weak while consumption began growing again, after two straight years of decline; this led to a drop in savings. Financial wealth increased primarily owing to the rise in the prices of

households' securities holdings. Total net wealth expanded by 1.1 per cent, partly thanks to the reduction of 0.6 per cent in liabilities, even though house prices fell further (see Section 1.3).

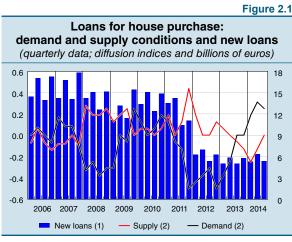
Debt is still low but new loans for house purchase are picking up

grow again

The ratio of household debt to disposable income held basically stable at 63 per cent, a low level by international standards.1 Italian households took advantage of the low level of interest rates to apply for new mortgages and renegotiate more favourable terms and conditions on existing ones. In the first nine months of

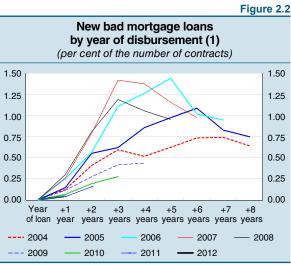
2014, new mortgage lending rose by 10 per cent compared with the same period in 2013 (though still more slowly than did repayments), reflecting both an expansion in demand and better supply conditions (Figure 2.1).

Between December 2013 and September 2014 the average rate on new variable rate mortgage loans to households declined from 3.2 to 2.7 per cent, close to the euro-area average of 2.5 per cent. The average



Sources: Euro-Area Bank Lending Survey, Regional Bank Lending Survey and supervisory reports.

(1) Right-hand scale. Includes new loans for house purchase, subrogations and substitutions. - (2) For the demand index, values above (below) zero indicate expansion (contraction); for the supply index, values above (below) zero indicate tightening (easing)



Source: Central Credit Register.

(1) The mortality curves indicate for each year subsequent to the one in which the loan was disbursed the number of new mortgage loans classified as bad debts as a percentage of those granted in each year.

<sup>1</sup> The time series of the debt-to-income ratio was revised following the adoption of the new European System of National and Regional Accounts (ESA 2010). The changes led to a reduction in the ratio of about 2 percentage points.

cost of bank credit for households was unchanged at 4.0 per cent, compared with 3.8 per cent in the euro area.

# The deterioration in credit quality slows

In the first half of 2014 the share of bank loans to consumer households with

repayment irregularities stabilized at just above 10 per cent (Table 2.1). The balance between the annual flow of loans passing into higher risk classes and those showing an improvement fell for the first time since mid-2011, declining from 2.7 per cent of total loans in December 2013 to 2.3 per cent in June. For mortgage loans, the largest component of household debt, the share of new bad debts among the loans granted between 2009 and 2012 was lower than that for contracts concluded in the years preceding the crisis (Figure 2.2).

The main risk for households comes from weak income growth

In the coming months developments in nominal income pose the main risk to indebted households. Our assessments indicate,

however, that even given fairly severe shocks, the share of vulnerable households,<sup>2</sup> currently estimated to be relatively low by historical standards, would not change significantly. A decrease in income of half a percentage point in 2014 and of 1 percentage point in 2015 would increase the portion of debt held by vulnerable households only marginally, to 21 per cent as against 20 per cent in 2012 (see the box "The effects of the stagnation of income on the vulnerability of indebted households").

	to consum		eholds (1)	rable 2. <sup>-</sup>
	December	2013	June 20	)14
	Но	hase loans		
Total	340,179	100	338,539	100
Performing	318,864	93.7	317,187	93.7
Non-performing	21,315	6.3	21,352	6.3
Past-due (2)	3,053	0.9	1,973	0.6
Substandard	6,560	1.9	7,110	2.1
Bad debts	11,702	3.4	12,269	3.6
		Consume	er credit	
Total	113,205	100	112,049	100
Performing	101,117	89.3	100,167	89.4
Non-performing	12,088	10.7	11,882	10.6
Past-due (2)	1,715	1.5	1,640	1.5
Substandard	3,353	3.0	3,118	2.8
Bad debts	7,020	6.2	7,124	6.4
		Other lo	ans (3)	
Total	99,989	100	100,240	100
Performing	76,231	76.2	76,060	75.9
Non-performing	23,758	23.8	24,180	24.1
Past-due (2)	1,688	1.7	1,323	1.3
Substandard	4,793	4.8	5,090	5.1
Bad debts	17,278	17.3	17,767	17.7
		Total I	oans	
Total	553,373	100	550,828	100
Performing	496,212	89.7	493,413	89.6
Non-performing	57,161	10.3	57,415	10.4
Past-due (2)	6,456	1.2	4,936	0.9
Substandard	14,705	2.7	15,319	2.8
Bad debts	36,000	6.5	37,160	6.7

Source: Supervisory reports.

(1) Loans include repos but not securitized loans. – (2) Past-due loans include restructured loans. – (3) Other loans mainly comprise current account overdraft facilities and mortgages to build or buy non-residential properties, to consolidate other loans or for other non-specific purposes.

 $^{2}$  Households are considered vulnerable when the instalments they have to pay (principal plus interest) exceed 30 per cent of their income and their disposable income is below the median of the distribution.

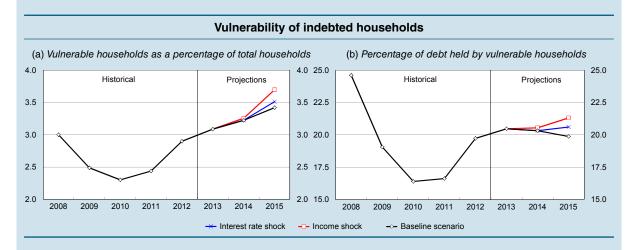
#### THE EFFECTS OF THE STAGNATION OF INCOME ON THE VULNERABILITY OF INDEBTED HOUSEHOLDS

The Survey on Household Income and Wealth shows that in the early part of the crisis, between 2008 and 2010, the proportion of financially vulnerable households fell from 3.0 to 2.3 per cent of total households and their debt from 24.6 to 16.4 per cent of total household debt (see figure). The sharp fall in interest rates had more than offset the pronounced reduction in income: households had benefited from the better terms on outstanding mortgage loans as well, thanks to the considerable recourse made to renegotiation, subrogation and substitution. Households in difficulty had also taken advantage of the possibility granted by many banks of temporarily suspending the payment of mortgage instalments. In 2012 the proportion of vulnerable households rose to 2.9 per cent (about

750,000 households) and their debt to close to 20 per cent of total household debt (about  $\notin$ 140 billion). The deterioration was due to the contraction in disposable income and the rise in interest rates on new loans as a result of the sovereign debt crisis.

To assess the risk associated with indebtedness, the microeconomic data collected in the surveys up to 2012 were projected up to 2015, using a microsimulation model that incorporates the macroeconomic data most rapidly and frequently available.<sup>1</sup> For the projections we used a baseline scenario in accordance with the present economic slowdown, in which nominal income begins to grow moderately again from 2015, interest rates remain practically unchanged and lending to households begins to rise again only in 2015 (see Section 3.2).

According to these simulations the percentage of vulnerable households would rise to 3.2 per cent in 2014 and then to 3.4 per cent in 2015 (figure, panel a); their share of total household debt would increase only slightly compared with 2012 (figure, panel b) as a consequence of the greater selectivity of financial intermediaries during the crisis in granting loans to low-income households.



In the presence of a shock to nominal income (a fall of 0.5 per cent in 2014 and of 1.0 per cent in 2015), 3.7 per cent of households would be financially vulnerable in 2015 and their debt would amount to just over 21 per cent of the total.

In an alternative scenario, with income as in the baseline scenario and an increase of 1 percentage point in the three-month Euribor interest rate next year, 3.5 per cent of households would be vulnerable and their debt would be just under 21 per cent of the total.

<sup>1</sup> See V. Michelangeli and M. Pietrunti, "A microsimulation model to evaluate Italian households' financial vulnerability", Banca d'Italia, Questioni di Economia e Finanza (*Occasional Papers*), No. 225, 2014.

### 2.2 FIRMS

The disparities between the financial conditions of different firm classes widen The persistently low levels of economic activity are heightening the differences between firms in terms of growth prospects, profitability and conditions of access to credit. Turnover and profitability are increasing in large firms, while the economic and financial conditions of small businesses remain precarious notwithstanding a gradual reduction of their debt. According to the national accounts, the gross operating profit of non-financial firms has held stable over the year. The business survey conducted by the Bank of Italy in October on a sample of more than 4,000 industrial and service firms indicates that in the first nine months of 2014 the balance between firms reporting an increase in sales and those reporting a decrease remained negative; it was positive for exporting firms and firms with over 200 employees.

#### Debt diminishes among highly leveraged firms

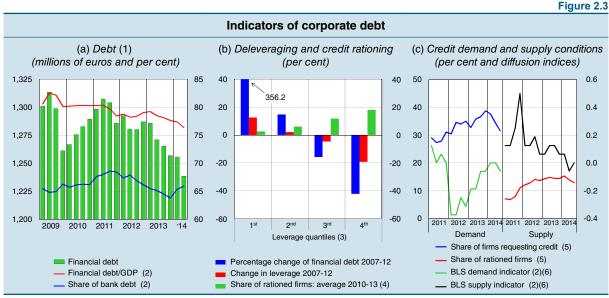
Though still high, leverage is decreasing. In the twelve months to June financial debt fell by 2.6 per cent and leverage by about 4 percentage points, to 42.8 per cent. The debt-to-GDP ratio decreased to 76.4 per cent, shedding over 6 percentage points with respect to the peak of June 2009 (Figure 2.3.a).<sup>3</sup> According

to microeconomic data based on the financial statements of a broad sample of companies, the adjustment of recent years has mainly concerned firms with very high levels of debt prior to the recession (Figure 2.3.b.). For them, the reduction is partly due to banks tightening the supply of credit: between 2010 and 2013, on average 2.6 per cent of firms per year in the lowest quartile of leverage did not obtain the credit they applied for, compared with 18.0 per cent of the most heavily indebted.

## Fewer firms apply for bank loans ...

Bank lending is still declining (down 3.1 per cent on an annual basis in September). The survey of manufacturing firms conducted by Istat indicates that demand for credit decreased in the first three quarters of 2014, a trend that had already

emerged in 2012 from the euro-area bank lending survey (Figure 2.3.c). The surveys also point to an easing of lending standards, which has helped to bring down the interest rates on new loans (-59 basis points in the twelve months to September) and the share of firms subject to credit rationing. Conditions of access to credit nonetheless remain difficult, particularly for small firms: in the third quarter 15.4 per



Sources: Bank of Italy, Istat and Cerved Group.

(1) Data for the non-financial corporate sector. The figures for the second quarter of 2014 are provisional. – (2) Right-hand scale. – (3) Leverage quartiles for a sample of more than 500,000 Cerved balance sheets for 2007; the 1<sup>st</sup> quartile includes non-indebted firms. For the share of rationed firms, annual leverage quartiles. – (4) Share of firms reporting they had applied for but not obtained credit. Data from the sample used in the Bank of Italy's annual Survey of Industrial and Service Firms. – (5) Averages of monthly data recorded by Istat from a sample of manufacturing companies. The percentage of firms refused credit is calculated in respect of the total number of firms that contacted banks or finance companies in the 3 months prior to the survey. – (6) Quarterly data referring to Italian banks contacted as part of the Euro-Area Bank Lending Survey. Diffusion indices: positive values indicate an increase in demand or a reduction in supply.

<sup>3</sup> The time series of the debt-to-GDP ratio of non-financial firms was revised after the adoption of ESA 2010. Although the ratio decreases by about 3 percentage points as a result of the changes, its performance is not significantly different.

cent of firms with fewer than 50 employees were rationed, over one third higher than the percentage of large firms.

... and more turn In the first nine months of the year 18 new companies were listed on the stock exchange, the largest number since 2007. Most of these IPOs were on AIM Italia (Alternative Investment Market), where listing costs are lower. Gross bond

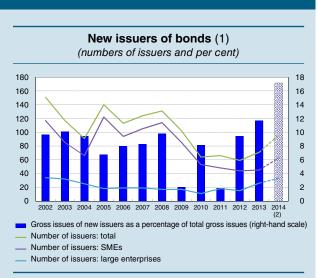
issues totalled €21 billion, slightly below the large volumes of previous years. However, the number of firms issuing bonds for the first time was more than 60 per cent higher than in the previous five years. The turnaround compared with the drop in issuer numbers during the crisis was marked for small and medium-sized enterprises (see the box "New issuers of bonds, 2002-13"). Most of these took advantage of the rules on minibonds introduced in November 2012 to encourage issues by unlisted companies. There were 57 placements of minibonds for a value of €7 billion, equal to 12 and 10 per cent respectively of total bond issues in the period in question. In 2014 the volume of such issues averaged just over 30 million, well below the 270 million recorded in previous years, reflecting the growing presence in the market of medium-sized firms (with turnover of  $\notin$ 10-50 million), up from 27 to 49 per cent of the total.

### **NEW ISSUERS OF BONDS, 2002-13**

to the market

Between 2002 and 2013 more than 1,200 firms issued bonds for the first time. During the crisis their numbers declined sharply, falling from a yearly average of 124 between 2002 and 2008 to 72 in the five following years; the fall was especially pronounced among small and medium-sized enterprises (see figure). Since 2013 there have been signs of a recovery in new issues, involving large firms at first and now gradually spreading to those of smaller size.

Econometric estimates confirm that recourse to the bond market has been mainly by large firms, which are more easily valued by investors and better able to bear the fixed costs of a placement.<sup>1</sup> Other things being equal, the probability of beginning to issue securities is greater among firms that make large volumes of investment. The companies that placed



#### Sources: Bank of Italy and Dealogic.

(1) Defined as firms for which there is no evidence of placements in the 10 preceding years. - (2) Data estimated on the basis of the first 9 months

bonds for the first time also had sounder balance sheets on average and in particular a lower level of debt than those that did not make issues. Lastly, the probability of a first bond issue is higher for firms with a large share of tangible fixed assets and a substantial proportion of short-term debt. The reasons that led firms to make a first issue during the crisis were not essentially different from those observed in the preceding years.

