BANCA D'ITALIA

EUROSISTEMA

Financial Stability Report

Number 1

December 2010

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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; estimates are in italics

FOREWORD

With this first issue, the Bank of Italy begins regular publication of its Financial Stability Report*, which analyses the risk factors for the financial system and assesses their possible effects.*

The crisis has had only an indirect effect on Italian banks, which are protected by their sound business model – focused on lending to households and firms – and by a prudent regulatory framework and supervisory model. The risks to banks stem mainly from the weaknesses of the Italian economy, in particular its low rate of growth; once again, the indissoluble link between financial stability and economic growth becomes apparent. The analyses set forth in the Report underline the close link, at international level, between the soundness of the financial sector and that of the public finances.

To preserve the stability of the financial system, the priority today is to adopt policies that enhance the growth potential of the Italian economy. In the light of the strains that have recently beset a number of European countries, it is indispensable to press ahead with the consolidation of the public finances.

With this Report, which will also be referred to in the work of the European Systemic Risk Board, the Bank of Italy makes its analyses of the domestic and international financial system available to intermediaries, investors and authorities.

Mario Draghi

December 2010

OVERVIEW

The world economy continues to expand but at a slower pace; risks remain

The world economy continues to expand, although more slowly and at different paces in the various areas. Output growth in 2011 is forecast to be robust in the emerging and developing countries, moderate in the advanced economies. In Italy, GDP is expected to expand at a slower pace than the average for the euro area.

In the advanced economies the strength of the recovery is subject to risks. World demand could be affected by the phasing out of the extraordinary support measures adopted during the crisis; households' and firms' spending decisions could be held back by the need to reduce debt and by the slow recovery of employment. Credit supply-side tensions may resurface.

The markets are affected by the deterioration in the public finances ...

In the euro area the markets are affected by the deterioration in the public finances; in the countries with severe budget problems risk premiums are extremely high. The risk of contagion has been limited by the exceptional measures adopted by the European authorities.

Looking ahead, the persistent public finance imbalances in the advanced countries threaten to act as a brake on investment, feed fears of inflation, and further raise the risk premiums on sovereign debt. This could lead to significant rises in medium- and long-term interest rates, with adverse effects on the recovery and capital markets.

... and uncertainty about the robustness of the recovery

Favourable expectations regarding corporate profits and lower interest rates have sustained the global recovery in the stock and bond markets. This improvement needs to be underpinned by a lasting strengthening of the economic fundamentals, as the abundant supply of inexpensive liquidity from the central banks will eventually come to an end.

The low level of interest rates in the advanced countries could prompt investors to take large risks in order to obtain high returns. Flows of capital to the emerging countries are increasing, pushing up the prices of financial assets there.

The profitability of the leading international banks could diminish

Part of the recent improvement in the profitability of the leading international banks could be temporary. The public support measures introduced in several countries have been removed or are expiring; trading profits, linked to the favourable financial market conditions of recent months, could diminish; net interest income, which is limited by the low level of interest rates, could be affected by the flattening of the yield curve following the adoption of new monetary stimulus measures in several countries. Over the next two years, the banks will need to refinance a very large volume of bonds, at a time when sovereign borrowers and firms are greatly increasing their recourse to the market.

Overall, in the euro area, banks' demand for central bank refinancing is declining; the excess liquidity with respect to reserve requirements has decreased. Some banks experience difficulty in accessing the markets, which they overcome by having recourse to the Eurosystem. Looking ahead, the removal of the extraordinary liquidity measures require changes in banks' funding.

In Italy the situation of households and firms is still affected by the crisis

In Italy, firms' financial situation and profitability are improving, although the effects of the crisis have not been completely overcome. The tensions that surfaced during the recession have spread within the productive system owing to *the lengthening of firms' payment times. Corporate debt is not out of line with that in other countries but the high proportion of short-term debt and the prevalence of variable-rate loans among long-term liabilities will heighten the risks associated with a rise in market rates.*

The financial situation of Italian households remains generally sound, thanks to their low level of debt and large share of low-risk assets. However, the rapid growth of variable-rate mortgages increases the potential repercussions of a rise in financial costs. Furthermore, although borrowing for home purchase continues to be the prerogative of higher-income and more solvent households, before the crisis it had also grown considerably among the less well-off, for whom debt service payments represent a larger share of income.

The market's evaluation of the soundness of Italian banks is affected by sovereign debt risk within the euro area

As in other euro-area countries, in Italy investors' judgment on the soundness of the largest banks reflects the strains in the market for the sovereign bonds of some countries. However, the market indicators and measures of systemic risk show that the repercussions on Italian banks have generally been limited.

Bank lending to firms is recovering

Lending to firms, especially by the largest banks, has resumed growth. This reflects the upturn in demand as well as the end of tensions on the supply side. Lending to households is also gaining pace. Our analyses indicate that these trends will continue next year.

Credit quality shows signs of improvement

The quality of credit still shows the effects of the 2009 recession, but the latest data indicate that the flow of new bad debts may have stabilized. Econometric estimates consistent with the expected evolution of the main macroeconomic variables suggest that the default rates of both households and firms will decline in 2011. These forecasts are subject to uncertainty, mainly in connection with macroeconomic developments.

The international exposure is stable

Overall, the exposure of Italian intermediaries to foreign counterparties is stable. There has been an increase vis-à-vis the countries of Central and Eastern Europe, where economic and financial conditions are improving but where credit risks are high. The exposure to foreign banks is limited. The tiny portion of total bank assets represented by loans to borrowers in the euro-area countries with problematic public finances mitigates the balance-sheet impact of the sovereign debt strains.

Banks have good liquidity conditions

Italian banks display a good short-term liquidity position. The high proportion of retail funding confers stability, and the funding gap remains small. Recourse to Eurosystem refinancing is very modest, including by comparison with the other euro-area countries. Over the next two years, however, Italian banks, like those elsewhere, will have to roll over large volumes of maturing bonds.

Market risk has declined and counterparty risk is stable

Market risks are diminishing. A rise in interest rates would have limited, and in some cases beneficial, effects. Counterparty risk has remained low, given that positive-value and negative-value positions in derivatives are balanced at the level of individual intermediaries.

The profit outlook remains cloudy

The banks' performance is still suffering the effects of the recession. In the coming months their profitability could benefit from a pick-up in lending and a possible gradual improvement in credit quality, but the outlook is influenced by the low level of interest rates, uncertainty over the robustness of economic growth and the possible resurgence of sovereign debt strains in the euro area. Lasting enhancement of profitability will require action on costs, which are still higher than the European average in proportion to income.

Capital needs further strengthening

Italian banks have strengthened their capital bases by various means: capital increases, retained earnings, issues of securities purchased by the Ministry for the Economy and Finance and disposals of non-strategic assets. In a cyclical expansion *characterized by significant market and credit risks, it is essential to consolidate the expansion of own funds.*

In the longer run, the major Italian banks, like their counterparts abroad, will have to make a considerable effort to comply with the new, more stringent capital adequacy requirements developed by the Basel Committee. The long period of transition will attenuate the effects of the new rules on banks and the economy.

Insurance companies face costs in connection with low interest rates

Overall, Italian insurers have low levels of exposure to potential instability on the financial markets. However, they must cope with the costs entailed by the low level of interest rates.

Banks' behaviour in interbank markets has changed

Italian banks have become more sensitive to credit and liquidity risk. The share of collateralized trades has risen at the expense of uncollateralized trades. The share of transactions carried out in the OTC market has increased. That of transactions with foreign counterparties has diminished. These changes have enabled banks to contain risks in a phase of global financial instability, but massive resort to OTC trading may undermine market transparency; the tendency to trade with domestic intermediaries could restrict the number of potential counterparties.

MTS has guaranteed the liquidity of trading

In 2010 the electronic secondary market (MTS) has guaranteed continuous trading in Italian government securities even at the moments of most acute strain. Demand for government bonds has remained strong, enabling the Treasury to continue to lengthen the average duration of the debt.

The settlement infra-structure has ensured reliable and continuous functioning

Payment and settlement infrastructures contributed decisively to the orderly conduct of trading in the Italian markets. Both the euro-area TARGET2 gross settlement system and Italian structures have ensured perfect business continuity during 2010.

1 MACROECONOMIC RISKS AND INTERNATIONAL MARKETS

1.1 THE OUTLOOK AND MACROECONOMIC RISKS

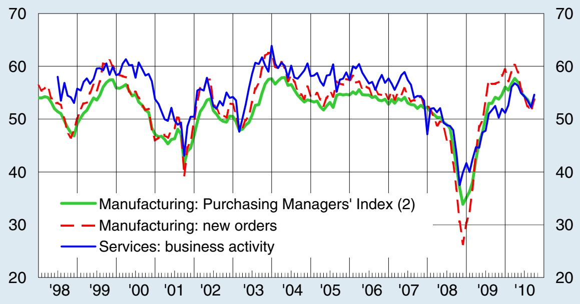
The world economy continues to expand but at a slower pace

World economic growth continues, although more slowly and at different paces in the various areas (Figure 1.1). Economic activity is robust in the emerging and developing countries – especially China, India and Brazil – thanks to the strong expansion in private demand; it is more moderate in the advanced countries and has slowed in the second half of 2010, particularly in the United States. To date, the cyclical upswing has not led to a significant drop in unemployment rates, which stand close to 10 per cent in both the euro area and the United States (see *Economic Bulletin*, October 2010).

Figure 1.1

Global PMIs (1)

(monthly data)



Source: Markit.
(1) Indices based on purchasing managers' valuations (PMIs) and referring to global trends in output in manufacturing and services. Seasonally adjusted. – (2) Composite indicator of trends in orders, output, employment, supplier delivery times and stocks of purchases.

According to forecasts by the International Monetary Fund, in the emerging and developing countries GDP will grow by 6.4 per cent in 2011, only slightly less than this year, and the situation in Central and Eastern Europe will improve (see the box "The economic outlook for Central and Eastern Europe"). The current slowdown in activity in the advanced economies, which is linked to the sluggish performance of private consumption, is expected to persist through the early months of next year, principally owing to the gradual adjustment of fiscal policies and the end of the stimulus coming from the inventory cycle. Global GDP growth is projected to be 2.2 per cent in 2011, against 2.7 per cent this year.

THE ECONOMIC OUTLOOK FOR CENTRAL AND EASTERN EUROPE

Macroeconomic conditions in the Central and Eastern European countries – which represent a major area of activity for Italy's principal banking groups (see Section 2.2) – are improving thanks to the upturn in export demand and the stabilization of local financial markets. In the countries that experienced the greatest difficulties (the Baltic states, Bulgaria, Romania and Hungary) the recession has given way to a weak recovery, in part due to the support of international institutions. Growth is stronger in the Czech Republic, which has been less affected by the crisis, and in Poland, where GDP has expanded uninterruptedly thanks to resilient domestic demand.

According to the IMF, in 2011 growth will spread to the entire area and become more homogenous, averaging around 3 per cent. The recovery will be affected by the high and still rising rate of unemployment, which is now hovering around the 10 per cent mark in several countries.

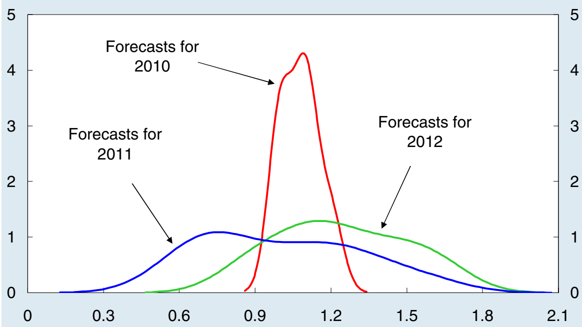
Inflation should hold stable at just over 1 per cent in the advanced economies and around 5 per cent in the emerging and developing countries.

In Italy growth continues at a moderate pace

The leading private analysts and the international organizations project that in Italy GDP will grow by around 1 per cent in 2010 and 2011, accelerating slightly to 1.2 per cent in 2012. The slowdown in world trade and the less expansionary stance of fiscal policy will act as a brake on the recovery of output in the first half of next year. As in the other advanced economies, in Italy too the strength and timing of the recovery are extremely uncertain (Figure 1.2).

Figure 1.2

Italian GDP growth in 2011-12 according to the leading international organizations and private forecasters (1)
(distribution of forecasts)



Sources: Based on data from European Commission, Consensus Economics, IMF, OECD, CER, Prometeia and Ref. (Ricerche per l'economia e la finanza).
(1) Average annual rates of change; percentages. The vertical axis shows the values of the probability density approximating the distribution of forecasts: high values indicate forecasts on which a large number of analysts concur. European Commission, Consensus Economics, IMF and OECD forecasts are used for 2010 and 2011; European Commission, OECD, CER, Prometeia and Ref. forecasts for 2012.

The risks for the recovery in the advanced countries come from domestic demand ...

In the advanced economies the risks for the recovery come from the evolution of domestic demand. Consumption could be significantly affected by the need to further reduce private sector debt, which is still high in several countries; specifically, in the United States, the present readjustment could be accentuated by the weak macroeconomic outlook and by a further decline in house prices (see Section 1.3). Consumption is affected by uncertainty about the future employment situation, which could weaken consumer confidence and encourage precautionary saving.

... the state of the public finances ...

The unprecedented deterioration in public finances raises doubts about the sustainability of the public accounts in several of the advanced economies (see the box "The sustainability of the public finances") and is in danger of undermining the recovery. In Europe, budget policies are directed at containing the deficit and reducing the debt; in some countries, risk premiums on sovereign bonds are nonetheless very high, adversely affecting the financial markets. Tensions have been heightened in recent weeks by concern about Ireland's finances, which reflect the difficulties of the country's banking system. At the end of November the EU and the IMF approved a three-year plan for joint financial assistance to Ireland. In the coming months, public and private issuers in the advanced countries will make substantial recourse to the market. The effects this might have on long-term interest rates would eventually affect household and corporate spending, economic activity and world trade (see Section 1.2).

... and the availability of credit

There is also the risk that the deterioration in the quality of credit and the difficulty in obtaining finance on the markets may limit the supply of bank lending and the resources available to revive investment and consumption (see Section 1.2).

THE SUSTAINABILITY OF THE PUBLIC FINANCES

According to the IMF, the US budget deficit will begin to diminish in the current year, reaching 11.1 per cent of GDP and then falling to 6.7 per cent in 2012 (see the table); the debt-to-GDP ratio, which has risen by 20 percentage points between 2008 and 2010, is forecast to increase by a further 10 points over the next two years to 102.9 per cent. According to the European Commission, the net borrowing of the euro-area countries should begin to contract in 2011 (reaching 4.6 per cent) while the public debt will continue to expand, rising to 88 per cent of GDP in 2012. These projections assume a moderate economic recovery and the adoption of firm fiscal consolidation measures, particularly on the expenditure side. For Italy, the European Commission forecasts a gradual improvement in the budget deficit over the period 2010-12 to 3.5 per cent of GDP and a slight increase in the debt-to-GDP ratio, to 119.9 per cent. Compared with other advanced countries, Italy's public finances have benefited in recent years from the fact that the country has not needed to tap public funds to rescue banks.

The deterioration in the public finances is fuelling fears about the sustainability of the debt and raising the risk premiums on sovereign borrowing. In the euro area the spread with respect to German government bonds is extremely wide in Greece, Ireland and Portugal, where long-term interest rates

Financial sustainability indicators (1)

(per cent of GDP)

	Public debt (2)		Public deficit (2)		Sustainability indicator (3)	Private debt Q1 2010 (4)		International economic accounts 2009	
	2009	2012	2009	2012		Households	Non-financial firms	Current and capital account balance	International investment position
Italy	116.0	119.9	5.3	3.5	2.6	44.3	83.8	-3.2	-19.3
Germany	73.4	75.2	3.0	1.8	4.5	62.2	66.1	5.0	37.3
France	78.1	89.8	7.5	5.8	7.1	53.7	107.7	-1.9	-12.5
Spain	53.2	73.0	11.1	5.5	15.3	85.7	139.7	-5.1	-92.1
Greece	126.8	156.0	15.4	7.6	20.3	52.4	70.0	-10.0	-84.0
Portugal	76.1	92.4	9.3	5.1	8.9	96.8	162.8	-7.5	-108.7
Ireland	65.5	114.3	14.4	9.1	14.8	118.0	210.0	-3.8	-98.4
Euro area	79.2	88.0	6.3	3.9	6.8	65.4	102.9	-0.5	-16.2
United Kingdom	68.2	86.6	11.4	6.4	13.5	100.5	117.5	-1.0	-19.7
United States (5)	84.3	102.9	12.9	6.7	14.0	92.0	74.5	-2.7	-19.4
Japan (5)	217.6	238.6	10.2	8.1	….	65.6	95.4	2.7	56.1

Sources: European Commission, IMF, national financial accounts and balance-of-payments statistics.
(1) For the public and private debt and the international investment position, end-of-period data. – (2) Data are taken from European Commission, *European Economic Forecast*, Autumn 2010, for EU countries, and from IMF, *Fiscal Monitor*, November 2010, for the United States and Japan. – (3) The increase in the primary surplus/GDP ratio needed to stabilize the debt/GDP ratio. For the EU countries, estimates are based on demographic and macroeconomic projections agreed at European level. The estimate for Italy does not include the effects of the measures concerning pensions passed in the summer, which official estimates calculate will produce savings rising to 0.5 per cent of GDP in 2030. Data are taken from European Commission, *Public Finances in EMU*, October 2010, for EU countries, and from IMF, *Country Report*, 10/248, July 2010, for the United States.– (4) Unconsolidated data. For Portugal end-2009 data. For the United Kingdom, the United States and Japan Q2 2010 data. – (5) Non-harmonized statistics. For the United States, the data for firms refer to the non-financial business sector.

have risen significantly. In Belgium, France, Italy and, to some extent, Spain, the increased spread with respect to the German Bund mainly reflects investors' flight to quality, which has helped to compress the yield on the German securities. In Italy, the yields on 10-year government bonds are currently below the average for the last decade.

In addition to the level of debt, the sustainability of the public finances also depends on the level of budget deficits in the long term, which is affected by the evolution of expenditure linked to demographics, developments in potential growth and the future level of interest rates. According to the European Commission, age-related expenditure, which includes pensions, medical assistance and long-term care, and unemployment benefits, will increase by 5.1 percentage points of GDP in the next fifty years in the euro area as a whole and by 1.6 points in Italy. Assuming that the crisis has not affected long-run potential growth, the Commission estimates that in order to stabilize the debt-to-GDP ratio the primary surplus must increase (with respect to its structural value in 2009) by 6.8 percentage points of GDP in the euro area and by 2.6 points in Italy.

As the crisis has shown, the economy's overall debt exposure – which includes both public and private sector borrowing – and net international investment position can also affect investors' assessment of the soundness of the public finances. In the euro area the total financial debt of households and non-financial firms amounts to 168 per cent of GDP (128 per cent in Italy), compared with 167 per cent in the United States and 218 per cent in the United Kingdom. The net international investment position amounts to 16 per cent of GDP in the euro area and 19 per cent in Italy, but is much higher in Portugal (109 per cent), Ireland (98 per cent), and Greece (84 per cent). In the United States it is equal to 19 per cent of GDP.

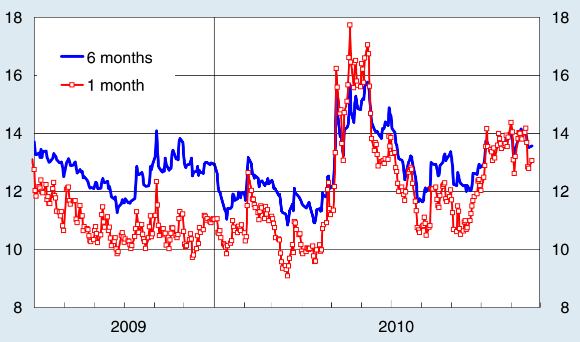
Interest rates in the advanced countries are extremely low ...