<sup>&</sup>lt;sup>1</sup> The analysis, which uses a sample of more than 1.3 million financial statements of companies drawn from the Cerved database, relies on the estimation of logistic models. The dependent variable is a dummy equal to 1 in the year in which a firm issues bonds for the first time; the independent variables, all measured in the year preceding the issue, include sales revenue, the ratio of investment to sales revenue, the ratio of gross operating profit to assets, leverage, the proportion of short-term financial debt, the share of fixed assets and three dummies equal to 1 for listed firms, for those with less than six years in business, and for those with positive sales revenue growth.

#### Financial conditions are still fragile and are improving only among large firms

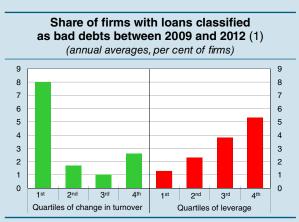
According to the financial statements for that year, 33.1 per cent of firms were financially fragile in 2012, with an interest expense coverage ratio of over 50 per cent. Preliminary data for 2013 point to a drop in vulnerability among firms with more than 50 employees but an increase among small firms, chiefly due to the deterioration in their profitability. According to the national accounts, in the twelve

months to June 2014 the interest expense coverage ratio rose slightly from the previous year, reaching a peak of 21.8 per cent. The ratio of new bad debts, which is an indicator of firms' ability to repay bank loans, also remains high, although it is down 0.7 percentage points on the peak of 4.8 per cent recorded in September 2013 (see Section 3.2); no decline was observed among small businesses, however. Firms' ability to repay debt will improve as they strengthen their financial structure after the imbalances of the crisis had amplified the effects of macroeconomic shocks (see the box "Leverage and bad debts of firms").

#### LEVERAGE AND BAD DEBTS OF FIRMS

Data from a broad sample of companies indicate that the financial structure of firms has greatly amplified the impact of cyclical developments on their ability to repay their debts.<sup>1</sup>

The two recessions of the last five years have produced a substantial increase in bank loans classified as bad debts. The increase reflects both trends in firms' turnover and their leverage. Among firms in the worst quartile in terms of sales trend (i.e. a contraction of at least 14 per cent on average for the year), 8.0 per cent had loans classified as bad debts, compared with an average of 1.7 per cent among other firms. Similarly, the percentage of firms with loans classified as bad debts falls from 5.3 per cent among those in the top quartile in terms of leverage (a leverage ratio of over 84 per cent)



Sources: Based on Cerved Group and Central Credit Register data. (1) The quartiles of change in turnover are calculated on the basis of the average change in the period 2008-12. Leverage is the ratio of financial debt to the sum of financial debt and shareholders' equity; the quartiles are calculated on the basis of the distribution in 2007-08.

to 1.3 per cent among those in the first quartile (see figure).

The effect of pre-crisis indebtedness on the probability of having their bank loans classified as bad debts between 2009 and 2012 has been quantified by econometric analysis. The results indicate that, controlling for other factors (including change in turnover), an increment of 10 percentage points in the leverage ratio corresponds to an increase of nearly 1 point in the bad-debt probability. This is a substantial effect; it implies an increase of about 4 percentage points in the bad-debt probability between the 25<sup>th</sup> and the 75<sup>th</sup> percentile of the distribution.

The initial leverage also amplifies the effects of declining turnover on the probability of a firm's loans being classified as bad debts. Given the same shock to sales, in fact, the probability is more than three times as high in the top as in the bottom leverage quartile.

<sup>1</sup> About 200,000 limited companies for which Cerved has data on financial debt in 2007 or 2008 and whose exposures at that time were not classed as adjusted bad debts by the Central Credit Register (see Bonaccorsi di Patti, D'Ignazio, Gallo and Micucci, "The Role of Leverage in Firm Solvency: Evidence from Bank Loans," Banca d'Italia, forthcoming).

The increase in liquidity is also concentrated among large firms Firms' liquidity continues to rise. According to the financial accounts, cash and deposits represented 7.6 per cent of total liabilities, over 1 percentage point more than the average for 2004-08. The balance sheet data indicate that liquidity has only increased among medium-sized and large enterprises.

#### Several measures are adopted to support SMEs' access to credit

Several measures continue to support the access to credit and liquidity of small firms. In the first seven months of the year, the Central Guarantee Fund provided guarantees for loans amounting to €7.6 billion, equal to about 14 per cent of loans to non-financial companies for amounts up to €250,000 (a proxy for

lending to small enterprises). In September repayments of general government arrears under way since the summer of 2013 reached  $\in$ 31.3 billion, a little over half the amount set aside for 2013-14. The third moratorium signed by the Italian Banking Association and the main business associations allowing SMEs to request the suspension or extension of loan repayments will remain in force until December this year. The exclusion of firms with repayment irregularities from the last two moratoriums has greatly diminished the impact of the measure: in the ten months to July only  $\in$ 1.4 billion of capital repayments were suspended, equal to about one fifth and one half of the amounts recorded in the first and second moratoriums.

# The main risk for firms is the weakness of the economy

The continuing weakness of the economy is the main factor of risk for firms in the months to come. Unless a recovery gets under way, there seems little likelihood that financial conditions will improve significantly, especially for small firms and those producing for the home market. Firms are gradually returning to a balanced

financial structure, however, partly owing to the reduction in their debt and partly to increased recourse to the market by medium-sized and large enterprises. These tendencies make firms less financially vulnerable and place them in a better position to take advantage of future investment opportunities. Difficulties accessing credit are still a serious obstacle, above all for small and less capitalized firms.

# **3** THE BANKING AND FINANCIAL SYSTEM

### 3.1 THE ECB'S COMPREHENSIVE ASSESSMENT OF THE LEADING EURO-AREA BANKS' BALANCE SHEETS

#### Methodology

The ECB publishes the results of the comprehensive assessment ... The results of the comprehensive assessment of the balance sheets of the main euro-area banks (including Lithuania) were published on 26 October, in preparation for the launch of the Single Supervisory Mechanism (SSM) on 4 November. The exercise had three aims: to evaluate the actual health of the banks on the basis of common criteria; to quantify, if necessary, the capital strengthening

measures to be taken; and to release clear and comparable information to restore confidence in the European banking system.

... consisting in an asset quality review ...

The comprehensive assessment consisted in an asset quality review (AQR) and a stress test, conducted with reference to a baseline and an adverse macroeconomic scenario.<sup>1</sup> The AQR applied common definitions to check the quality of the assets

held at the end of 2013. The analysis of credit portfolios verified the accuracy of loans' classification in the performing and non-performing categories and the adequacy of the related provisions, taking account of the valuations of the collateral covering the exposures. In order to complete the exercise on schedule only a subset of assets was considered for each bank, selected from the riskiest portfolios. Sample performing and non-performing exposures were examined individually by the teams of inspectors. Overall value adjustments for each portfolio were then obtained using inferential techniques. Lastly, the adequacy of valuation adjustments on performing loans and exposures to retail customers (collective provisioning analysis) were analysed using a quantitative challenger model.

> The stress test was severe compared with similar exercises conducted in the past. The value adjustments that emerged from the AQR were deducted from the value of the starting capital used as an input in the stress test; if large, they also led to a he loss estimates provided by the banks for the stress test's time horizon (2014-16).

worsening of the loss estimates provided by the banks for the stress test's time horizon (2014-16), representing an innovative approach to supervisory practices.

The reference capital threshold varies according to the exercise

... and a severe

stress test

The minimum amount of common equity tier 1 (CET1) capital required for all banks was set at 8.0 per cent of risk-weighted assets for both the AQR and the stress test's baseline scenario. This requirement is higher than both the regulatory minimum (4.5 per cent) and the minimum augmented by the capital conservation buffer (7.0 per cent). Under the stress test's adverse scenario the threshold was set

at 5.5 per cent, also higher than the regulatory minimum. Banks have six months from the publication of the results to cover any shortfalls resulting from the AQR or the baseline scenario of the stress test and nine months to cover shortfalls from the adverse scenario.

<sup>1</sup> For a detailed description of the methodology see the Bank of Italy's *Technical note on the procedures for conducting the Comprehensive Assessment*.

The comprehensive assessment is essentially a prudential exercise a prudential exercise the comprehensive assessment was essentially a prudential, not an accounting, exercise. In fact the reclassifications and value adjustments following the AQR were also partly based on financial indicators of possible difficulties of corporate borrowers; current accounting regulations instead prescribe that loan valuation adjustments be made following objective indications of a loss. Furthermore,

ample recourse was made to statistical methodologies not contemplated by accounting criteria. In their dealings with the supervisory authorities, the banks will evaluate the need to make any adjustments to their balance sheets on a case-by-case basis.

#### The main results for Italian banks

All the Italian banks pass the AQR ... 2014, all the banks passed the AQR. The stress test, instead, showed potential capital needs for four

banks totalling €3.3 billion.

	Decul	to of the	Compre	onoivo (		t for Italia	hanka		Table 3.
	Resul		-		Assessmen numbers of b		1 Danks		
	Results published by the ECB							Results including other capital strengthening measures	
	Excess/ shortfall after the AQR (1)	Excess/ shortfall after the ST baseline (2)	Excess/ shortfall after the ST adverse (3)	Min excess/ max shortfall (4)	Main capital strengthening measures (5)	Excess/ shortfall, including main capital strengthening measures	the AQR, including main capital strengthening measures (6)	Other capital strengthening measures (7)	Final excess/ shortfall, including all capital strengthening measures
	А	В	С	D = min(A,B,C)	Е	F = D+E	G = A+E	н	I = D+E+H
Banco Popolare	-34	-693	-427	-693	1,756	1,063	1,722	120	1,183
Banca Popolare dell'Emilia Romagna	162	149	-128	-128	759	631	921	0	631
Banca Popolare di Milano	-482	-647	-684	-684	518	-166	36	879	713
Banca Popolare di Sondrio	-148	-183	-318	-318	343	26	195	0	26
Banca Popolare di Vicenza	-119	-158	-682	-682	459	-223	340	253	30
Carige	-952	-1,321	-1,835	-1,835	1,021	-814	69	0	-814
Credito Emiliano	463	480	599	463	0	463	463	0	463
Credito Valtellinese	-88	-197	-377	-377	415	38	327	12	50
lccrea	356	385	256	256	0	256	356	0	256
Intesa Sanpaolo	10,548	9,419	8,724	8,724	1,756	10,480	12,304	417	10,897
Mediobanca	205	600	445	205	0	205	205	560	765
Monte dei Paschi di Siena	-845	-1,516	-4,250	-4,250	2,139	-2,111	1,294	0	-2,111
Unione di Banche Italiane	2,432	1,848	1,743	1,743	18	1,761	2,450	0	1,761
UniCredit	6,451	6,167	5,580	5,580	1,235	6,815	7,686	1,932	8,747
Veneto Banca	-583	-574	-714	-714	738	24	155	0	24
Total:	0.054	5 000	0.445	0.070	0.445	0.010	-	4 405	0.001
shortfalls (8)	-3,251	-5,290	-9,413	-9,679	8,148	-3,313	0	1,132	-2,924
excesses (8)	20,617	19,049	17,347	16,971	3,009	21,762	28,523	3,041	25,546
Number of banks with shortfalls				9		4	0		2

Sources: Bank of Italy and the ECB's Aggregate Report on the Comprehensive Assessment, October 2014.

(1) Capital excess/shortfall with respect to the threshold of 8% for the CET1 ratio at 31/12/2013 (B8 in the template published by the ECB for banks with shortfalls). – (2) Excess/shortfall with respect to the threshold of 8% for the CET1 ratio at 31/12/2013 (B9 in the ECB template). – (3) Excess/shortfall with respect to the threshold of 5.5% for the CET1 ratio at 31/12/2013 (B1 in the ECB template). – (4) Minimum excess or maximum shortfall (between those resulting from the AQR, the baseline stress test scenario and the adverse stress test scenario) at 31/12/2013 (B11 in the ECB template). – (5) Main capital strengthening measures taken between January and September 2014 (sum of C1-C6 in the ECB template). – (6) Data taken directly from the results published by the ECB. – (7) Other capital strengthening measures decided in 2014, in addition to those outlined in Column E. – (8) The totals shown in Columns D, F, G and I cannot be obtained by applying the formulas indicated at the top of each column, which are valid only for the data on the individual banks.

 $^{2}$  Of these, 13 now fall directly within the perimeter of the SSM; Credito Valtellinese and Credito Emiliano, which according to the latest available data hold assets of under €30 billion, were classified among the less significant banks.

Table 3.1

#### ... but the stress test called for two banks to strengthen capital

Taking account of other capital strengthening measures decided in the course of 2014 (mainly extraordinary asset divestments, the completion of the ongoing authorization procedures to use internal models, and the elimination of specific capital requirements), the potential shortfalls are reduced to  $\notin 2.9$  billion (0.2)

per cent of Italy's GDP) and concern two banks: Banca Carige and Banca Monte dei Paschi di Siena. For 13 banks there are capital surpluses of €25.5 billion. The two banks concerned have already submitted plans to the supervisory authorities to cover the shortfalls.

The aggregate results confirm the solidity of Italy's banking system despite severe tensions The data confirm the overall resilience of the Italian banking system, despite the severe strains of recent years: the global financial crisis, the sovereign debt tensions, and the prolonged recession in Italy.

#### The asset quality review

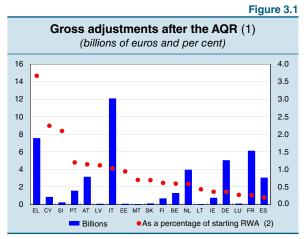
#### The amount of the value adjustments is relatively large ...