The stance of monetary policy is still universally expansionary, with official interest rates at all-time lows. In November, the US Federal Reserve introduced new monetary stimulus measures, renewing its programme of purchases of long-term government securities. The objective is to strengthen growth and avert the danger of deflation, but the scheme risks fuelling uncertainties about the exchange rate that would spread to the international financial markets (Figure 1.3). In Japan as well, the central bank has adopted new expansionary measures. In the euro area, inflation expectations are holding steady at just below 2 per cent and the risk of deflation is low.

Figure 1.3

Volatility of dollar-euro exchange rate (1)

(daily data; percentage points)



Source: Bloomberg.
(1) Volatility implied by 1-month and 6-month at-the-money options.

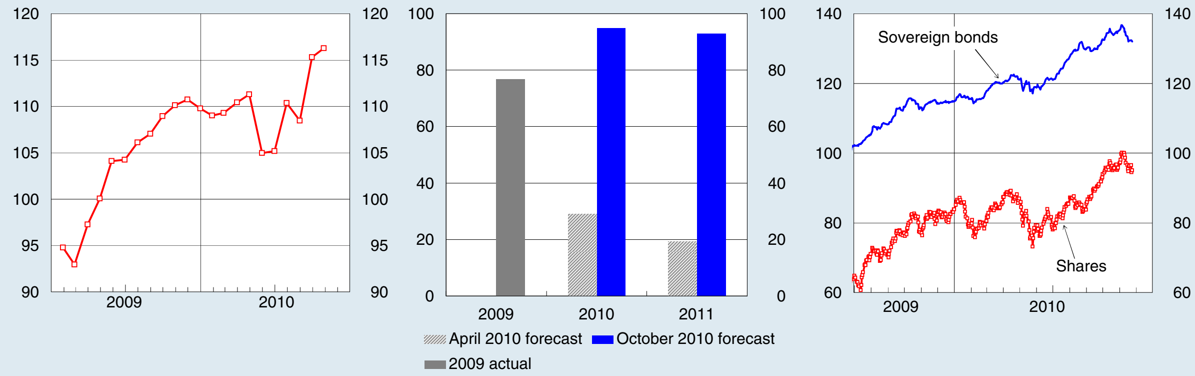
... encouraging flows of capital to the emerging countries

The abundant supply of liquidity and low interest rates could prompt investors to take large risks in order to obtain high nominal returns. Carry trade operations, financed with short-term foreign currency loans at low interest rates, are increasingly profitable (Figure 1.4.a). Unexpectedly large and growing flows of capital to the emerging countries, especially those with good growth prospects and large interest-rate spreads (Figure 1.4.b), are contributing to the growth of credit and driving up the prices of financial assets (Figure 1.4.c). In several of these countries, this tendency is being heightened by government measures to curb the appreciation of the currency.

Figure 1.4

Profitability of carry trades, capital inflows and securities prices in emerging countries

(a) *Cumulative return on carry trades* (1) | (b) *Net inflows of private financing in emerging Asian countries* (2) | (c) *Emerging countries' share and bond indexes* (3)



Sources: Based on data from Bloomberg, Institute of International Finance, International Monetary Fund, Morgan Stanley, Royal Bank of Scotland and Thomson Reuters Datastream.
(1) Monthly data; index, December 2008=100. Cumulative return from a strategy consisting in a short-term investment in five currencies with a high interest rate, financed with a short-term loan in five currencies with a low interest rate. – (2) Annual data; billions of dollars. Debt financing provided by commercial banks and by other private lenders. Does not include equity investment (direct or portfolio). The forecasts and the outturns are from the Institute of International Finance. – (3) Daily indices, 31/12/2007=100. Total return indices in dollars of emerging countries' sovereign bonds and shares.

1.2 THE RISKS IN THE FINANCIAL MARKETS

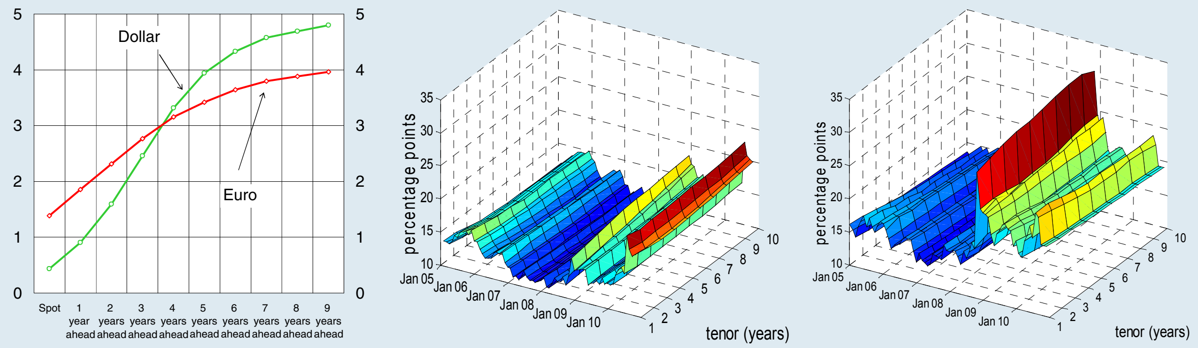
There are risks of a rise in long-term interest rates ...

In recent months, fears about the outlook for economic recovery have contributed to expectations that the phasing out of monetary stimulus in Europe and the United States will be deferred and attenuated. Investors appear to believe that interest rates will stay low over the longer run as well (Figure 1.5.a). These expectations are surrounded by growing uncertainty, as evidenced by the rise in the expected volatility of long-term interest rates (Figures 1.5.b and 1.5.c). Looking ahead, there is the danger that longer-term rates will rise sharply, mainly in connection with the severe deterioration in several countries' public finances (see the box "The effects of the public debt on long-term interest rates").

Figure 1.5

Interest rate level and volatility
(per cent and percentage points)

(a) *Yield curve of 1-year forward interest rates* (1) | (b) *Implied volatility of 10-year euro forward interest rates* (2) | (c) *Implied volatility of 10-year dollar forward interest rates* (2)



Sources: Based on Bloomberg and Thomson Reuters Datastream data.
(1) Forward rates implied by swap rates. Data on 22 November 2010. – (2) Monthly data; for November 2010, data for the 22nd of the month. For each month, the graph shows the implied volatility of 10-year forward rates running from the year shown on the right-hand horizontal axis. Volatility is derived from the prices of swaptions.

THE EFFECTS OF THE PUBLIC DEBT ON LONG-TERM INTEREST RATES

A worsening of the public finances can affect medium- and long-term yields through three main channels. First, if the supply of savings is not perfectly elastic, financing the budget deficit has to compete for resources with the demand of the private sector, causing real interest rates to rise. Second, an increase in the public debt may cause fears that even sovereign borrowers may default, leading to increased credit risk premiums on government bonds. Third, a larger deficit may fuel expectations of inflation or exchange-rate depreciation, with additional repercussions on interest rates.

Estimates of the possible effect of an increase in the budget deficit on long-term interest rates vary greatly from country to country and according to the method used. It is widely agreed that the effects will be greater where the deterioration in the budget balance persists over time. Studies for the United States indicate that a permanent increase in the debt-to-GDP ratio of 1 percentage point would raise real long-term interest rates by 3 to 5 basis points, while a permanent increase in the budget deficit would produce a far larger result. The estimates for the European countries, although not uniform, tend to show greater effects.

According to the projections of the international organizations, the public debt of the group of advanced countries will increase significantly over the coming years (see the box "The sustainability of public finances"). In the United States, it is expected to increase by another 20 percentage points of GDP by 2015. On the basis of the foregoing estimates, this would entail, other things being equal, a rise of between 0.6 and 1.0 percentage points in real long-term interest rates.

In the present circumstances, the sharp deterioration in the public finances could have a much stronger impact on long-term interest rates than on previous occasions. For one thing, investors might believe the current increase in budget deficits will persist, at least in part. Second, since the increase in the supply of government securities will be substantial in absolute terms, involve all the advanced economies at once, and coincide with a large demand for funds by private issuers, particularly financial companies (Figure 1.7), the relationship between the deficit and market yields might result in larger interest-rate increases as borrowing requirements grow. Specifically, there could be an increasing risk of a vicious circle between the cost and the level of the public debt, with the increase in the debt pushing up the yield curve, which in turn would push up the deficit and the debt. Finally, the widespread perception that the crisis has reduced the growth potential of the advanced economies could lead to doubts about the ability of sovereign issuers to honour their debt.

The demand for securities could also help to drive up long-term interest rates as the factors temporarily sustaining it disappear. Since the onset of the financial crisis, the government securities of the leading advanced economies, particularly the United States, have repeatedly benefited from investors' preference for low-risk assets (flight to quality), fuelled by fears concerning the soundness of both private issuers, mainly banks, and public ones. Looking ahead, as the real economy recovers and the present highly expansionary monetary policies are phased out, a halt is bound to be called on the repeated purchases of government securities made by some central banks to support the economy and boost the supply of credit (notably in the United Kingdom and the United States) or to restore the proper functioning of the markets affected by tensions (in the euro area).

Taken together, these demand- and supply-side factors heighten the risk that long-term interest rates will rise significantly in the medium run.

… increasing fears about the sustainability of countries' public finances

In the face of large and persistent budget deficits in several countries, a possible decrease in economies' growth potential and the risk of higher medium- and long-term interest rates, tension in one country may affect the creditworthiness of sovereign issuers with sounder economic fundamentals.

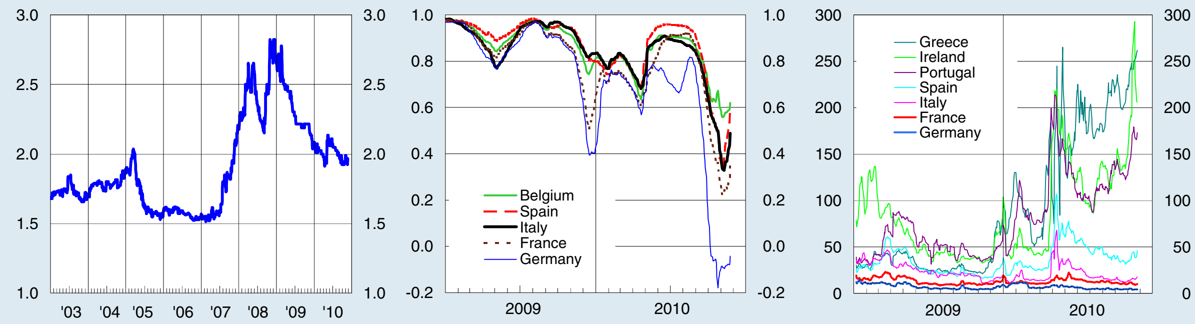
Figure 1.6

Sovereign credit and liquidity risk indicators
(daily data)

(a) *Dependence indicator of spreads on 10-year government bonds in the event of tensions in one country* (1)

(b) *Correlation between sovereign CDS spreads of selected countries and those of Greece, Ireland and Portugal* (2)

(c) *Bid-ask spreads on government bonds* (3)

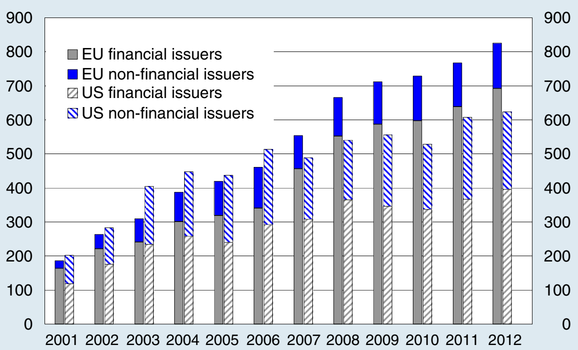


Sources: Based on Bloomberg and Thomson Reuters Datastream data.
(1) Number of countries out of the seven considered. The indicator is based on the interest rate spreads between 10-year bonds of the seven euro-area countries with a large public deficit or debt (Belgium, France, Greece, Ireland, Italy, Portugal and Spain) and 10-year German bonds. The value of the indicator gives the expected number of countries in which the spread would increase beyond the 95th percentile of its distribution (estimated over the previous 2 years) if it did so in at least one of the countries considered. – (2) Correlation indices, calculated on a 6-month moving window. Simple mean of the 6-month correlation between the spreads on each country's 5-year CDSs and those of Greece, Ireland and Portugal. – (3) Basis points.

In the euro area, the tensions that have surfaced repeatedly in countries with severe budget problems have affected others. Their potentially destabilizing transmission has been curtailed by the adoption of public finance adjustment measures in several countries, extraordinary intervention by public bodies through the Eurosystem's Securities Markets Programme for the purchase of government securities and, for countries coming under exceptionally strong pressure, the creation of a programme to provide financing via the European Financial Stabilisation Mechanism and the European Financial Stability Facility, supplemented with IMF assistance. In the second half of the year, the dependence between sovereign risk premiums in the event of tension in one country has tended to diminish (Figure 1.6.a). The correlation between sovereign CDS spreads of countries where the tension is greatest (Greece, Portugal and Ireland) and those of other countries has decreased progressively (Figure 1.6.b); the evolution of bid-ask spreads on government securities, an indicator of market liquidity, has followed divergent patterns in the various markets (Figure 1.6.c). In the second half of November tension was revived by fears concerning Ireland's financial situation, with repercussions on risk premiums for public and private issuers. At the end of the month, the economic and finance ministers of the euro-area countries agreed on the main features of a permanent crisis management mechanism designed to safeguard the financial stability of the area as a whole, the European Stability Mechanism, which will not become operational until July 2013.

Figure 1.7

Volume of maturing private bonds (1)
(annual data; billions of euros)



Source: Based on Dealogic data.
(1) Bonds with a maturity at issue of two or more years issued on domestic or international markets and classified according to the parent company's location and sector. Financial issuers are banks and other financial institutions.

For private issuers there is the risk of a tightening of conditions for access to the bond markets

In recent years, private borrowers (banks and non-financial firms) in the advanced economies have issued a particularly large volume of bonds, totalling €3.3 trillion in 2009-10 for US and European issuers. It will not be easy for them to maintain such a high level of relatively inexpensive borrowing on the bond market in the next two years, principally owing to the likelihood of a large increase in total public- and private-sector issues. In particular, the volume of medium- and long-term private-sector bonds due to mature has no precedent in the last ten years (Figure 1.7).

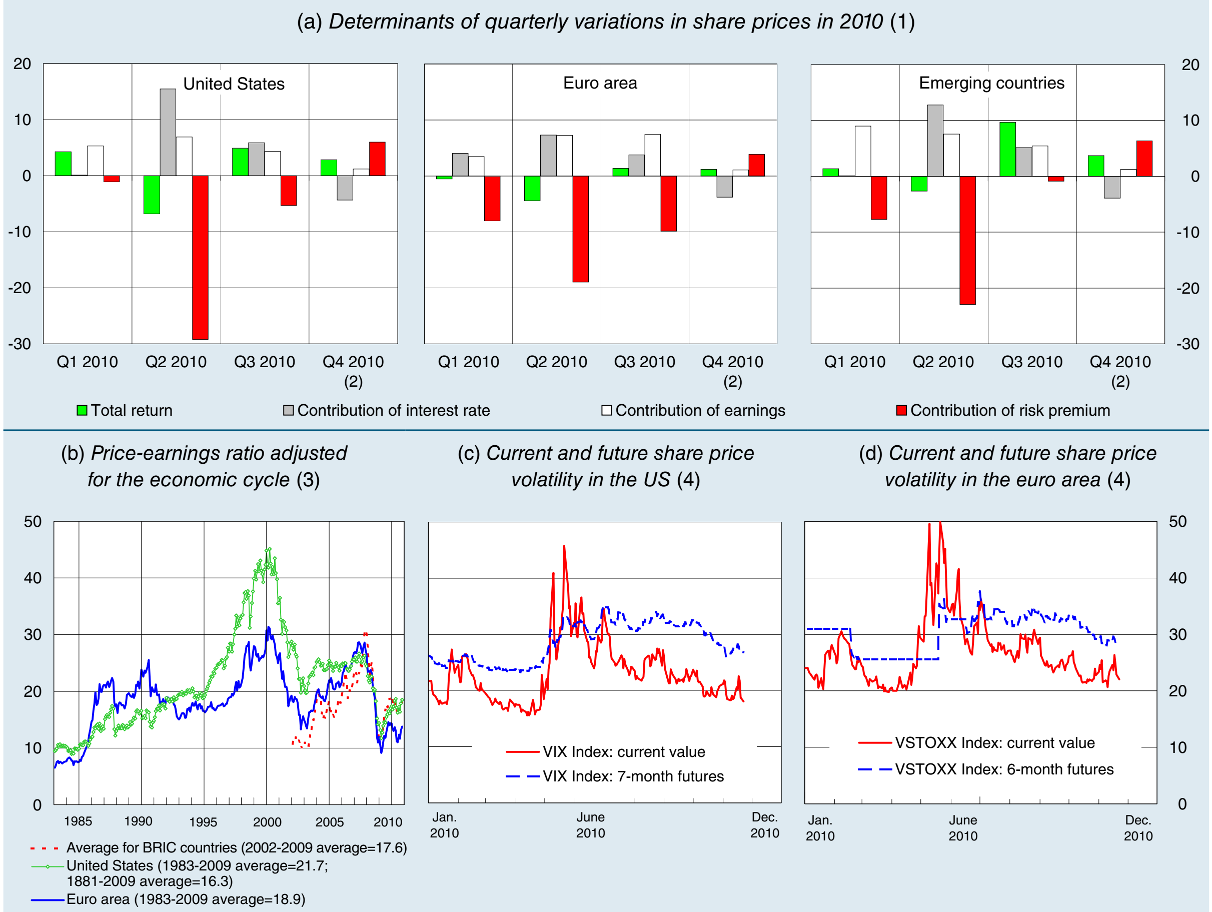
For the corporate sector, a contraction in this form of financing would reduce firms' ability to offset the slow growth in bank lending, lengthen the maturity of debt, boost investment and finance M&A activity. For banks, difficulty in renewing maturing securities could trigger new liquidity tensions, particularly as central banks start normalizing liquidity supply conditions.

The markets have picked up ...

Since the summer there has been an improvement in conditions on the international financial markets. Share prices have risen and interest-rate spreads between corporate bonds and government securities have begun to narrow again.

Figure 1.8

Share market financial indicators



Sources: Based on data from Bloomberg, IMF, IBES, Morgan Stanley, Thomson Reuters Datastream and Robert Shiller (http://www.econ.yale.edu/~shiller/).
(1) Quarterly data; percentages. The quarterly rate of return is broken down into the contributions of the three fundamental determinants (expected earnings, long-term interest rates and risk premium) assuming that the risk premium is equal to the difference between the nominal return on the shares (equal to the ratio between earnings per share forecast by the financial analysts of the IBES panel for the following 12 months and the share price index) and the yield on 10-year government bonds. – (2) Data for the period from October to 19 November. – (3) Monthly data; price-earnings ratio. Ratio, at constant prices, of the share price index to the 10-year moving average of earnings per share. The BRIC countries are Brazil, Russia, India and China. – (4) Daily data; percentage points. VIX Index for the United States and VSTOXX Index for the euro area of the implied volatility of spot share prices and similar forward indicators based on futures contracts on the two indexes.