For the Italian banks the AQR resulted in asset value adjustments totalling €12.0 billion, against €47.5 billion

...

for European banks as a whole (Figure 3.1). Relative to the starting risk weighted assets, the adjustments come to 102 basis points, compared with an average of 56 basis points for the SSM banks (Table 3.2).

The difference is partly ascribable to the gaps in growth between the various countries: the value adjustments were on average higher for banks



Source: ECB, Aggregate Report on the Comprehensive Assessment October 2014

(1) Gross of tax effects. - (2) Right-hand scale

....

...

Table 3.2

Value adjustments after the AQR (1) (billions of euros and basis points)								
		Italian banks		SSM	1 banks			
		billions of euros	basis points (RWA)	billions of euros	basis points (RWA)			
Value adjustments calculated with reference to:								
Individually assessed positions	(a)	-4.4	-37	-16.4	-19			
Projection of findings	(b)	-3.8	-33	-10.3	-12			
Challenger model	(c)	-3.6	-30	-16.2	-19			
Total adjustments calculated using statistical methods	(b)+(c)	-7.4	-63	-26.5	-31			
Total adjustments on credit portfolios	(d)=(a)+(b)+(c)	-11.8	-100	-43.0	-51			
Adjustments owing to the review of level 3 assets and CVA	(e)	0	-2	-4.6	-5			
Gross impact on capital	(f)=(d)+(e)	-12.0	-102	-47.5	-56			
Tax and risk offset	(g)	3.8	33	13.7	16			
Net impact on capital	(h)=(f)+(g)	-8.2	-69	-33.8	-41			

(1) The figures in basis points are calculated by relating the corresponding figures in billions to the risk weighted assets at the end of 2013. The credit valuation adjustments (CVA) are adjustments to the balance sheet values of the derivatives to take account of the possible default of the counterparties

in the countries that have recorded the worst economic performance since the outbreak of the economic crisis.<sup>3</sup>

... and mostly reflects The bulk of the value adjustment stems from the application of inferential statistical valuations methodologies (63 basis points for the Italian banks; 31 for all the SSM banks) (Table 3.2). For example, the challenger model, which was used to assess the

adequacy of collective provisioning on performing exposures, determined significantly higher value adjustments than those normally used under international accounting standards (IAS-IFRS), which do not allow the recognition of merely prudential items. For the Italian banks the share of value adjustments that emerges from the inspection of individual positions is comparable to that for SSM banks as a whole (37 basis points in terms of risk weighted assets out of a total of 102, against 19 basis points out of a total of 56 for all the SSM banks).

A portion of the value adjustments derives from the reclassification of performing to non-performing exposures.<sup>4</sup> For the Italian banks these reclassifications came exposures are in line to 198 basis points in terms of risk weighted assets, against 201 basis points for all with those in the euro SSM banks (Table 3.3). For these, 120 basis points are ascribable to the outcome of the analysis of the banks' positions, conducted both on an individual and a statistical basis, while the remaining 81 basis points were due to the adoption of

the new harmonized definition of non-performing exposures. For the Italian banks the reclassifications are instead almost entirely due to the first component. This partly reflects the use, for loan reclassification, of stricter balance sheet indicators for corporate borrowers than the accounting ones. The application of these criteria has influenced above all the assessment of exposures to Italian SMEs, whose balance sheets reveal on average low profitability and high indebtedness. By contrast, the adoption of the new harmonized definition of non-performing exposures did not affect the Italian banks.<sup>5</sup> Overall, the stock of non-performing exposures according to the criteria adopted by the AQR rises by 18.3 per cent for the SSM banks, against 9.6 per cent for the Italian banks.

	Stock	New non-performing exposures							on-performing
	of non- performing exposures (end- 2013 nat. definition)	Portion owing to new harmonized definition		Portion owing to asset analysis		Total		exposures (based on the AQR)	
	billions	billions	basis points	billions	basis points	billions	basis points	billions	percentage change on 2013
SSM banks	743	55	81	81	120	136	201	879	18.3
Italian banks	198	0.4	4	18.6	194	19	198	217	9.6

Source: ECB. Aggregate Report on the Comprehensive Assessment, October 2014.

<sup>3</sup> In numerous instances, positions classified as performing based on the data at 31 December 2013 were reclassified by the banks themselves during the summer months when the assets were inspected.

<sup>4</sup> It is not possible to reconstruct this amount based on the data published by the ECB; in Table 3.2 it is distributed among the items "individually assessed positions" and "projection of findings."

<sup>5</sup> See the box "Definition of non-performing exposures and forbearance in the EBA rules and the asset quality review", *Financial* Stability Report, No. 1, 2014.

**Reclassifications** 

to non-performing

area

Table 3.3

The AQR also looked at a number of particularly opaque assets (including "level 3" assets), whose assessment is based on statistical models and the adequacy of collateral valuations, especially real estate collateral, with respect to market prices. For the level 3 assets, the value adjustments determined by the AQR were very limited: 2 basis points for the Italian banks, against 5 basis points (in terms

of risk weighted assets) for all the banks in the euro area. For real estate collateral, the differences between the firms' assessments and those ascertained by the inspectors were limited (see the box "The valuation of real estate collateral in the AQR".)

#### THE VALUATION OF REAL ESTATE COLLATERAL IN THE AQR

For the Italian banks, the valuation of realestate collateral, conducted by independent appraisers, considered a sample of more than 8,000 properties in Italy and abroad for a total value exceeding  $\in$  33 billion.

Value adjustments of

real estate collateral

opaque assets and

are limited

The figure shows the differences for real estate collateral between the appraisers' valuations and those recorded in the banks' accounts. The former were generally lower than the latter for all types of real estate: by 10.1 per cent in the case of the Italian banks, by 13.0 per cent for the full set of banks participating in the AQR. As a rule, the banks in all the countries reappraise real estate collateral only periodically, so the discrepancy between the internal bank valuations and the AQR valuations probably reflects the fall in property prices, of varying intensity, observed in many markets in the last few years.

For the properties located in Italy, the median downward collateral valuation adjustment was 6 per cent (see the table). For a quarter of

Real estate collateral: differences between banks' valuations and AQR appraisals (1) (per cent; by location of the collateral) 0 0 -2 -2 -4 -4 -6 -6 -8 -8 -10 -10 -12 -12 -14 -14 -16 -16 -18 -18 Italian banks SSM banks Total Total Abroad Mediterranean countries Italv Central Europe Eastern Europe UK and Ireland

(1) The data for Italy refer both to properties located in Italy (including a marginal portion attributable to Italian subsidiaries of foreign groups) and to a small sample of properties located abroad held as collateral by Italian banking groups. The data for the SSM countries are taken from Figure 37 of the Aggregate Report on the Comprehensive Assessment, ECB, October 2014. For a residual category of countries (including the Nordic and Baltic countries), the valuation results are not shown in that figure. The weighted average is calculated using the value assigned to the collateral by the bank.

#### Distribution of the valuation differences for the Italian banks (1)

(anly)	properties	loootod in	h Halu
	properties	юсаео п	i ilaivi

(only properties located in naiy)								
	1 <sup>st</sup> quartile	Median	3 <sup>rd</sup> quartile					
Industrial	-16.7	-5.8	-1.0					
Residential	-16.1	-5.4	0.9					
Commercial	-18.7	-6.8	-1.5					
Other	-18.8	-6.3	0.0					
Total	-17.1	-5.7	0.0					

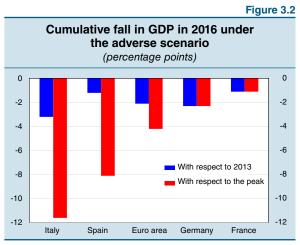
(1) The values only regard the appraisals of properties located in Italy (which account for more than 80 per cent of the value of the real-estate collateral examined and pertain almost entirely to Italian banking groups). The distribution reported is that of the differences between the AQR appraisal and the internal bank valuation. The real estate categories are the following: (a) industrial, i.e. functional to an industrial activity (factory buildings, warehouses, etc.); (b) residential, including individual flats and residential compounds; (c) commercial, used for retail trade; (d) other (offices, hotels, land, etc.).

them, the downward valuation adjustment exceeded 17 per cent (first column), while for another quarter no downward adjustments were made (third column). There were no significant differences between the categories of real estate.

#### The stress test

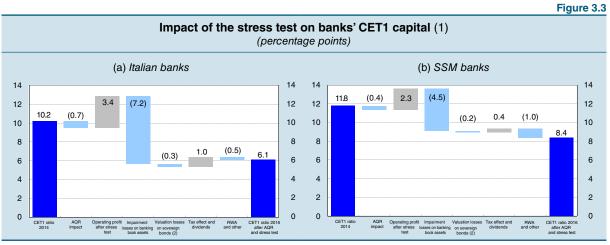
The stress test adopts very strict hypotheses The adverse scenario in the stress test was severe. The overall fall in Italian GDP

with respect to the baseline scenario was in line with the average for the other euro-area countries (6.1 and 6.6 percentage points respectively); in Italy, however, its negative effects were compounded by the protracted recession that began at the end of 2008. Under the adverse scenario, the cumulative fall in GDP between the peak year (2007 in Italy) and 2016 (the final year of the stress test) would be almost 12 percentage points for Italy, much higher than the euro-area average (Figure 3.2). The stress test was rendered even more severe for the Italian banks by including the hypothesis of a resurgence of sovereign debt tensions<sup>6</sup> in this scenario.



Sources: Based on ECB and Bank of Italy data.

Under the adverse scenario the potential estimated losses of the 15 Italian banks would amount to around €90 billion for the years 2014-16. Those stemming from loan loss provisions would amount



Source: ECB, Aggregate Report on the Comprehensive Assessment, October 2014.

(1) Adverse scenario of the stress test. The impact on capital over the three years 2014-16 are shown in relation to RWA and make a positive (grey bar) or negative (blue bar) contribution to the starting CET1 ratio, determining the final value of the CET1 ratio after the AQR and the stress test. – (2) Available for sale.

<sup>6</sup> The exercise used the definition of capital in force in each country, taking account of the various national discretionary measures adopted for the transition to Basel III. The only exception was the treatment of the prudential filter relative to variations in the prices of government securities classified in the available-for-sale portfolio, which it was decided to eliminate gradually.

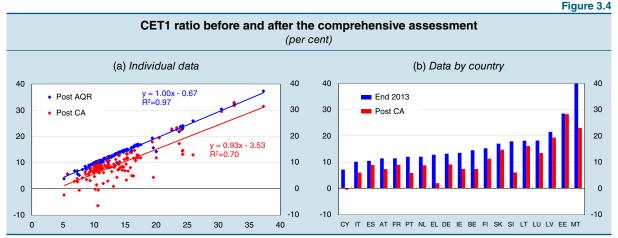
to 7.2 per cent in terms of risk-weighted assets, against 4.5 points on average for the SSM banks. Overall, the impact on Italian banks' capital under the adverse scenario (after the initial adjustment as a result of the AQR) would come to  $\in$ 39 billion, or 3.4 percentage points in terms of risk-weighted assets; for banks in the euro area the corresponding effect averages 3.0 percentage points (Figure 3.3). At the end of 2016 the average CET1 ratio of Italian banks would fall to 6.1 per cent, from 9.5 per cent at the beginning of the stress test. The gradual removal of the prudential filter for changes in the prices of government securities classified as available for sale reduced the capital of the Italian banks participating in the AQR by almost  $\notin$ 4 billion (including  $\notin$ 1 billion for Banca Monte dei Paschi di Siena).<sup>7</sup>

### The key determinants of the results

### The results of the comprehensive assessment reflect the initial capital ratios ...

The capital needs emerging from the comprehensive assessment reflect both the banks' initial capital ratios and national economic conditions. The correlation between the initial CET1 ratio, as recorded at the end of 2013, and that net of the value adjustments following the AQR is 99 per cent; the correlation between the starting and final CET1 ratios, after the stress test, comes to 84 per cent

(Figure 3.4.a). For the Italian banks the initial capital ratio was over 1 percentage point less than that of the banks in the main euro-area countries (-3 points with respect to Germany, -1.3 points with respect to France and Austria, -1.9 points with respect to the Netherlands, and -4.4 points with respect to Belgium; Figure 3.4.b).



Source: ECB, Aggregate Report on the Comprehensive Assessment, October 2014.

The initial capitalization levels in turn also depend on the considerable support given by various governments in the euro area to the financial systems of their respective countries. According to the data published by Eurostat, which measure this aid through its effect on public debt, at the end of 2013 this amounted to nearly  $\notin$ 250 billion in Germany, almost  $\notin$ 60 billion in Spain, around  $\notin$ 50 billion in Ireland and the Netherlands, and just over  $\notin$ 40 billion in Greece. In Italy public aid came to around  $\notin$ 4 billion (Figure 3.5),  $\notin$ 3 billion of which was paid back in the course of 2014.

<sup>&</sup>lt;sup>7</sup> Under the adverse scenario the yield on ten-year BTPs would already equal 5.9 per cent in 2014, a level close to that reached at the height of the crisis in 2011-12. Taking account of current yields on government securities, it is estimated that from the end of 2013 the increase in the value of the portfolio of government securities taking part in the exercise has resulted in unrealized capital gains of over  $\notin$ 5 billion.

#### Figure 3.6

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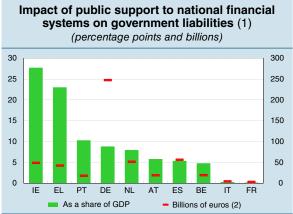
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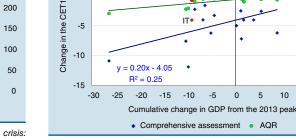
-10

-15

15







y = 0.07x - 0.60

R<sup>2</sup> =0.52

Relation between macroeconomic performance and

the results of the comprehensive assessment (1)

(percentage points)

IT• .