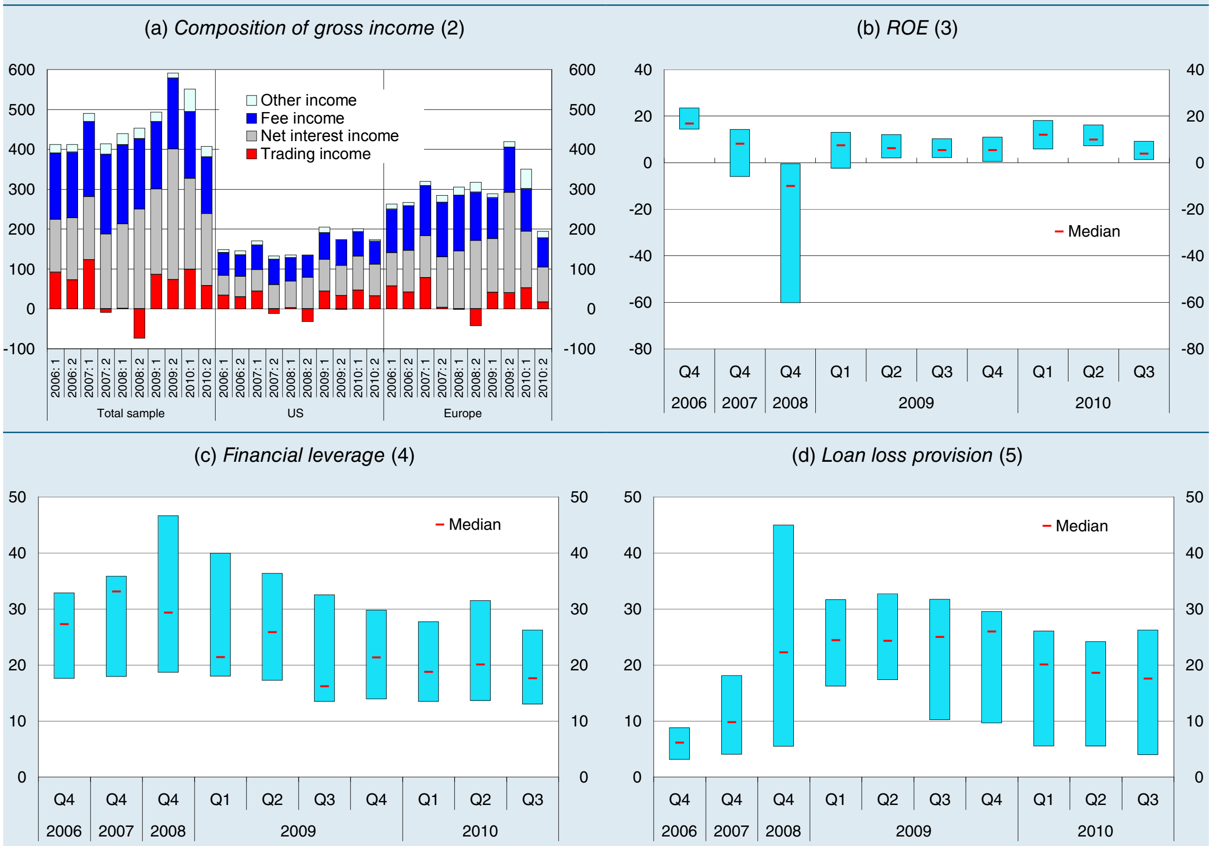
The recovery has benefited above all from the easing of the severe tensions on the government securities markets in the spring and from the continuation of the global expansion in output. In recent months, expectations of a further relaxation of monetary conditions in several advanced countries have also contributed. Stock markets have received a boost from the good performance of corporate profits (Figure 1.8.a). In the main markets, cyclically-adjusted price/earnings ratios are currently not far from their average long-term values (Figure 1.8.b). In the second half of November tensions emerged, particularly in Europe, in connection with the Irish crisis.

... but are still vulnerable

It is too early to form a definitive opinion as to the solidity of the recovery in stock and bond markets. It largely reflects the reduction in interest rates, but this could prove short-lived. Investors' confidence and inclination to risk could change if they are not underpinned by a lasting strengthening of economic fundamentals and instead continue to be based on the abundant supply of inexpensive liquidity from the central banks, which is bound to end. The revival of fears about the sustainability of the public finances and the soundness of banks in several advanced countries could cause a rise in risk premiums and a new fall in share and bond prices.

Figure 1.9

Leading international banks (1)



Sources: Based on Bloomberg and Thomson Reuters Datastream data.
(1) Quarterly data and percentages, including median and interquartile range, unless otherwise stated. For some banks, not all the balance-sheet data contained in the figure are available. The set of leading international banks consists of large European and US financial institutions that engage in various kinds of banking activity, including at international level: Banco Santander, Bank of America, Barclays, BNP Paribas, Citigroup, Crédit Agricole, Credit Suisse, Deutsche Bank, Goldman Sachs, HSBC, ING, Intesa Sanpaolo, JPMorgan Chase, Morgan Stanley, Royal Bank of Scotland, Société Générale, UBS and UniCredit. – (2) Half-yearly data in billions of dollars. The figure for the second half of 2010 is estimated from the figure for the third quarter. – (3) Annualized quarterly return. – (4) Ratio of balance-sheet assets to shareholders' equity. – (5) As a percentage of net interest income.

Given this uncertainty, investors in Europe and the United States expect stock market volatility to increase significantly in the coming months (Figures 1.8.c and 1.8.d). The surge in the demand for gold on international markets is also a symptom of uncertainty: indeed, investments in the metal may have been stepped up partly to hedge against the risk of a fall in the prices of financial assets.

The situation of the leading international banks has improved ...

The situation of the leading international banks has improved with respect to the worst phase of the crisis. Net interest income and net profit on trading have increased, despite the decline of recent months (Figure 1.9.a); the return on equity has risen (Figure 1.9.b); overall, financial leverage remains below the pre-crisis levels (Figure 1.9.c), partly owing to large capital increases, which have totalled around $600 billion since 2008.

... but the recovery in their profitability could be short-lived

The improvement in the profitability of the leading international banks may be partly temporary and unlikely to be repeated in 2011. To begin, the pick-up in trading income is linked to the extremely favourable conditions prevailing on the financial markets in 2009 and the first half of 2010. Moreover, government measures introduced in many countries to support banks could be dismantled or cut back in 2011 (see the box "The interventions in support of the financial system"). Furthermore, net interest income in 2011 may be limited by the persistently slow expansion in bank lending, as well as by low interest rates and the flattening of the yield curve following the adoption of new monetary stimulus measures by several central banks. Finally, experience shows that bad debts emerge with a lag with respect to recessions and their level remains high well beyond the start of the recovery, as the performance of loan loss provisions suggest (Figure 1.9.d). In addition, in 2011-12 banks will need to refinance a huge volume of bonds, at a time when sovereign borrowers and firms are also greatly increasing their recourse to the market (Figure 1.7).

THE INTERVENTIONS IN SUPPORT OF THE FINANCIAL SYSTEM

After the failure of Lehman Brothers in September 2008, in a context of strong risk aversion and severe disruptions of money and financial markets, the governments of the industrial countries adopted a series of support measures for banks and other financial institutions: capital injections, guarantees for bond issues, asset purchases and guarantees. Together, these measures prevented the collapse of banks with a fragile liquidity position and difficulty accessing external finance. Eventually, market conditions improved; fears of bank failures diminished, reducing the risk premiums on bank liabilities and allowing intermediaries to resume funding on capital markets.

However, the support measures generated a number of distortions which, over the next few years, could jeopardize the efficiency of the banking system. Econometric analyses of over 500 government-guaranteed bond issues by banks from 13 countries reveal that about two thirds of the rate at issuance reflects the guarantor's credit-rating rather than that of the issuer. Because of the considerable differences in countries' sovereign spreads, this allows banks with lower profitability and weaker balance-sheet positions but enjoying state guarantees from countries with a high credit-rating to raise funds at a much lower cost than sounder and better-rated banks. Italian banks did not make use of the government guarantees offered and so, unlike their competitors in other EU countries, will not be negatively affected when this form of support is phased out over the coming years.

Apart from being detrimental to competition, support measures for banks can distort the allocation of resources and lower the banking system's productivity. In many countries, they have also contributed to the increase in public sector deficits and contingent liabilities: the sums committed for the various support schemes and, to a lesser extent, the amounts actually utilized represent a substantial share of gross domestic product, sufficient to contribute significantly to lowering the credit rating of sovereign issuers. Finally, the measures could create expectations of further intervention, thus influencing and distorting banks' business strategies and encouraging excessive risk-taking.

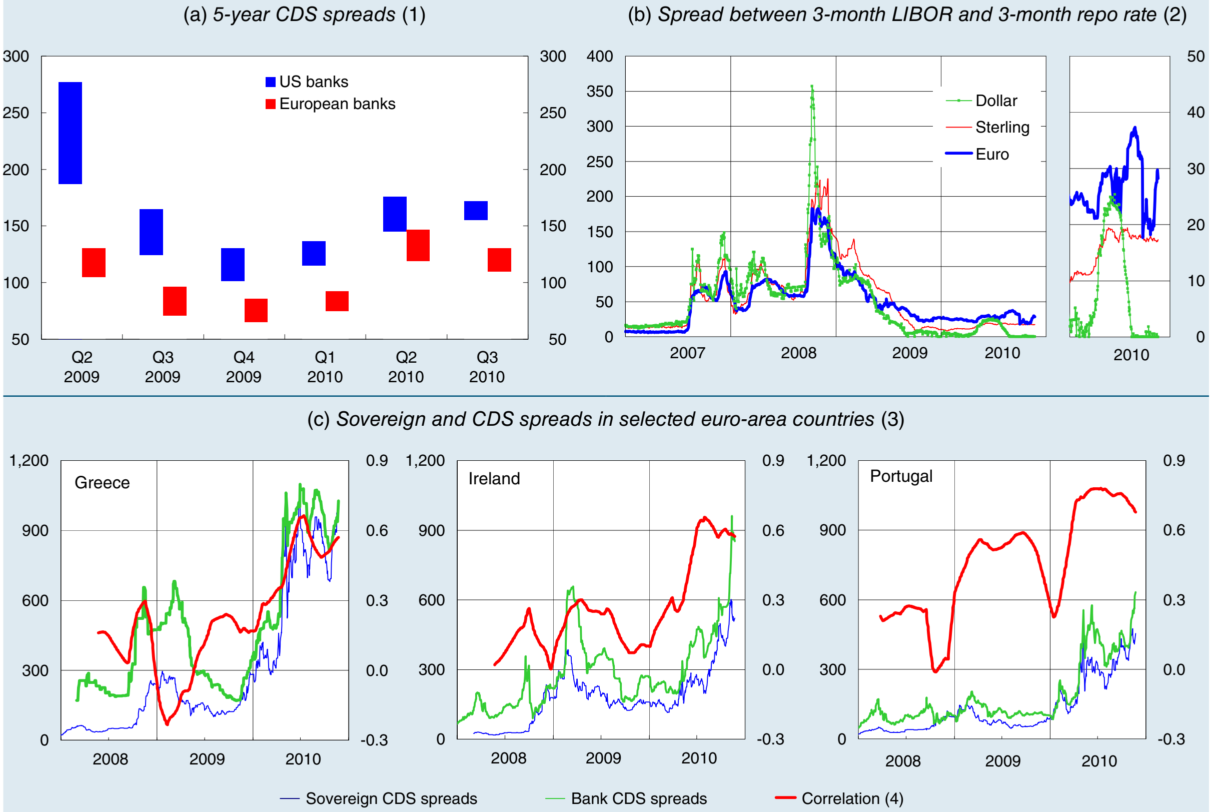
The side effects of the measures prompted the authorities to draw up, from the beginning of this year, an exit strategy that would lead to a progressive removal of the various support schemes. In the European Union, since January around half the countries that had introduced state guarantees for bank bonds have wound them down and since July the countries in which such schemes still existed have tightened access requirements and raised the fees. However, recent tensions on the sovereign debt markets and the possible repercussions on banks' funding ability have prompted the European authorities to extend, until the first half of 2011, the rules allowing member states to grant guarantees on bank bond issuance in case of need.

European banks are affected by tensions on the sovereign bond markets

In Europe, banks are also affected by the turmoil on some countries' sovereign bond markets. The risk indicators have risen again (Figure 1.10.a), fuelling tensions on the interbank markets (Figure 1.10.b). The effects are more marked in the case of banks in countries for which fears of a deterioration in their public finances are greatest (Figure 1.10.c).

Figure 1.10

CDS spreads for leading international banks and interbank market spreads
(average quarterly and daily data; basis points and correlation indices)



Sources: Based on Bloomberg and Thomson Reuters Datastream data.
(1) Annual spreads on CDSs written on banks, which are contracts insuring against a bank's default risk. The chart shows the interquartile range. – (2) Spread between 3-month LIBOR and the 3-month repo rate. – (3) For each country the graph shows the CDS spreads for sovereign issues, those for issues by banks resident in that country and a correlation index. – (4) Right-hand axis. Correlation index. Three-month moving average of the correlation between changes in the two time series of CDS spreads, calculated on the basis of a GARCH (1,1) statistical model.

The publication in July of the stress tests on the 91 leading European Union banks has eased but not eliminated the tensions, which flare up whenever fears concerning sovereign risk reappear. The weakest banks and those in the countries at risk have difficulty accessing the markets, which they get round by drawing extensively on Eurosystem refinancing; when the extraordinary liquidity measures are dismantled, it could become difficult for them to raise funds elsewhere.

Above all, increased sovereign risk could have a much greater impact on banks' income statements than direct exposure to fiscally weak countries. In fact government securities are the most common form of collateral in interbank transactions and central bank refinancing operations; moreover, their yields affect the cost of banks' wholesale funding since investors in bank liabilities typically demand a premium with respect to the return on sovereign bonds of the issuer's home country.

1.3 HOUSING MARKETS

In the United States the housing market still shows signs of weakness

The housing market in the United States has seen the end, in recent months, of the impetus provided by the home purchase tax incentives available until last April. The marked fall in house sales (Table 1.1) and negative flow of mortgage loans to the residential sector reflect the underlying weakness of housing demand (as well as possible strains in credit supply) and point to a further fall in prices in the next few months. The negative slope of the curve of futures on the Case-Shiller house price index is consistent with this scenario. Prospects for the non-residential property market also appear very uncertain, since prices are particularly sensitive to the economic cycle and have been falling since last summer; the rate of arrears has risen to almost 9 per cent.

In the euro area the phase of downward adjustment has come to a halt

Housing market conditions in the euro area are improving. The phase of falling house prices has come to a halt in the area as a whole and, with the exception of Spain, in the leading countries; the number of house sales is picking up. In France since mid-2009 there has been an increase in new building permits and, to a lesser extent, building starts. Prospects for the housing sector in the area as a whole are nevertheless dampened by difficult conditions in the labour market, the possible restrictive effects of fiscal adjustment programmes launched by national governments, and persistent credit supply tensions in some countries.

In Italy the signs of recovery are gaining strength ...

In Italy the signs of recovery in the real-estate sector have gained strength, as regards housing in particular. Last spring investment in construction recorded the first increase in two years. In the latest quarters, the downward trend in house sales under way since 2006 has come to a halt (Figure 1.11.a); according to the quarterly survey of real-estate agents conducted by the Bank of Italy together with Tecnoborsa and Agenzia del Territorio, mandates to sell continued to increase during the summer. House prices, which had fallen in 2009 (by 0.5 per cent) for the first time in 11 years, remained stationary in the first half of 2010. The economic climate is less favourable for the non-residential sector where sales are down

Table 1.1

House prices and sales
(% changes on the previous period)

	Euro area	France	Spain	United Kingdom	United States
			Prices		
2007	4.6	6.6	5.8	9.2	-4.5
2008	1.3	1.2	-1.5	-6.7	-16.7
2009	-2.9	-7.1	-6.7	-7.4	-12.9
July-Dec. 2009	0.1	1.2	-1.3	5.8	3.1
Jan.-June 2010	0.9	2.6	-0.7	3.4	0.1
			Number of sales		
2007	....	-0.9	-12.4	-3.4	-15.0
2008	....	-19.7	-32.5	-44.2	-17.1
2009	....	-7.9	-17.8	-4.7	2.8
July-Dec. 2009 (1)	....	1.0	6.4	35.3	19.5
Jan.-June 2010 (1)	....	5.8	7.3	-10.5	-5.1

Sources: ECB for the euro area, Insee and Banque de France for France, Ine for Spain, HM Revenue & Customs and Thomson Reuters Datastream for the United Kingdom, Thomson Reuters Datastream for the United States.
(1) For France, sales of new houses in metropolitan areas.

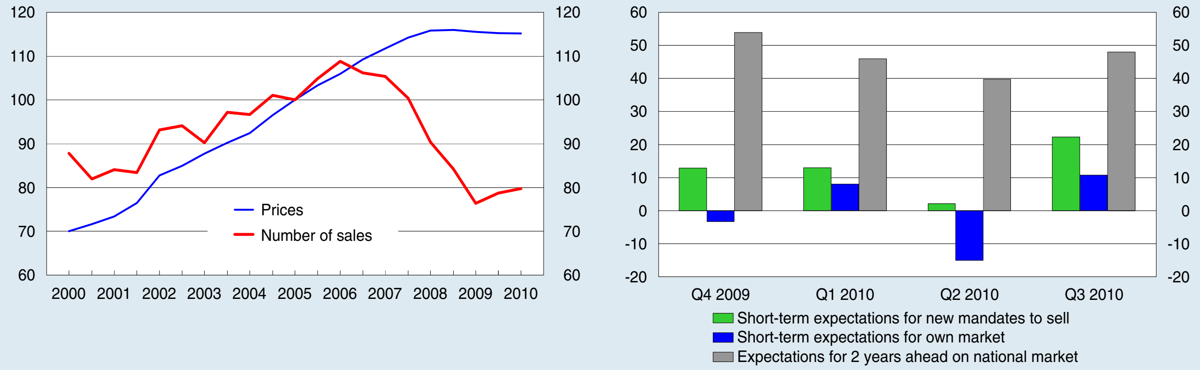
again and prices are still falling, albeit slowly (by about 0.5 per cent in the first half of 2010, following a drop of 1 per cent in 2009 and 13 per cent in 2008).

Figure 1.11

The housing market in Italy

(a) house prices and sales (1)
(indices, 2005=100)

(b) real estate agents' expectations (2)
(percentage balances of the replies)



Sources: Based on Bank of Italy, Agenzia del Territorio, *Il Consulente Immobiliare* and Tecnoborsa data.
(1) Semi-annual data; for prices, nominal values.– (2) Quarterly data from survey conducted by Bank of Italy, Tecnoborsa and Agenzia del Territorio. Balances between replies indicating improving or worsening situation. Expectations for new mandates to sell and for agents' own market refer to the quarter following the one indicated; for the national market, expectations are for 2 years from now.

... and there are signs of further improvement ahead

The most recent indicators, mainly of a qualitative nature, point to a further improvement in the Italian housing market in the coming months, confirming, however, the uncertainty about the robustness of the recovery. The index of construction firms' confidence, measured by ISAE, has clearly picked up since the summer. The prolonged fall in production in the industrial sectors supplying the main inputs to the construction sector (cement, lime, gypsum and derived products) has come to a halt, giving way to a sharp upturn with respect to the lows recorded at the beginning of the year. The Bank of Italy's business outlook survey carried out in September on a sample of construction firms revealed a prevalence of opinions that the value of production will recover significantly in 2011. October's housing market survey showed a renewed increase in the balance between positive and negative opinions concerning the short-term outlook for the agents' own market and regarding medium-term prospects (two years) for the national market (Figure 1.11.b).

Italian prices appear in line with fundamentals

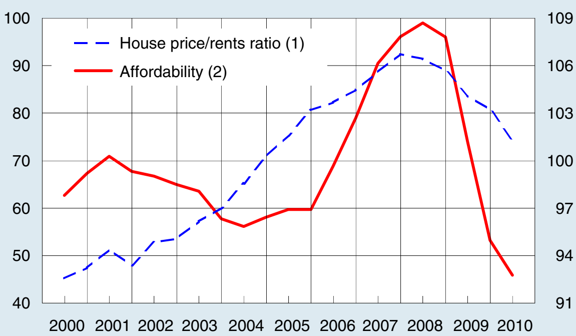
The ratio of house prices to rents – an indicator of the risk of overvaluing properties – has been falling since 2008, when the ten-year rise came to a halt (Figure 1.12); it is estimated that the indicator is currently close to a value consistent with its fundamental determinants.