Source: Eurostat, Eurostat supplementary tables for the financial crisis: background note, October 2014.

(1) Data shown in the figure are collected by Eurostat according to its decision of 15 July 2009 (further clarified in 2012 and 2013) on "The statistical recording of public interventions to support financial institutions and financial markets during the financial crisis." They include liabilities of entities that have been reclassified into general government, and of newly established government defeasance structures. Contingent liabilities (mainly government guarantees on financial institutions' assets and liabilities) are not included. - (2) Right-hand scale.

Source: ECB, Aggregate Report on the Comprehensive Assessment, October 2014 and SNL Financial. (1) Each dot represents a country

#### ... and national economic conditions

Different macroeconomic conditions are another important factor that helps explain the differences in the results of the comprehensive assessment among the area's countries. On average the most significant value adjustments resulting from

5

0

-5

ratio

the AQR and stress test took place in the economies with the sharpest falls in GDP since the outbreak of the crisis (Figure 3.6).

#### The market's reaction to the results of the stress test

The results of the stress test produce uneven effects across markets

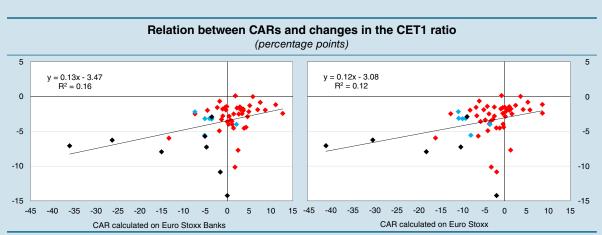
The announcement of the results of the stress test affected markets unevenly depending on the type of bank and financial instrument (see the box "The initial impact of the stress tests on banks' shares and CDS spreads"). The share prices of the banks for which capital strengthening requirements emerged recorded large losses owing to the dilution effect of any capital increases. The risk premiums on the CDS

of almost all the banks involved in the exercise narrowed in the days immediately following 26 October, reflecting increased confidence on the part of investors; these improvements were subsequently scaled back.

#### THE INITIAL IMPACT OF THE STRESS TESTS ON BANKS' SHARES AND CDS SPREADS

The initial impact on financial markets of the results of the European stress test was analysed by examining the cumulative abnormal returns (CARs) of the shares and the CDS spreads of a sample of banks subjected to the exercise.<sup>1</sup> The analysis shows a clear decline in the share prices of the

<sup>1</sup> The banks covered in the analysis represent 17 countries and at the end of 2013 accounted for some 60 per cent of the total assets of the banks included in the EBA stress test. The analysis is limited to listed banks. For each bank, the abnormal return on a given day is calculated as the difference between the actual return of its shares and the theoretical return generated by a model that takes account of the historical correlation between the share price and the price of a benchmark share index. The model is estimated using daily data for the period between 10 October 2013 and 10 October 2014. For each share, the CAR is calculated as the sum of the abnormal returns recorded between 24 and 31 October 2014, in order to capture the reaction to the publication of the stress test results.



Sources: ECB, Aggregate Report on the Comprehensive Assessment, and calculations based on Thomson Reuters Datastream data..

banks for which capital shortfalls were found, probably due to the capital dilution effect that future recapitalizations (announced or expected) will have on the shares already in circulation.

The figure shows the relation between the CARs of the individual banks (horizontal axis) and the overall effect of the stress test in terms of CET1 ratios (vertical axis). The points identify the banks that showed capital shortfalls in their present capital levels (in black) or those observed at the end of 2013 (in blue) and the banks for which capital shortfalls were not found (in red). In the left-hand panel, the CARs are calculated with respect to the Euro Stoxx index of euro-area banks. A positive correlation is found between the size of the corrections to capital resulting from the stress test and the fall in share prices. In the right-hand panel, the exercise is repeated with the CARs calculated vis-à-vis the overall Euro Stoxx index. The results as a whole are confirmed, although there is an increase in the number of banks that pass the stress test but nevertheless record negative CARs. This suggests that the behaviour of share prices also incorporated a sector-wide negative correction.

Additional information on the markets' initial reaction to the stress tests can be gleaned from the performance of the spreads on banks' credit default swaps. The relevant data are available for a limited number of banks. In the three days following 26 October, the spreads on 5-year CDS narrowed for nearly all of these banks, including those for which capital shortfalls were found. This general trend was partly reversed in the second half of the week.

### 3.2 CREDIT

Loans to the non-financial private sector continue to be the principal source of vulnerability for Italian banks. The contraction of credit and the fall in lending rates are cutting into interest income, while loan loss provisions continue to absorb a good part of operating income.

**Credit to the economy contracts further** ... In 2014 trends in lending to households and firms reflected both low demand due to slack economic activity and high credit risk, which makes lending less attractive than securities investment for banks (Figure 3.7). The three-month rate of contraction in lending to non-financial corporations has been steady at 3 per cent since the early months

of 2014 (Figure 3.8.a). The decline in mortgage lending to households, the least risky component of the entire loan portfolio, has continued to moderate.

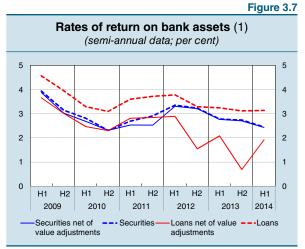
while the decline	The average rates on new
in interest rates	loans have come down to
continues	very low historical levels of
	around 3 per cent in

September (Figure 3.8.b). The attenuation of sovereign risk has been reflected in a narrowing of the spread between Italian and euro-area interest rates to 65 basis points for firms and 30 for households.

#### Economic uncertainty weighs on the recovery in lending to firms

Based on a macroeconomic scenario that updates the July forecasting framework (see *Economic Bulletin*,

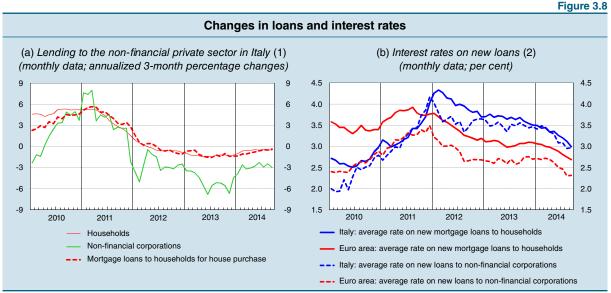
No. 3, 2014) to incorporate the latest cyclical data and is in line with the most recent consensus projections, lending to non-financial firms is not expected to return to growth until the end of 2015 (Figure 3.9.a). The contraction in loans to



Source: Supervisory reports.

 Income less expense as a percentage of the respective balance-sheet items. Excludes branches of non-Italian EU banks.

households, instead, should come to an end as early as the first quarter (Figure 3.9.b).8



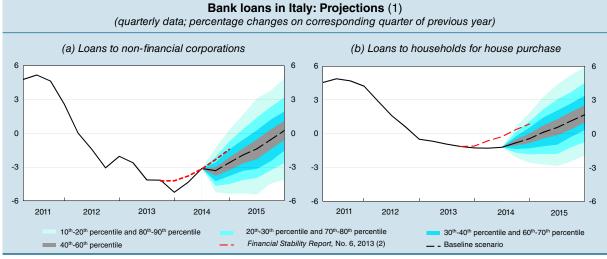
Sources: Based on Bank of Italy and ECB data.

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

The upside and downside forecasting risks are evenly balanced, on the whole. On the one hand the recent measures of the ECB Governing Council to foster the flow of credit to the economy (see *Economic Bulletin*, No. 4, 2014) and the reduction of uncertainties thanks to the Asset Quality Review could accelerate the credit upturn; on the other hand, the recent worsening of the economic picture could result in a slower-than-expected recovery in lending.

<sup>8</sup> In this scenario, economic activity strengthens progressively in the course of 2015, in response to an acceleration of export demand and a recovery in domestic demand. The decline in house prices comes to a halt in the second half of 2015. Money market rates are assumed stable for all of 2015.





(1) Rates of change take account of loans not recorded in banks' balance sheets because they have been disposed of or securitized. The probability distribution of projections (which allows estimation of the size of the risks to the baseline projection) was based on stochastic simulations using random extractions from the distribution of shocks in the Bank of Italy's quarterly econometric model. The distribution is graphed by percentile groups. – (2) Baseline simulation.

The deceleration of new bad debts goes ahead in the second quarter ... The flow of new non-performing loans as a ratio to the stock of performing loans decreased in the second quarter to 4.5 per cent, from the peak of 6.6 per cent at the end of last year. For new bad debts the flow came down by 0.2 percentage points from the fourth quarter of 2013 to 2.6 per cent; the decline mostly involved loans to firms, bringing that rate down to 4.1 per cent (Figure 3.10). Preliminary data indicate that new bad debt flows stabilized at this level in the third quarter.

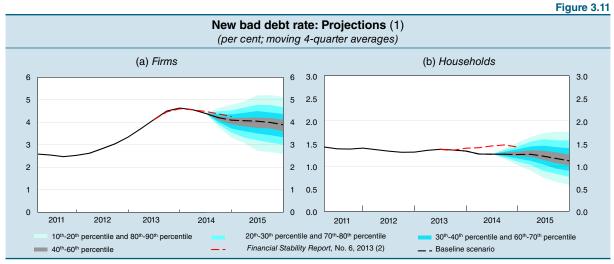


Source: Central Credit Register.

(1) Annualized quarterly flows of adjusted non-performing loans and adjusted bad debts in relation to the stock of loans at the end of the previous quarter, net of adjusted non-performing loans and of adjusted bad debts, respectively; seasonally adjusted where necessary. – (2) The index considers the movements of loans to firms between the different categories of credit quality (loans with no anomalies, overdrafts in breach of limits, past-due loans, restructured loans, substandard loans and bad debts). It is calculated as the balance between the shares of loans whose quality deteriorated/improved in the 12 preceding months.

... and should continue next year as well

Based on the forecasting scenario of gradual recovery in economic activity used to project credit trends, the fall in the new bad debt rate should resume in 2015 for loans to both firms and households (Figure 3.11).



(1) Quarterly flow of adjusted bad debts in relation to the stock of loans at the end of the previous quarter, net of adjusted bad debts; data seasonally adjusted, where necessary. The probability distribution of projections (which allows estimation of the size and sign of the risks to the baseline projection) was calculated by means of stochastic simulations using random extractions from the distribution of shocks in the Bank of Italy's quarterly econometric model. The distribution is graphed by percentile groups. – (2) Baseline simulation.

#### Non-performing loans increase further but coverage ratios improve

In June non-performing loans accounted for 16.8 per cent of total credit to customers; bad debts came to 9.4 per cent (Table 3.4). Net of loan loss provisions, the share of non-performing loans was 10.5 per cent, while that of bad debts alone was 4.4 per cent. The ratio of net bad debts to regulatory capital was stable at 34.0 per cent. In

## Credit quality: shares of non-performing and collateralized loans and coverage ratios (1) (per cent: June 2014)

(per cent; June 2014)																
	5 largest groups			Large banks			Small banks			Minor banks			Total system			
	Percentage composition	Share of collateralized loans	Coverage ratio	Percentage composition	Share of collateralized loans	Coverage										
Customer loans	100	60.7	8.4	100	58.4	6.2	100	55.8	7.8	100	73.8	5.9	100	61.2	7.6	
of which: Performing	82.5	59.5	0.7	85.0	57.9	0.5	82.8	55.5	0.6	83.7	72.8	0.5	83.2	60.2	0.6	
Non-performing	17.5	66.2	44.7	15.0	61.2	38.5	17.2	57.4	42.5	16.3	78.9	33.6	16.8	65.7	42.4	
Bad debts	10.1	65.6	58.4	7.7	59.1	55.9	9.9	53.4	55.8	8.1	76.0	50.4	9.4	64.2	57.	
Substandard	5.4	69.7	27.1	5.4	64.6	22.9	5.5	64.4	26.0	6.6	83.5	19.4	5.5	69.8	25.3	
Restructured	1.1	41.5	28.7	1.0	45.6	14.9	0.7	49.2	27.6	0.4	63.1	16.6	1.0	44.2	25.3	
Past-due	0.8	77.6	13.1	1.0	75.4	10.8	1.1	64.0	12.0	1.2	78.5	5.2	0.9	75.9	11.	
Memorandum item:																
Customer loans (€ mn)	1,234,911			439,317			133,469				176,458			1,984,155		

Source: Supervisory reports.

(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. The division into size classes is based on the composition of banking groups in June 2014 and total nonconsolidated assets as of December 2008. The 5 largest groups comprise the banks belonging to the UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, UBI Banca and Banco Popolare groups. The size classes "large", "small" and "minor" refer to banks belonging to groups or independent banks with total assets, respectively, greater than €21.5 billion, between €3.6 billion. Foreign bank branches are not included. The 5 largest groups plus "large banks" constitute the group of banks subject to the Single Supervisory Mechanism's comprehensive assessment.

Table 3.4

the first half of 2014 the coverage ratio (loan loss provisions over gross non-performing loans) rose from 41.9 to 42.4 per cent (Table 3.4). The increase was more pronounced among banks whose initial coverage ratios were relatively low, in particular minor banks, whose ratio rose by nearly 3 percentage points to 33.6 per cent.

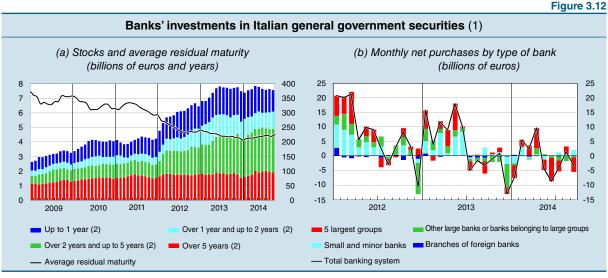
The Italian market for non-performing loans can benefit from the decrease in uncertainty over asset quality In the first nine months of 2014, through asset disposals and securitizations, Italian banks removed nearly  $\in 3$  billion in bad debts from their balance sheets. Some of the largest groups are currently engaged in substantial loan asset disposals. The market for these claims can benefit from the "certification" of the level of banks' provisioning by the AQR.

### Exposures to euro-area sovereign risk and foreign assets

## Banks' holdings of government securities are stable

At the end of September banks' portfolios of Italian general government securities amounted to  $\notin 378$  billion, or 10.3 per cent of their total assets (Figure 3.12.a). This represents an increase of  $\notin 4$  billion since the end of 2013, owing entirely to revaluations estimated at  $\notin 12.6$  billion, which resulted in capital gains for the

banks. In the first nine months of the year net disposals came to  $\in 8.6$  billion, for the most part effected by large banks (Figure 3.12.b).



Source: Supervisory reports.

(1) Amounts of purchases are net of fluctuations in market prices. Holdings are shown at market values. All securities issued by the general government sector, including local government securities; excludes Cassa Depositi e Prestiti. – (2) Right-hand scale.

Exposure to Central and Eastern Europe eases slightly Italian banks' exposure to the countries of Central and Eastern Europe, consisting mainly in loans, diminished slightly in the first half of 2014, from  $\notin$ 171 billion to  $\notin$ 167 billion (Table 3.5). Exposure to Russia and Ukraine is modest and decreasing. Non-performing exposures make up 10 per cent of

the total. Provisions equal to 50 per cent of the value of these exposures have been made. The coverage ratios are higher where country risk is greater and where the economic picture is worsening.

BANCA D'ITALIA

### Table 3.5

### Exposures of Italian groups and banks to residents of euro-area countries, Central and Eastern Europe, and developing countries by sector of counterparty (1) (billions of euros at June 2014)

	General Government	Banks	Financial corporations	Households and non-financial firms	Total	As a percentage of total exposures reported to the BIS (2)
Italy	439.6 (3)	113.1	121.0	1.334.5	2.008.3	77.8 (4)
Germany	33.1	26.3	32.8	85.0	177.2	16.2
Austria	16.0	7.3	1.3	50.4	75.0	39.4
France	5.6	13.3	3.1	7.4	29.5	3.5
Luxembourg	0.4	2.8	10.9	4.1	18.2	4.5
Spain	3.7	5.0	2.2		14.7	3.6
Netherlands	0.2	4.9	4.6	5.5	15.2	3.0
Ireland	0.2	1.0	5.3	0.4	6.8	2.5
Portugal	1.1	0.7	0.3	0.5	2.5	2.4
Greece	0.2	0.1	0.0	0.4	0.7	1.7
Cyprus	0.0	0.0	0.1	0.9	1.0	4.7
Other (5)	5.4	1.7	1.0	17.2	25.3	4.0
Euro area	505.5	176.1	182.6	1,506.3	2,374.3	
Russia	1.5	1.4	1.0	16.4	20.2	13.3
Ukraine	0.3	0.0	0.0	3.2	3.6	22.6
Central and Eastern Europe (6)	40.3	9.1	4.0	113.1	166.6	15.4
Other developing countries	3.0	8.5	0.2	7.0	18.7	0.7

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

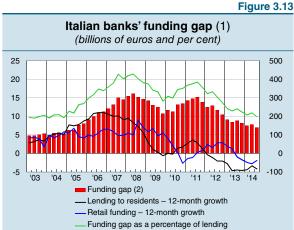
(1) Exposures to "ultimate borrowers", gross of bad debts and net of provisions. Cassa Depositi e Prestiti is not included. – (2) As a percentage of the total foreign exposures to each country in March 2014 reported to the BIS by a large group of international intermediaries. – (3) Of which €389 billion in securities and €50.6 billion in loans. – (4) As the BIS data for Italy do not include exposures to residents, the ratio is obtained by including exposure to general government in the denominator. - (5) Belgium, Estonia, Finland, Malta, Slovakia, and Slovenia. - (6) 30 countries: Albania, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Czech Republic, Croatia, Estonia, Georgia, Hungary, Kazakhstan, Kyrghyzstan, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Tajikistan, Turkey, Turkmenistan, Ukraine and Uzbekistan.

### **3.3 REFINANCING RISK AND LIQUIDITY RISK**

Refinancing risk	Refinanci
declines owing	diminish
to the contraction	as a resul
in loans and easy	funding
market access	with the
conditions	and t

risk has ing ed during 2014 t of the decline in needs, connected fall in lending, favourable he conditions of access to

wholesale markets. The funding gap has fallen to very low levels compared with the recent past (9.9 per cent in September; Figure 3.13). In the first nine months of 2014 net bond issuance on wholesale markets was positive (Figure 3.14), including that of medium-sized banks ( $\notin 1.2$  billion; gross issues of  $\notin 5.2$  billion). In the next two years the major banking groups will have to redeem about €100 billion of securities placed on wholesale markets



Source: Supervisory reports.

(1) Share of loans not financed by retail funding. For the calculation methodology, see the box "The funding gap of Italian banks" in Financial Stability Report, No. 4, April 2012. - (2) Right-hand scale.



125

100

75

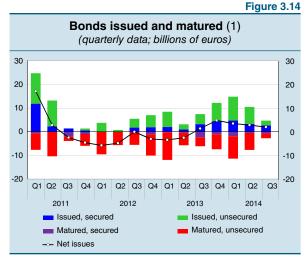
50

25

2015 2016

(2)

(2)



Source: Dealogic.

(1) The data refer to Italian banks' issues of securities on international markets with issue amounts of more than €200 million. Issues retained on issuers' balance sheets, those addressed to the retail market and those of Italian banks' foreign subsidiaries are not included. Source: Data for a sample of 31 banking groups subject to periodic monitoring of their liquidity position by the Bank of Italy. (1) Excludes government-guaranteed bonds pursuant to Decree Law 201/2011. – (2) Right-hand scale.

Apr

2015

July

Italian and foreign institutional counterparties

Maturities of bank bonds by holder (1)

(billions of euros)

(redemptions of  $\in$ 53 billion in 2015; Figure 3.15), in line with what was observed at the end of 2013 for 2014-15.

25

20

15

10

5

0

Dec. Jan.

Retail bonds

2014

### Retail funding and its composition are oriented to supporting profitability

Total funding continued to contract (Figure 3.16), mainly owing to the progressive repayments of the three-year Eurosystem refinancing operations (see Section 4.2). Net issues of retail bonds, bearing higher interest rates than deposits, also diminished. Banks are using their distribution networks to sell insurance products and investment fund shares

in order to increase their income from commissions (see Section 3.6). Deposits are continuing to expand. Partly in response to the reduction in official rates by the ECB, the average cost of funds came down in September to 0.95 per cent (compared with 1.18 per cent in December 2013).

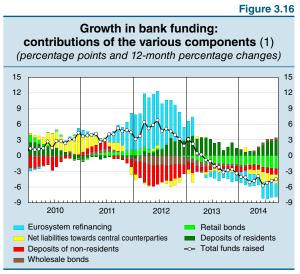
### The short-term liquidity position is still substantial

Banks' short term liquidity strengthened during the summer. As a proportion of total assets, the net one-

month liquidity position reached relatively high levels of around 12 per cent in October (Figure 3.17).

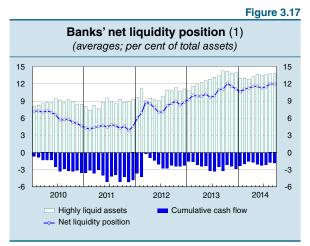
Alignment with the new prudential standards on bank liquidity continues The liquidity coverage ratio will be introduced as a prudential requirement in the European Union with effect from 1 October 2015.

In June 2014 the 15 Italian banks included by the Basel Committee in the observation sample for convergence towards the new prudential rules on



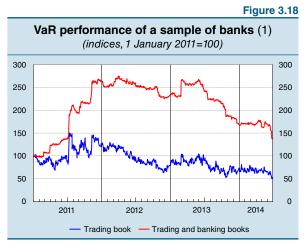
Source: Supervisory reports.

(1) The sum of the contributions is equal to the percentage change over 12 months in the total funds raised. The percentage changes in the single components are calculated net of reclassifications, exchange-rate variations, value adjustments and other variations not due to transactions. Liabilities towards resident monetary financial institutions are excluded. Net liabilities towards central counterparties are the funds raised by way of repos with nonresidents via central counterparties. liquidity met the liquidity coverage ratio established for 2015.<sup>9</sup> At the same date, all the sample groups had a net stable funding ratio of more than 100 per cent.



Source: Data for a sample of 31 banking groups subject to periodic monitoring of their liquidity position by the Bank of Italy. Monthly averages of weekly observations.

(1) The net liquidity position is calculated as the (positive or negative) difference between holdings of assets eligible for use as collateral for Eurosystem refinancing operations and cumulative expected cash flow. The time frame is 1 month; on prudential grounds it is assumed that there is no roll-over of maturing obligations vis-à-vis institutional counterparties.



Source: Data from a sample of 6 banking groups using internal models to quantify market risk, collected as part of the periodic monitoring of market risk by the Bank of Italy.

(1) Averages weighted according to the size of the single intermediaries' portfolios. The indices are constructed so as to reflect the performance of the VaRs in relation to all positions (securities and derivatives) valued at fair value (in red) and to the trading book component alone (in blue). A decline indicates a reduction in risk.

### 3.4 INTEREST RATE RISK AND MARKET RISK

**Italian banks' financial risks are diminishing** The VaR of the leading Italian banks points to a decline in the financial risk deriving from securities and derivatives evaluated at fair value (Figure 3.18). This is due to the reduction in the volatility of the yields on Italian government securities, which make up the bulk of financial instruments held for investment purposes.

Exposure to interest rate risk is modest and declining The interest rate risk of the 11 largest Italian banking groups is modest and also declining. A simulation of a rise of 200 basis points in the risk-free interest rate curve (according to the methodology suggested by the Basel Committee) would result, for data from 30 June, in an average decrease in the net value of assets and

liabilities equal to 4.4 per cent of regulatory capital (6.8 per cent in June 2013), which is well below the 20 per cent early warning threshold set in the regulations. There is also little dispersion of results among the groups: the average figure is the outcome of losses not exceeding 13.4 per cent and gains of up to 4.3 per cent of capital. These results reflect the presence in the balance sheets of Italian banks of a large share of variable rate items whose economic value is unlikely to change with shifts in the yield curve.

Movements in the interest rate curve affect not just capital items but also firms' profitability. Our recent analyses indicate that the loss of value associated with a rise in interest rates through a change in the prices of assets and liabilities would be on average partially offset by an increase in interest income (see the box "The risks for banks deriving from a rise in interest rates", *Financial Stability Report*, No. 6, 2013). The recent stress test (see the box "Interest rate risk and net interest income in the comprehensive assessment") also provided some useful elements for assessing the impact on economic results of a rise in the interest rates.

<sup>9</sup> In 2015 banks will have to meet a liquidity coverage ratio of 60 per cent. The minimum requirement will be raised gradually, reaching 100 per cent in 2018.

### INTEREST RATE RISK AND NET INTEREST INCOME IN THE COMPREHENSIVE ASSESSMENT

The stress test conducted as part of the comprehensive assessment hypothesizes, in the adverse scenario, an interest rate shock comparable to that assumed by the Basel Committee methodology.<sup>1</sup> Although the exercise considers a multitude of channels through which yield changes can affect banks' interest income, the interest rate shock is the principal determinant. However, the assumptions underlying the exercise are such as to have a particularly adverse impact on net interest income, given that (a) there is an automatic reduction in interest earnings due to the reclassification of performing exposures as defaulted, a condition rendered still more restrictive by the assumption that all positions in default (not only bad debts) cease to generate interest income; and (b) it is assumed that over the three-year period of the exercise the bank, rather than actively manage its balance-sheet assets, mechanically replaces all maturing positions with instruments of the same original maturity and technical form (the static balance sheet assumption). These hypotheses mean that the results of the stress test cannot be read – even in the baseline scenario – as a forecast of banks' profitability or as an indication of the actual reaction of net interest income to interest rate variations.

The stress test also makes other restrictive assumptions concerning the variation in banks' lending and borrowing rates. On the lending side it assumes that banks cannot pass on to customers more than 75 per cent of any increase in the cost of funding for new loans (and only 50 per cent for residential mortgage loans). On the borrowing side it assumes that increases in sovereign spreads are transmitted fully to wholesale and only partly to retail funding costs.<sup>2</sup> Lastly, the exercise posits a significant increase in the cost of Eurosystem refinancing between 2014 and 2016, which would not appear to be consistent with the extremely fragile economic situation hypothesized by the adverse scenario.