The absence of any signs of house prices being overvalued is confirmed by the performance of the affordability index, which has been improving since the second half of 2008 owing to the combined effect of sluggish house prices and declining interest rates; in the first half of 2010 the index stabilized well below its long-term average.

Figure 1.12

Affordability of housing and ratio of house prices to rents in Italy

(semi-annual data; indices, 1992-2009 average=100)



Sources: Based on Bank of Italy, Istat and *Il Consulente Immobiliare* data.
(1) Right-hand scale. – (2) Left-hand scale. The indicator is given by the ratio of debt service on new mortgage loans – proxied by the product of prices and interest rates – to household disposable income; a fall indicates that housing is more affordable.

Real-estate agents' latest evaluations polled in the quarterly survey confirm this picture: in particular, the October figures show a further increase (to 67 per cent from 65.8 per cent in the previous survey and from 57.5 per cent a year earlier) in the share of agents expecting stable prices in the near future.

1.4 THE FINANCIAL SITUATION OF FIRMS AND HOUSEHOLDS IN ITALY

Firms

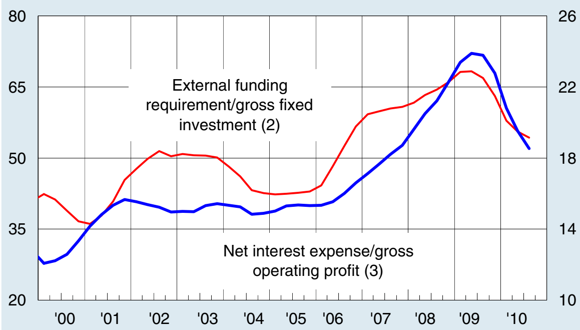
The financial conditions of firms show an improvement

The financial conditions of firms are improving. The gross operating profit in the first half increased by almost 7 per cent compared with the same period in 2009. Partly thanks to the fall in interest rates, the ratio of interest expense to gross operating profit fell significantly, nevertheless remaining above pre-crisis levels (Figure 1.13). On the basis of the Bank of Italy's Business Outlook Survey of Industrial and Service Firms, last September the percentage of firms that expected to close 2010 in profit rose to 56.1 per cent, but was still well below past levels, especially in the case of smaller firms.

Figure 1.13

Firms' interest expense and external funding requirement (1)

(percentages)



Sources: Bank of Italy and Istat.
(1) Estimates based on national accounts data of the institutional sector of non-financial corporations. The indicators are based on the sum of the data for the 4 quarters ending in the reference quarter. – (2) Left-hand scale. The external funding requirement is the difference between investment and self-financing. – (3) Right-hand scale.

The external funding requirement remains high

The external funding requirement diminished as a result of a pick-up in self-financing that out-paced investment, but remained high, including in relation to investment (around 55 per cent). On the basis of the Business Outlook Survey, fixed investment has become the main reason for applying for credit; the shortage of internal funds is now less important.

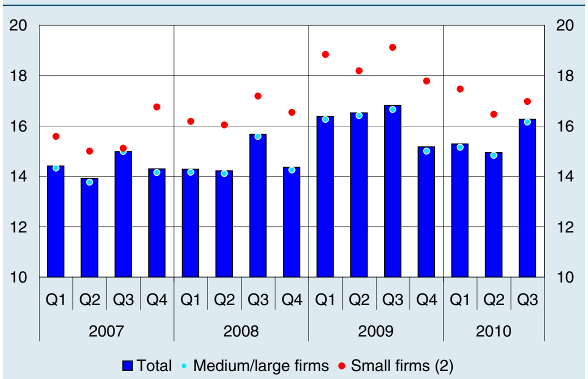
Financial strains in the business sector persist

Despite the improvements, the financial conditions of firms continue to suffer the effects of the crisis. The tensions that emerged in recent months are reflected in a large increase in the time to collect trade credits. The Bank of Italy's Business Outlook Survey indicates that in the first nine months of 2010, some 54 per cent of firms recorded increased payment delays for their trade receivables. A similar picture emerges from the data on trade receivables that firms transferred to the financial system through factoring operations, bill discounting, or other forms: the percentage of overdue credits, especially when the debtor is a small firm, remains high (Figure 1.14).

Figure 1.14

Percentage of overdue trade credits (1)

(percentages)



(1) Data based on trade receivables transferred to the financial system for which the debtor is known. – (2) Limited partnerships, general partnerships, informal partnerships, de facto companies and sole proprietorships with fewer than 20 workers.

Firms' financial strains are accentuated by the very large volume of payments due from general government, which is particularly slow to pay (218 days in 2009, twice as long as for private firms, according to the Bank of Italy's Survey of Industrial and Service Firms).

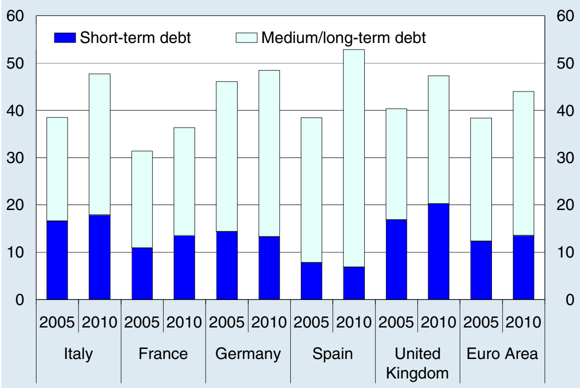
The large proportion of short-term and variable rate debt makes firms' balance sheets fragile

The level of firms' indebtedness (measured as the ratio of financial debt to the sum of financial debt and shareholders' equity at market values) was equal to 47.7 per cent mid-way through 2010, a level higher than in the past but no different from that of other leading countries (Figure 1.15). However, the financial conditions of Italian firms are undermined by the large share of short-term debt and the prevalence of variable rate loans among long-term debt (94 per cent of the loans granted between 2004 and 2009, about five points higher than the euro-area average), which heighten the potential impact of a rise in market rates.

Figure 1.15

Corporate leverage (1)

(percentages)



Sources: Bank of Italy for Italy; ECB for euro-area countries; Central Statistical Office for the United Kingdom.
(1) Ratio of financial debt to the sum of financial debt and shareholders' equity at market prices. The figure for 2010 refers to the month of June.

The persistence of a sluggish economy and a rise in interest rates could damage the weakest firms

In the next few months the main risks for firms are the persistence of a sluggish economic recovery and an increase in funding costs. As a result it is possible that liquidity problems may lead to defaults by the weaker firms, especially if serious difficulties in accessing external financing were to re-emerge.

Households

Financial wealth is invested mainly in low-risk assets

During the financial crisis, households intensified their portfolio reallocation in favour of low-risk financial assets, such as banking products and postal savings (Figure 1.16.a). Just a fraction of households hold more risky assets: it is estimated that only 20 per cent – mostly in the higher income brackets – hold financial instruments other than deposits or government securities. Households' vulnerability to financial shocks is further mitigated by the ample share of total wealth consisting in real assets (more than 60 per cent), for the most part homes (see "Household Wealth in Italy", in *Supplements to the Statistical Bulletin, Monetary and Financial Indicators,* No. 67, 16 December 2009).

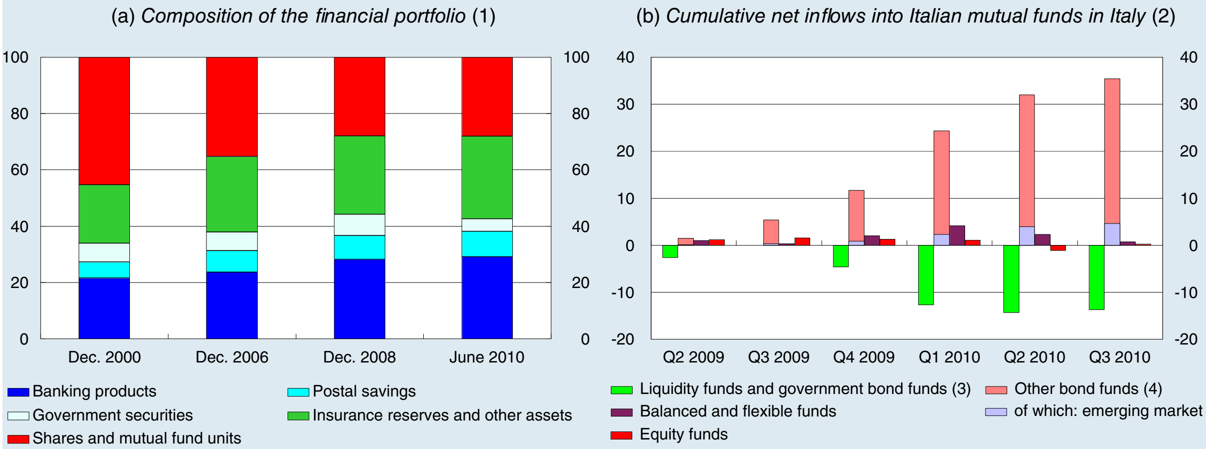
However the low level of interest rates could also lead Italian households to invest growing amounts of savings in riskier instruments. In the last few months household investment in Italian mutual funds has mainly involved corporate bond funds, including high-yield and emerging-market bond funds, set against net disposals of units of money market and government securities funds (Figure 1.16.b).

Debt is low ...

By international standards, the total debt of Italian households remains low (Figure 1.17). Furthermore, a large part of their liabilities are solidly collateralized: almost two thirds of the total consists in home mortgages, on which the average loan-to-value ratio is about 62 per cent (compared with 79 per cent for the euro area in 2007). It is estimated that for three quarters of households with mortgages debt is below 40 per cent of total assets.