The table shows the results of the stress test for the net interest income of the 15 Italian banks included in the comprehensive assessment. In the adverse scenario the aggregate falls significantly,

		Net interest in		(millions o			511055 100		
			Baseline scenario			Adverse scenario			
			2013	2014	2015	2016	2014	2015	2016
Adverse scenario		32,777	32,084	31,859	31,803	29,314	28,198	27,21	
Interest income	Loans	No default Impact of default	50,296 _	50,778 -680	51,611 -1,617	53,086 -2,248	57,491 -4,112	62,181 -6,346	63,87 -8,33
	Securiti	es investment	9,187	9,547	9,434	9,280	10,924	12,688	13,56
Derivatives		ves	16,498	16,924	16,469	17,032	19,080	21,554	23,35
Interest Re expense EC	Wholes	Wholesale funding		16,388	16,085	16,460	18,186	20,160	21,12
	Retail funding		13,240	13,329	13,493	14,090	17,581	20,448	21,44
	ECB refinancing		734	510	482	569	1,266	1,453	1,54
	Derivatives		12,849	14,257	13,978	14,229	17,035	19,818	21,13
	Total Cumula	tive impact	32,777 _	32,084 -693	31,859 -1,611	31,803 -2,585	29,314 -3,463	28,198 -8,042	27,21 -13,60
	Total net of default Cumulative impact		32,777	32,764 -13	33,476 686	34,051 1,960	33,426 649	34,544 2,416	35,55 5,18

<sup>1</sup> In the adverse scenario, long-term interest rates in Italy are 205 basis points higher than in the baseline scenario in 2014 and 149 points in 2015 and 2016. The Basel Committee methodology calls for a parallel shift of the yield curve by 200 basis points. <sup>2</sup> The adjustment in deposit rates for firms is set at 50 per cent of the change in the sovereign spread; that of the rest of retail funding at 30 per cent. In addition, under the static balance sheet assumption banks cannot increase their recourse to Eurosystem

refinancing; the funds that they had received in maturing long-term refinancing operations can be replaced by short-term refinancing, the rate on which is assumed to rise consistently with short-term market rates.

producing a cumulative loss of income over the three years of €13.6 billion (equal to an average of 8.4 per cent of regulatory capital). This outcome is the resultant of the positive effect of the larger increase in lending rates than in funding rates and the greater negative effect of reclassifying a portion of the loan portfolio as defaulted. Excluding this latter effect from the calculation, net interest income would increase in the baseline scenario (by  $\notin 2.0$  billion in the three years) and even more, owing to the sharper rise in interest rates, in the adverse scenario (by  $\in$  5.2 billion). The improvement would be driven by rising proceeds on loans and securities.

### 3.5 BANKS' CAPITAL AND PROFITABILITY

increases are

launched in 2014

Substantial capital In the first six months of 2014 capital increases were completed for a total of €11 billion; the funds raised on the market, together, for some banks, with the share of half-yearly profits set aside, fostered capital strengthening. At the end of June the common equity tier 1 (CET1) capital and the total own funds of the Italian

banking system averaged 11.9 and 15.2 per cent of risk weighted assets. With the new regulatory arrangements (Basel III), which will become fully operational in Italy in 2018, the capital aggregates are no longer directly comparable with those in force until 31 December 2013.

The coefficients of small and medium- sized banks are higher than those of the rest of the system	The capital strength of small and medium-sized groups and banks (those not involved in the comprehensive assessment) is above average. Last June, in fact, their CET1 was equal to 13.3 per cent of their risk-weighted assets; for mutual banks the ratio was 15.6 per cent.
two thirds was attrib of the total capital	At the end of January Regulation EU No. 575 of 26 June 2013 (the capital requirements regulation, which implements in the European Union the rules drawn up at international level by the Basel Committee) introduced a capital requirement for banks against the risk of changes in the credit valuation adjustment (CVA) for derivatives. <sup>10</sup> For Italian banking groups the capital red in June 2014 by the CVA for derivatives amounted to €994 million, of which butable to the three largest groups in terms of assets. This amount is 0.92 per cent requirement and confirms the limited role of the Italian banking system in with financial counterparties.
The average leverage ratio is above 3 per cent	For the 15 Italian banks included by the Basel Committee on Banking Supervision in the sample for monitoring convergence towards the new prudential rules, the ratio of CET1 to the total on- and off-balance sheet exposures calculated according to the Basel III definitions (the leverage ratio) averaged 5 per cent on

30 June 2014, a significantly higher value than the regulatory minimum that should enter into force in 2018 (3 per cent) and above the figure found in the main euro-area countries.

In the first six months In the first half of 2014 the annualized ROE was 2.8 per cent, against 1.3 per cent of 2014 profitability in the first half of 2013 (Figure 3.19); the ROE of the banks involved in the improves, but is still comprehensive assessment was 2.5 per cent and that of the other banks 3.5 per very low cent. For the banking system as a whole the improvement in profitability was due

<sup>&</sup>lt;sup>10</sup> According to international accounting rules, the CVA is an adjustment that must be made to the book value of derivatives to take account of the probability that the counterparties of the transactions may default. The increases in the CVA are caused by the worsening of counterparties' creditworthiness and give rise to accounting losses. The scope for applying the capital requirement for the CVA established by the regulation is narrower than that laid down by the Basel III rules. In particular, the requirement does not have to be calculated for transactions in derivatives with EU member states and their central banks or those with non-financial entities that do a limited amount of business in derivatives.

on the one hand to the increase of 3.2 per cent in fee income and on the other to the fall of 3.1 per cent in provisions.

The cost-income	
ratio improves	

Operating costs came down by 0.4 per cent in absolute terms and fell from 61.4 per

cent of gross income in the first six months of 2013 to 59.9 per cent in the first six months of 2014.

Profitability is likely to improve next year as well On the basis of the forecasting scenario used for the projections of loans and bad debts, operating

profitability should improve both this year and in 2015. Interest income should increase slightly this year, thanks to the fall in the cost of funds, and more strongly in 2015, thanks to the expected upturn in economic activity. In both years the reduction in operating costs is expected to continue.

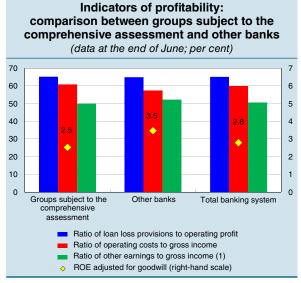


Figure 3.19

Source: Supervisory reports. Provisional data

(1) Other earnings refer to the result net of commissions and to the result on financial operations.

### 3.6 INSURANCE COMPANIES

### The market's assessment

Insurance shares are affected by the uncertain economic outlook The share prices of the main Italian and European insurance companies declined starting in the second quarter (Figure 3.20.a), following the overall stock market trend. Analysts' forecasts of earnings per share for Italian insurers improved, in contrast to those for the euro area generally (Figure 3.20.b). The expected



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

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

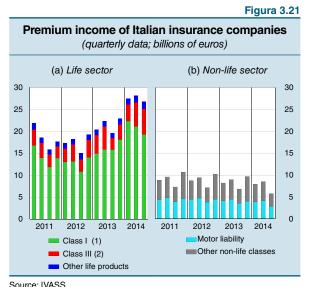
default frequencies implied by share prices increased, but remained far below the highest levels recorded during the financial crisis (Figure 3.20.c).

### Premium income and liquidity

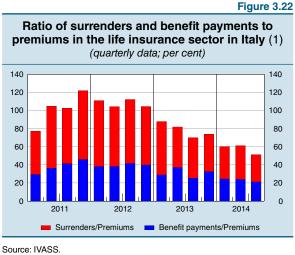
Premium income continues to grow in the life sector and to shrink in the non-life sector In the vear-earlier period), owing to the continuing weakness of the economy (Figure 3.21.b).

Liquidity risk remains modest The technical indicators of the life sector show that liquidity risk is low and decreasing. The loss ratio (surrenders plus benefit payments over premiums) fell further to under 60 per cent. In the first nine months of 2014 the decrease in

policy surrenders continued, especially in the traditional life insurance classes (Figure 3.22), leading insurers to reduce the most liquid asset components.







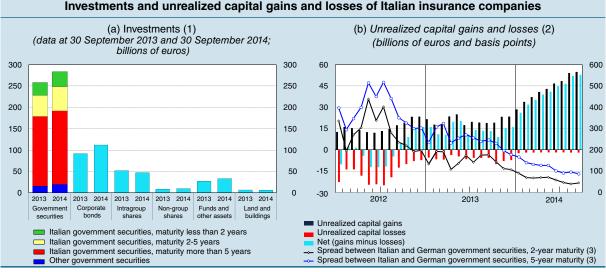
(1) The indicators are calculated as the sum of policy surrenders and benefit payments at policy maturity (principal and annuities) in proportion to premium income during the period. A value higher (lower) than 100 indicates a net outflow (inflow) of funds.

### Investments

Investment in Italian government securities is still substantial The composition of insurers' assets has not changed significantly in recent months. Holdings of Italian government securities remain substantial (Figure 3.23.a); owing to the fall in yields, these have generated a new increase in net unrealized capital gains (Figure 3.23.b).

The periodic survey conducted by IVASS on risk factors in insurance has found that the main groups intend to diversify their investments by stepping up purchases of private sector securities. The new portfolio allocation strategies are designed to take advantage of the opportunities created by recent regulatory changes, which have broadened the range of permissible investments (see the box "The new rules on lending to firms by non-bank intermediaries"). The aim is to contain the costs of the new prudential rules (Solvency II), whose application is imminent and which provide for specific capital charges in respect of asset concentration risk.

#### Figure 3.23



Sources: IVASS and Bloomberg.

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

### THE NEW RULES ON LENDING TO FIRMS BY NON-BANK INTERMEDIARIES

Decree Law 91/2014 (the "competitiveness decree"), converted by Law 116/2014, increases the categories of financial intermediaries eligible to grant loans to firms.<sup>1</sup> The new law allows insurance companies to lend directly to firms (except micro-businesses) providing that they work in conjunction with a bank or authorized financial intermediary which selects the borrowers and maintains, even temporarily, an interest in the operation. If the insurance companies wish to act alone, they must obtain special authorization from Ivass.<sup>2</sup> In both cases, the insurance company must be sufficiently capitalized and have adequate risk management systems in place.

The law allows investment funds to set up "credit funds", collective investment undertakings able to disburse loans directly, drawing on investors' subscriptions.

While the new measures facilitate the flow of resources to support the economy and encourage the financial system's diversification, the growth of shadow banking could increase the risks for financial stability by allowing opportunities for regulatory arbitrage and encouraging excessive credit growth and leverage. The Italian authorities are well aware of these risks and are drawing up a regulatory framework to limit them. The approach is based on the banking supervision model, while observing the principle of proportionality; it is rigorous by international standards.

Secondary legislation requires insurance companies to submit to Ivass a detailed plan of their proposed lending activity. In this plan the companies must describe how the selection and monitoring of lending operations will be organized and, if they are not assisted by a bank, they must demonstrate their ability to manage credit risk in accordance with banking standards. The legislation makes a distinction between different categories of credit, to which specific quantitative limits apply. Finally,

<sup>&</sup>lt;sup>1</sup> Parliament had already passed a law on business lending in December 2013 (Decree Law 145/2013, the "destination Italy decree"; see the box "Insurance companies' investments in bonds issued by SMEs", *Financial Stability Report*, No. 1, 2014).

 $<sup>^2</sup>$  The new law also extends the range of securities issued in the securitizations eligible as collateral for technical reserves, including loan securitizations, even unlisted and unrated.

the new rules require the capitalization of insurance companies engaging in lending activity to be evaluated taking account as of now of the future prudential regulations governing the insurance sector (Solvency II), which unlike the existing system envisage a risk-based assessment of capital requirements.

In June this year the public consultation on the regulations governing the structure of collective investment undertakings drawn up by the Ministry of Economy and Finance came to a close; in order to limit maturity transformation risk, the document stipulates the obligation to adopt the "closed-end" form for funds disbursing credit. As part of the transposition of EU Directive No. 61 of 8 June 2011 (Alternative Investment Fund Managers Directive, AIFMD) a regulatory framework for "credit funds" is now being drawn up. The prudential regulations place limits on the concentration of assets, the duration of loans, and financial leverage; the funds are also required to adopt suitable organizational and governance mechanisms to manage credit risk.

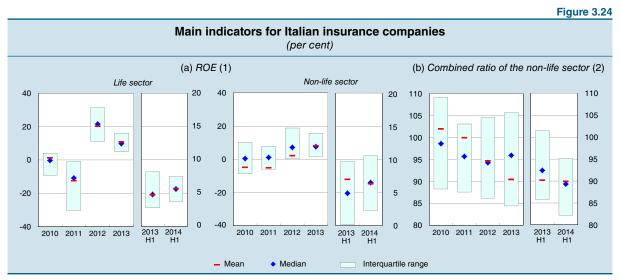
Under the rules the new entities authorized to grant credit must send detailed statistics to the supervisory authorities and report all exposures to their customers to the Central Credit Register.

### Profitability and capital adequacy

Earnings are still good and the financial position sound Insurance companies' profitability has remained satisfactory in 2014 (Figure 3.24). The Ivass surveys on life policies with guaranteed minimum yield and on the vulnerabilities of the insurance industry indicate that for Italian insurers the risks due to low interest rates are minimal, and they have relatively little incentive to seek

higher-risk, higher-yield investments. The results of the main listed insurance groups for the first six months confirm that solvency ratios in the life sector are well above the minimum regulatory requirements.

The risks still depend on economic uncertainty The main risks for the Italian insurance industry continue to stem from the possible impact on profitability of the protracted phase of cyclical weakness. Specifically, economic uncertainty could reduce the demand for insurance products and trigger new tensions in the financial markets, with adverse effects on the return on investment.



Source: Ivass.

(1) Ratio of earnings to shareholders' equity. - (2) Ratio of incurred losses plus operating expenses to premium income for the period.

# **4** THE MARKETS AND EUROSYSTEM REFINANCING

### 4.1 THE LIQUIDITY MARKET

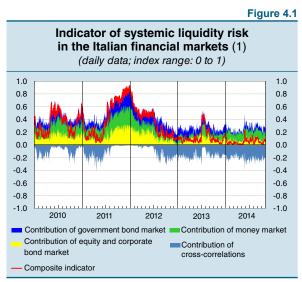
**The liquidity of Italian financial markets remains ample** Liquidity conditions on the Italian financial markets have remained good. The spike in the volatility of the stock market and, to a lesser extent, the market for government securities in the second half of October was not transmitted to other markets. The systemic risk indicator remains at a low level (Figure 4.1).

Trading volume on the repo market operated by MTS S.p.A. is high (Figure 4.2). About 60 per cent of the trading is accounted for by non-resident intermediaries who finance their positions in Italian government securities and invest liquidity. Almost all the contracts (95 per cent) continue to be cleared by Cassa di

Compensazione e Garanzia (CC&G) and LCH.Clearnet SA. Unsecured trades on e-MID and on the OTC market increased modestly after the Eurosystem's introduction of negative interest rates (see Section 4.2).

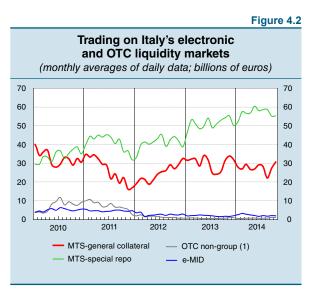
... while banks' funding from abroad diminishes further

In the last year Italian banks have gradually reduced their debtor position on the MTS repo market to  $\notin$ 46 billion at the end of October from  $\notin$ 63 billion a year earlier (Figure 4.3.a). The reduction mostly involved exposures with maturity of less than a month. After recording its lowest point since 2010 in September



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

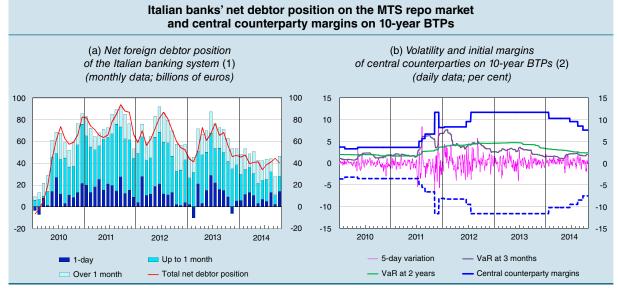
(1) The systemic risk indicator measures the joint risk in the money market, the secondary market for government securities, and the equity and corporate bond markets. The index range is between 0 (minimum risk) and 1 (maximum risk). The graph also shows the contributions to the composite systemic indicator of the individual markets and of the correlations between them. For the methodology used in constructing the indicator, see *Financial Stability Report*, No. 1, 2014.



Sources: Based on e-MID SIM S.p.A., MTS S.p.A. and TARGET2-Banca d'Italia data.

(1) Estimates of unsecured money market trading with maturity up to one week by Italian banks with non-group counterparties, based on TARGET2 data. In the most recent period the accuracy of these estimates is affected by errors in identifying trades at zero interest because of the large number of payments for identical amounts settled in TARGET2.

### Figure 4.3



Sources: Based on MTS S.p.A. and Cassa di Compensazione e Garanzia data.

(1) The net debtor position is calculated on the cash value of the outstanding contracts: monthly average of daily data for total net position, end-of-month data for the breakdown by duration. – (2) Volatility is measured by the variation in the price of the benchmark 10-year Italian government bond (BTP) over a 5-day horizon and by the value-at-risk indicator (VaR) of these variations at 3 months and 2 years with a confidence interval of 99 per cent. Margins are those for the 7-10 year duration bucket; the broken line, which is the mirror image of the margins, serves to highlight the adequacy of the margin requirements to cope with negative price variations actually registered in the market.

( $\in$ 28 billion) following the settlement of the first targeted longer-term refinancing operation (see Section 4.2), funding from abroad began to expand again in the second half of October to meet Italian banks' increased liquidity needs, partly in connection with the tax payments falling due in the closing months of the year.

In the course of this year the two central counterparties have repeatedly lowered their margin requirements on transactions in Italian government securities, reflecting lower market price volatility (Figure 4.3.b). The moderate size and the gradualness of the reductions indicate a particularly prudent attitude on the part of the central counterparties, consistent with the new European rules adopted in March 2013 (the European Market Infrastructure Regulation No. 648/2012).<sup>1</sup> Internationally, recommendations have been issued to limit the risk connected with the procyclicality of margin requirements on bilateral repos and securities lending.<sup>2</sup> The effects on the Italian market should be minor, given the ample use of the services provided by the central counterparty.

Interest rates on the Italian money market hit negative values and align with those of the euro area The introduction of negative rates on deposits with the Eurosystem did not affect the orderly functioning of the money markets (see the box "Liquidity developments following the monetary policy decisions of June 2014"). In the Italian markets one-day rates began to decrease anew following the lowering of the reference rates in June, turning negative on several occasions both in the unsecured segment (e-MID) and in the secured segment (MTS repo). Between June and August, 27 per cent of one-day contracts on e-MID traded at zero or negative interest rates,

<sup>2</sup> See Financial Stability Board, "Strengthening Oversight and Regulation of Shadow Banking. Regulatory Framework for Haircuts on Non-centrally Cleared Securities Financing Transactions", 2014 (http://www.financialstabilityboard.org/publications/r\_141013a.pdf).

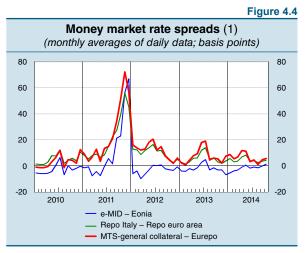
<sup>&</sup>lt;sup>1</sup> The current methodologies for calculating margins help to attenuate procyclicality. In determining margins, in fact, a very long look-back period of over 10 years is used (if available), together with holding periods of up to 5 days and coverage ratios of 99 to 99.9 per cent.

and 18 per cent on MTS repo; the respective portions rose to 52 and 46 per cent following the further 10-basis-point cut in the rate on the deposit facility decided in September. The spreads over rates in the euro area are now negligible (Figure 4.4).

### 4.2 EUROSYSTEM REFINANCING

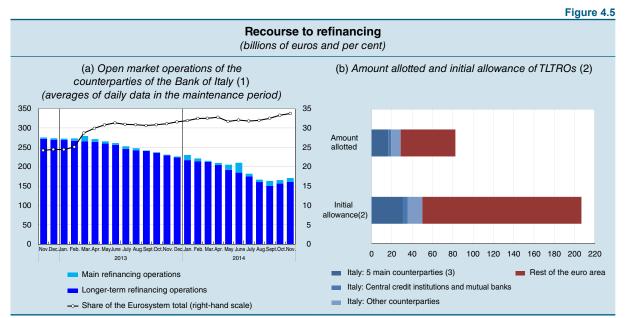
Eurosystem borrowing	After falling to €163				
by banks operating	billion in September, the				
in Italy falls	recourse to Eurosystem				
until September	credit of banks operating				
and then rises	in Italy rose to €171 billion				
	at the beginning of				

November, accounting for 34 per cent of total euro-area refinancing (Figure 4.5).



Sources: Based on e-MID SIM S.p.A., MTS S.p.A. and RepoFunds Rate data. (1) e-MID and Eonia: overnight; Repo Italy and Repo euro area: contracts on government securities with maturity of one business day concluded on electronic trading platforms operated by MTS S.p.A. and ICAP and guaranteed by a central counterparty; MTS-general collateral and Eurepo: tomorow-next.

On 24 September the first TLTRO was settled, with Italian counterparties obtaining €29 billion, equal to 35 per cent of the total demand. It will be possible to assess the real degree of participation only after the second operation, scheduled in December. The first TLTRO was settled at the same time as the main refinancing operation and the repayment of the three-year operations. The net injection of liquidity into Italian counterparties amounted to €15 billion. By 4 November the repayments of three-year refinancing operations totalled €139 billion, equal to 55 per cent of the amount originally allotted, compared with 76 per cent for the other euro-area countries.



Sources: Based on ECB and Bank of Italy data.

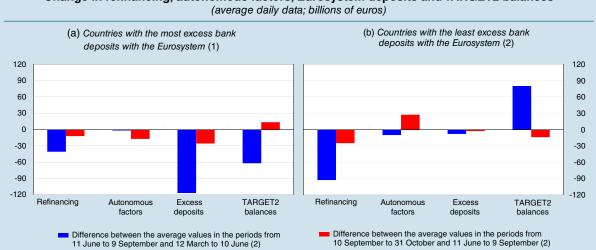
(1) The date indicated on the horizontal axis refers to the month in which each maintenance period ends. For the last maintenance period the average is calculated up to 4 November. – (2) The initial allowance is the maximum amount obtainable and is equal to 7 per cent of the stock of loans to firms and households (with the exclusion of loans for house purchase) on the books at 30 April 2014; it could increase if at the second TLTRO intermediaries were to participate that had not taken part in the first. – (3) Main banking counterparties in terms of the volume of assets of the group to which they belong.

Following the decision of the Governing Council of the ECB to suspend fixed-term deposit operations and to introduce negative interest rates on central bank deposits, the funds in excess of the reserve requirement deposited by banks with the Bank of Italy decreased from  $\notin$ 5 billion to  $\notin$ 3 billion (see the box "Liquidity developments following the monetary policy decisions of June 2014").

### LIQUIDITY DEVELOPMENTS FOLLOWING THE MONETARY POLICY DECISIONS OF JUNE 2014

On 11 June 2014 the decision of the Governing Council of the ECB to lower its key interest rates took effect. The rate on main refinancing operations was cut to 0.15 per cent, that on the marginal lending facility to 0.40 per cent, and that on deposits with the Eurosystem (also applied to the average of the reserves held in excess of the minimum reserve requirement) to -0.10 per cent. The official rates were lowered by a further tenth of a percentage point on 10 September. On 18 June one-week deposit operations<sup>1</sup> were also suspended.

Following the introduction of negative rates on deposits, both the level and the volatility of interest rates declined and the volumes exchanged in the unsecured segment rose slightly. The liquidity originally deposited for one week was mostly transferred from the banks in surplus to other area banks, which could accordingly reduce their recourse to Eurosystem refinancing. In the first three maintenance periods affected by the measures (from 11 June to 9 September) in the countries where banks' excess deposits with the Eurosystem, net of the reserve requirement, were largest, there was a decline in their TARGET2 balances (the net position of their central banks vis-à-vis the ECB) and in refinancing, as compared with the previous three periods (see figure). In the countries where these deposits were already at low levels, the reduction in refinancing averaged over €90 billion and was accompanied by an improvement of €80 billion in the average TARGET2 balances. In the same three



### Change in refinancing, autonomous factors, Eurosystem deposits and TARGET2 balances

(1) Countries with the most excess bank deposits with the Eurosystem (accounting for 90 per cent of the area aggregate): Germany, France, Netherlands, Luxembourg, Austria, Belgium, Finland. Countries with the least excess deposits: Italy, Spain, Greece, Ireland, Portugal. Refinancing: open market operations. Autonomous factors: monetary base creation/absorption channels not controlled by monetary policy. Deposits: balance of banks' reserve accounts net of the minimum reserve requirement, deposit facility and one-week deposits. TARGET2 balances: net bilateral position of the central banks towards the ECB. – (2) The intervals considered are based on the reserve maintenance periods (from the third to the tenth period in 2014); in calculating the average, the tenth maintenance period is considered up to 31 October.

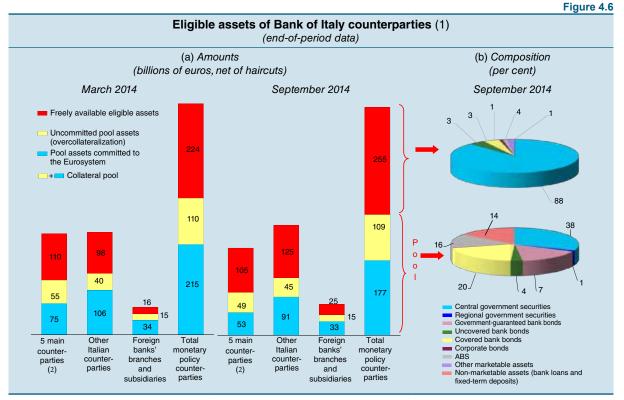
<sup>1</sup> Introduced in 2011 to sterilize the liquidity injected through the Securities Markets Programme (SMP) of outright open market operations in secondary sovereign bond markets.

periods Italian banks reduced their refinancing by  $\notin$ 41 billion and deposits with the Bank of Italy by  $\notin$ 4 billion, mainly owing to the contribution of the largest banking groups. Concomitantly, the Bank of Italy's negative balance on TARGET2 diminished by an average of  $\notin$ 35 billion; the improvement was recorded in June and July (see Section 1.1 and *Economic Bulletin*, No. 4, 2014).

In the subsequent two maintenance periods the trend in TARGET2 balances was inverted, but with only modest variations for both groups of countries.

Available eligible assets continue to increase ... Between March and September the assets deposited with the Bank of Italy in the collateral pool declined in value from  $\notin$  325 billion to  $\notin$  286 billion (Figure 4.6.a), reflecting Italian banks' smaller recourse to Eurosystem credit. The portion of uncommitted assets (overcollateralization) rose to 38 per cent.<sup>3</sup> Available eligible

securities outside the pool also increased, rising from  $\notin 224$  billion to  $\notin 255$  billion; they consisted mainly of government securities and amounted to 144 per cent of the outstanding refinancing (104 per cent in March 2014).



Sources: Based on ECB data and supervisory reports.

(1) The amount of assets committed to the Eurosystem includes the portion covering interest accrued. – (2) Main banking counterparties in terms of the volume of assets of the group to which they belong.

<sup>3</sup> The comparison between the degree of overcollateralization of the pool of collateral deposited by the Bank of Italy's counterparties and that of the other euro-area central banks is also affected by the existence in other European countries of triparty collateral management services, which allow banks to use securities deposited with a central depositary both for operations with the central bank and for operations with other counterparties (e.g. repos). As of September 2014 the Bank of Italy's counterparties can also use such services for securities held with foreign depositaries.

### ... despite the reduction in bank bonds guaranteed by the Italian government

The proportion of securities issued or guaranteed by the Italian sovereign in the collateral pool remains high at 45 per cent of the total (Figure 4.6.b), notwithstanding the reduction in the quantity of government-guaranteed bank bonds, owing almost entirely to the cancellation of securities before their maturity. At 30 September the collateral value of the bonds guaranteed was €19.6 billion (as against €50.5 billion)

in March 2014), of which only  $\in$ 3 billion for own use (i.e. assigned to the pool by the issuing bank) maturing beyond March 2015.<sup>4</sup> Looking ahead, the composition of the pool may be influenced by the measures recently adopted by the Bank of Italy (see the box "The measures to promote the use of bank loans as collateral for Eurosystem credit operations").

<sup>4</sup> As of March 2015 own-use government-guaranteed bank bonds will no longer be eligible as Eurosystem collateral (see <u>http://www.ecb.europa.eu/press/pr/date/2013/html/pr130.322.en.html</u>).

## THE MEASURES TO PROMOTE THE USE OF BANK LOANS AS COLLATERAL FOR EUROSYSTEM CREDIT OPERATIONS

The Bank of Italy has extended the range of bank loans eligible as collateral for Eurosystem refinancing operations in ways that should lower the funding cost in relation to credit to small and medium-sized firms and households.<sup>1</sup> The provision consists in five measures, which went into force on 10 September 2014.<sup>2</sup>

- a) Banks are now allowed to post as collateral portfolios of loans (and not just individual loans as has been the case to date) comprising mortgage loans to households, which were previously ineligible. The borrower's default probability cannot exceed 10 per cent, and the portfolio must meet predetermined standards of granularity. The diversification of credit risk enables the application of haircuts that are, on average, lower than those on loans posted individually.
- b) Banks can now also post the drawn amount of current account credit lines recorded in the Italian Central Credit Register as "matched" (*autoliquidanti*) and "revocable" (*a revoca*) loans, provided that the contracts on this credit meet or are amended so as to meet certain eligibility requirements defined by the Eurosystem. These requirements are designed to ensure the full and unconditional liquidation of the collateral by the Bank of Italy on the hypothesis remote as it may be of the counterparty's default vis-à-vis the Eurosystem. At present most such lines of credit lack the requisite characteristics. The Bank of Italy has identified a number of contractual amendments that the banks can adopt to meet the requirements.
- c) The minimum amount of the loans eligible as collateral, either individually or included in a portfolio, has been lowered from €100,000 to €30,000.
- d) The maximum default probability for loans posted individually has been raised from 1.0 to 1.5 per cent, also to take account of the cyclically induced deterioration in non-financial firms' creditworthiness.
- e) Loans granted under financial leasing and non-recourse factoring agreements are now eligible within the ordinary framework, with lower haircuts than in the temporary framework.

<sup>&</sup>lt;sup>1</sup> The measures comply with the rules established by the Governing Council of the ECB for the Eurosystem's ordinary collateral framework and the temporary framework for Additional Credit Claims (where the eligibility characteristics are less stringent, haircuts are larger and the risk is assumed by the national central banks).

<sup>&</sup>lt;sup>2</sup> Bank of Italy's press release of 8 September 2014, "New measures on bank loans eligible as collateral in Eurosystem refinancing operations".

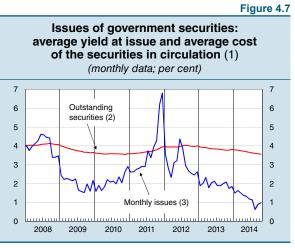
By 5 November these measures had allowed the posting of additional collateral with nominal value of  $\in 1.6$  billion. The effect of the provision can only be assessed in the medium term, once Italian monetary policy counterparties have made the necessary changes to their internal systems for selecting and managing the portfolios and amended their credit line contracts in conformity with the Eurosystem rules.

At the end of September eligible ABS – only senior tranches – held by Italian banks amounted to  $\notin$ 78 billion at face value. Of this total  $\notin$ 71 billion consisted of securities held by the bank originating the underlying claims;<sup>5</sup>  $\notin$ 53 billion worth were allocated to the collateral pool. The mezzanine and junior tranches associated with the eligible securities amounted to respectively  $\notin$ 10 billion and  $\notin$ 31 billion.

### 4.3 THE GOVERNMENT SECURITIES MARKET

Net bond redemptions are recorded in the third quarter; the average cost of the debt decreases In the first six months of 2014 issues of Italian government securities net of securities maturing amounted to  $\notin$ 94 billion ( $\notin$ 51 billion in 2012 and

€87 billion in 2013). In the third quarter the Treasury made net redemptions of €25 billion owing to the large volume of liquidity in its accounts (see Section 1.1). In October net issues totalled €27 billion. The yields at issue continued to diminish and from July stood at 1 per cent or less, the lowest values recorded since the introduction of the euro (Figure 4.7). Although short-term interest rates rose in October, the weighted average cost of outstanding government securities fell to 3.6 per cent.



(1) Unindexed government securities placed on the domestic market. – (2) Weighted average of the interest rates at issue of government securities outstanding at the end of the month. – (3) Weighted average of the interest rates on the government securities placed during the month, by settlement date.

The average residual life of government securities stabilizes The average maturity at issue lengthened to 4.5

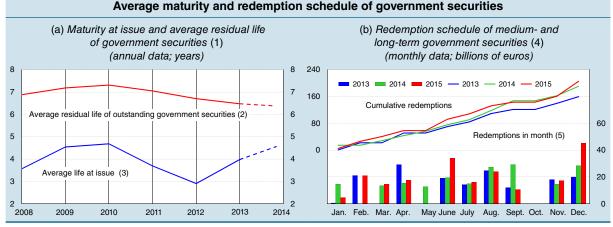
years, returning to its 2010 level (Figure 4.8.a). The lengthening helped to stabilize the average residual life of outstanding government securities at 6.4 years, halting the reduction under way for the past three years.

The volume of securities maturing in 2015 is large but manageable Next year  $\notin$ 205 billion of medium- and long-term government securities will mature,  $\notin$ 15 billion more than this year (Figure 4.8.b). Nevertheless, the increase in gross issues is likely to be limited owing to the projected decrease in the general government borrowing requirement.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup> The main requirements for the eligibility of ABS are: (a) they must be senior tranches listed on a market recognized by the ECB and comply with loan-by-loan disclosure requirements; (b) for the ordinary framework, they must have two ratings of at least "single A" level from any accepted external credit assessment institution at issuance and over the life of the security; (c) for the temporary framework (in force at least until September 2018), there must be a rating of at least BBB- at issue and in life issued by not less than two agencies and compliance with specific risk mitigation criteria.

<sup>&</sup>lt;sup>6</sup> See Nota di Aggiornamento del Documento di Economia e Finanza 2014.

### Figure 4.8

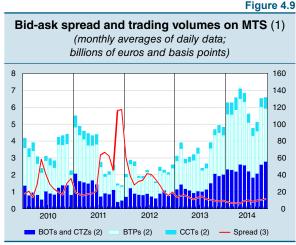


Sources: Based on Ministry of Economy and Finance and Bank of Italy data.

(1) Government securities placed on the domestic market. The figure for 2014, indicated by the dashed line, refers to the end of October. The two series differ in level mainly due to the quantity of BOTs, which account for a larger share of new issues than of the stock of outstanding securities. – (2) End-of-period data, weighted by the stock of outstanding securities. – (3) Average maturity of issues in the period by settlement date, weighted by the quantity issued. – (4) Government securities (including those placed on international markets) with original maturity of more than one year. The redemptions of index-linked BTPs are not revalued for inflation. – (5) Right-hand scale.

Secondary market liquidity is still good After the seasonal drop during the summer months, trading volumes on the

MTS secondary market picked up and were barely affected by the increased volatility in the second half of October (Figure 4.9). The resilience of the market improved significantly compared with the worst period of the sovereign debt crisis; however, in line with developments at global level, changes have been noted in the behaviour of market makers that could have repercussions on the market's functioning in conditions of high volatility (see the box "Developments in market making and the resilience of the MTS market"). The volume of sovereign debt derivatives, BTP futures (Figure 4.10.a) and credit default swaps on Italian sovereign debt (Figure 4.10.b) increased further.



Source: Based on MTS S n A data

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

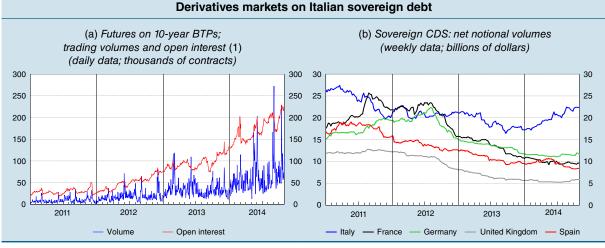
### The risk associated with the settlement of securities transactions diminishes

The reduction in the settlement lag from three to two days that was introduced by market infrastructures in Italy and many other European countries on 6 October did not hamper the orderly functioning of the markets or the settlement of securities transactions.<sup>7</sup> The measure will bring about a generalized reduction in counterparty risk and

hence in the collateral posted. Efficiency in the settlement of cross-border transactions is also expected to improve with the start-up of TARGET2-Securities (T2S), scheduled for June 2015, at which time the first group of central depositories, including Italy's, will migrate to the new platform.

<sup>&</sup>lt;sup>7</sup> The measure anticipates a provision of the new European regulation on central securities depositories (Regulation (EU) No. 909/2014 of the European Parliament and of the Council of 23 July 2014, the Central Securities Depositories Regulation, CSDR) imposing stricter settlement discipline.

### Figure 4.10



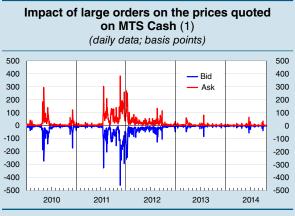
Sources: Based on Thomson Reuters Datastream and Depository Trust & Clearing Corporation data. (1) Open interest is the sum of all open futures contracts on the date indicated.

### **DEVELOPMENTS IN MARKET MAKING AND THE RESILIENCE OF THE MTS MARKET**

Market makers play a crucial role in financial markets: they supply immediacy services to other market participants by continuously quoting buy and sell prices, they contribute to price discovery, and they ensure orderly trading. With the financial crisis these intermediaries have also reduced their risk tolerance. The main investment banks, which conduct most of this activity, believe that some recent or forthcoming regulatory changes designed to strengthen the safeguards against risks might make it less profitable to continue market making. International studies are under way to assess the potential impact of a scaling back of market makers' activity, and consequent reduction of market

liquidity, on the transmission of monetary policy, on financial stability, and on the conditions of access to the capital markets for some borrowers, such as non-financial companies.

Preliminary studies on the behaviour of market makers in the secondary market for Italian government securities<sup>1</sup> seem to indicate that their strategies are moving towards a more broker-oriented model,<sup>2</sup> which cuts both the costs of keeping the securities on their books and the risks, and hence the need for capital. The studies show that while trading has increased by over 60 per cent, volumes quoted are basically unchanged, and that although bid-ask spreads have narrowed considerably in recent years, they are still wider on average



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

(1) The analysis refers to ten-year benchmark securities. Estimated impact on bid and ask prices of entering a hypothetical €50 million buy or sell order in the MTS book.

<sup>&</sup>lt;sup>1</sup> The studies compare the performance of trading against some indicators (bid-ask spread and quoted volumes) of price quoting by Specialists in Italian government securities on the MTS from 2010 to 2014.

<sup>&</sup>lt;sup>2</sup> Market making can be done either through continuous two-way quoting or in response to specific customer requests (brokeroriented).

than before the crisis (11 basis points in the first nine months of 2014, compared with 4 points in 2007). The increase in trading on platforms using request-for-quote systems (BondVision and Tradeweb) that occurred at the height of the crisis and the recent growth in the volume of BTP futures can also be interpreted as signs of market makers' greater reluctance to take positions for own account in meeting customers' orders.

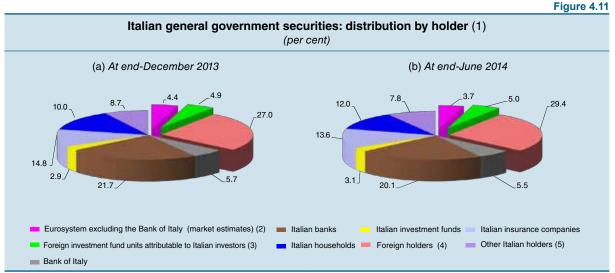
However, the reduced risk tolerance does not appear to have had a significant impact on the market's resilience. We estimate that, for the last two years, entering a hypothetical  $\in$ 50 million order (to buy or sell) in the MTS trading book<sup>3</sup> (equivalent to about ten times the average trade) would have produced a limited variation on average in the price of ten-year benchmark securities (see figure). The potential impact on prices would have exceeded 100 basis points at the height of the Italian sovereign debt tensions before falling back to the pre-crisis level of less than 20 points. The market's intraday resilience has also improved considerably, with a substantial reduction in the price impact of events that temporarily alter liquidity conditions, such as the issue of government securities and publication of macroeconomic data.

<sup>3</sup> The MTS is a quote-driven market in which contracts are concluded by matching orders with buy and sell quotes posted by market makers.

### The share of Italian government securities held by non-residents increases in the first half of the year

At the end of June 2014 the share of Italian government securities held by nonresidents was 29.4 per cent, up by 2.4 percentage points on the end of 2013 (Figure 4.11); in the same period the share held by Italian banks decreased from 21.7 to 20.1 per cent (see Section 3.3). After making further net purchases of government securities in July, non-residents reduced their holdings in August; estimates based on TARGET2 balances suggest that the reduction continued for

a further two months. The movements recorded in August and September were probably due in part to the renewal by the Treasury of securities maturing in those months (see Section 1.1).



Source: Financial accounts data

(1) Percentage shares calculated at market prices net of securities held by Italian general government entities. The shares of non-resident holders are shown separately. The data used for this figure have been statistically revised and therefore are not comparable with the data in the previous issues of this publication. – (2) Estimate, based on market sources, of Italian general government securities held by the Eurosystem (net of those held by the Bank of Italy) in the framework of the Securities Markets Programme (SMP). – (3) Individually managed portfolios and investment funds managed by foreign institutions but attributable to Italian investors. Partially estimated data. – (4) Net of securities held by foreign individually managed portfolios and investment funds but attributable to Italian investors and by the Eurosystem (excluding the Bank of Italy). – (5) Non-financial corporations, pension funds, and other types of investor.