Figure 1.16

Italian households' financial portfolio



Sources: Bank of Italy and Assogestioni.
(1) End-of-period stocks; percentages. – (2) Quarterly data; billions of euros. Cumulative net inflows since Q2 2009 into mutual funds in Italy, divided into the main investment categories. – (3) Liquidity funds and bond funds that only invest in government securities. – (4) Investment grade or high-yield bond funds, emerging market bond funds and other types of bond funds which do not only invest in government securities.

... but rising for low-income households

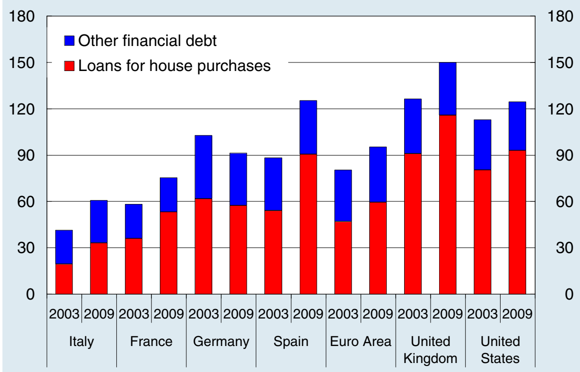
The Bank of Italy's surveys on Household Income and Wealth indicate nevertheless that in the pre-crisis years household debt grew substantially for the less well-off: in 2008, the households in the lowest quartile of equivalent income (i.e. income adjusted for household size) held almost 20 per cent of both mortgages and overall household debt, with an increase of about 8 percentage points compared with 2006.

Interest-rate risk still bears mainly on households

In the last few years variable rate mortgages have begun to grow once more, driven by a sharper fall in interest rates than for fixed rate contracts (Figure 1.18); they currently account for more than 66 per cent of the total stock. The risks deriving from a possible upturn in rates will therefore mostly affect households, which are not always fully aware of the problem: the Survey on Household Income and Wealth indicates that a third of them cannot distinguish clearly between the different types of mortgage or adequately assess the related interest rate risk. Risks are kept down partly by the high share of mortgage contracts (about one fifth of all variable rate mortgages) that provide for loan extensions or interest-rate caps, as well as the operations of renegotiation, subrogation or substitution meant to improve conditions for the debtor.

Figure 1.17

Household debt (1)
(percentage of gross disposable income)



Sources: Bank of Italy and Istat for Italy; Eurostat and ECB for the euro-area countries; Central Statistical Office and Bank of England for the United Kingdom; Federal Reserve and Bureau of Economic Analysis for the United States.
(1) The data refer to consumer households, producer households and non-profit institutions serving households. Bad debts are included. For the United States the figure refers to consumer households.

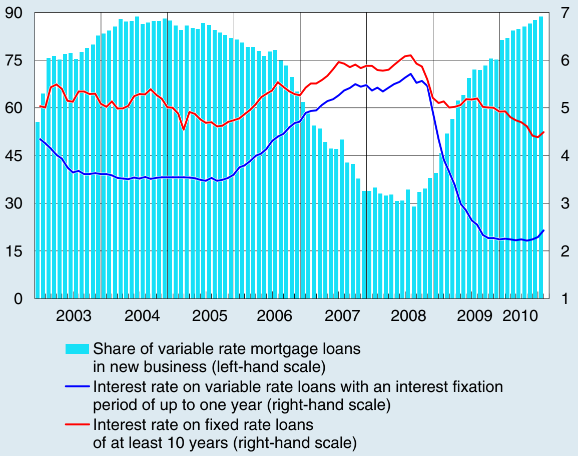
Young households and those in the South the most vulnerable

Debt servicing cost in relation to the disposable income of households with mortgages stands at a fairly low level and in the period 2009-2010 it appears to have fallen by more than one percentage point (to around 16 per cent), mainly as a consequence of the decline in interest rates. Nevertheless, lower-income households allocate a larger share of their income to mortgage repayment and are consequently more exposed to the risk of variations in interest rates or in disposable income. Recent analyses show that those with the most severe repayment difficulties are young mortgage-holders and those living in the South because of their low income, which increases the share of earnings earmarked for debt service.

Figure 1.18

Share of variable rate mortgage loans and interest rates on new business

(percentages)



Relief for struggling households came from the suspension of mortgage repayments

From February to September 2010 Italian banks suspended (for at least twelve months) the mortgage repayments of about 31,000 households in financial difficulty (in large part due to the loss of a job), for a residual debt of €4 billion. If at the end of the suspension period these households have not improved their financial situation, there could be an increase in the default rate.

The main risks are loss of income and possible increases in interest rates

In the months to come the main risks for the financial conditions of Italian households are linked to the sluggish growth of disposable income, held back in the first place by the state of the labour market. As for possible increases in interest rates, there are concerns over the financial situation of low-income households.

2 THE BANKING AND FINANCIAL SYSTEM

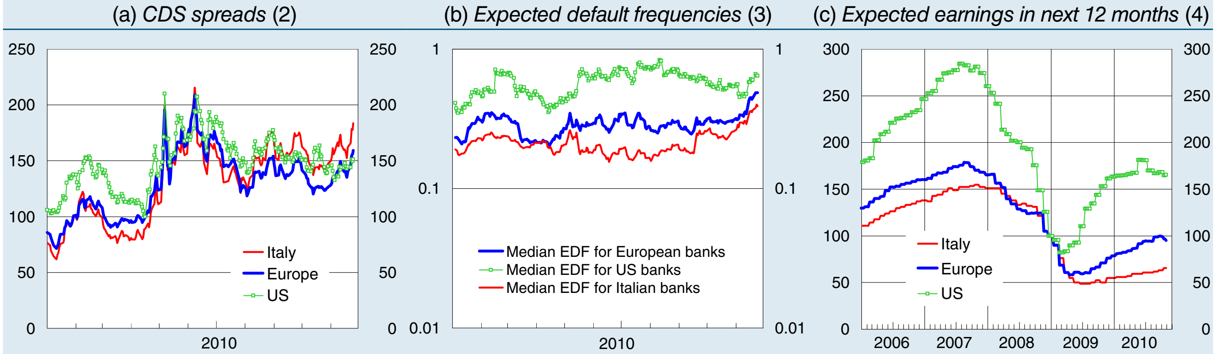
2.1 THE MARKET'S ASSESSMENT OF ITALIAN BANKS

Market-based indicators still signal fragilities

As in other euro-area countries, the market's assessment of the riskiness of the largest banks in Italy reflects the recurrent strains in the market for sovereign bonds. The spreads on Italian banks' credit default swaps (CDSs) have risen (Figure 2.1.a), although they fell back temporarily following the publication on 23 July of the results of the EU-wide stress tests. Expected default frequencies derived from the equity markets have also increased slightly, but remain lower than those of the main foreign banks (Figure 2.1.b). Financial analysts forecast an earnings recovery for Italian banks in the months ahead that will be slow in itself and by international comparison (Figure 2.1.c); this compresses our banks' market-to-book ratios.

Figure 2.1

Listed Italian banks compared with international peers (1)



Sources: Based on data from Bloomberg, Thomson Reuters Datastream, IBES and Moody's KMV.
(1) The data refer to the following sample of banks: for Italy, UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena; for Europe, UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, BNP Paribas, Société Générale, Crédit Agricole, Dexia, Deutsche Bank, Commerzbank, ING, Banco Santander, Banco Bilbao Vizcaya Argentaria, HSBC, Barclays, Royal Bank of Scotland, Lloyds, UBS and Credit Suisse; for the United States, Citigroup, JPMorgan Chase, Bank of America, Goldman Sachs and Morgan Stanley. – (2) Daily data, in basis points. Spreads on 5-year CDSs. – (3) Daily data, in percentage points. The expected default frequencies, calculated on the basis of the price and volatility of the shares of the intermediaries to which they refer, measure the probability of assets having a lower market value than liabilities over a one-year horizon. – (4) Simple average of expected earnings per share in the next twelve months. Weekly data. Indices; last figure for 2008=100. The data for the British and Swiss banks are converted into euros.

Indicators of systemic risk at international level show that the fears of instability kindled by the Greek crisis have differed in impact from country to country. On the whole, the effects on Italian banks have been limited (see the box "Indicators of interdependence between banks", Figure B).

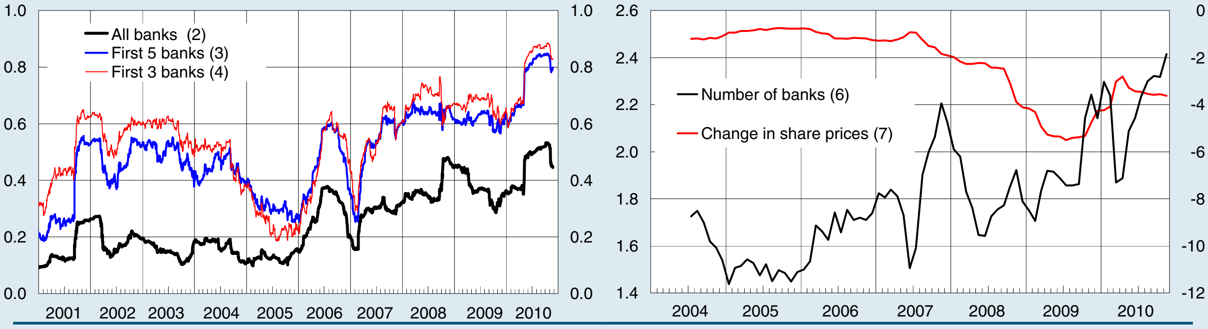
INDICATORS OF INTERDEPENDENCE BETWEEN BANKS

The correlation between the equity returns of the main Italian banks remains higher than it was at the time of the collapse of Lehman Brothers (Figure A.a). The increase in the correlation of equity returns is a broadly based phenomenon that is found both among European banks or US banks separately and between them. Indicators limited to highly negative scenarios (sharp drop in stock market prices)

Figure A

Italian banks: indicators of share price co-movement

(a) *Correlation indices* (1) | (b) *Number of banks expected to suffer a sharp share price decline* (5)



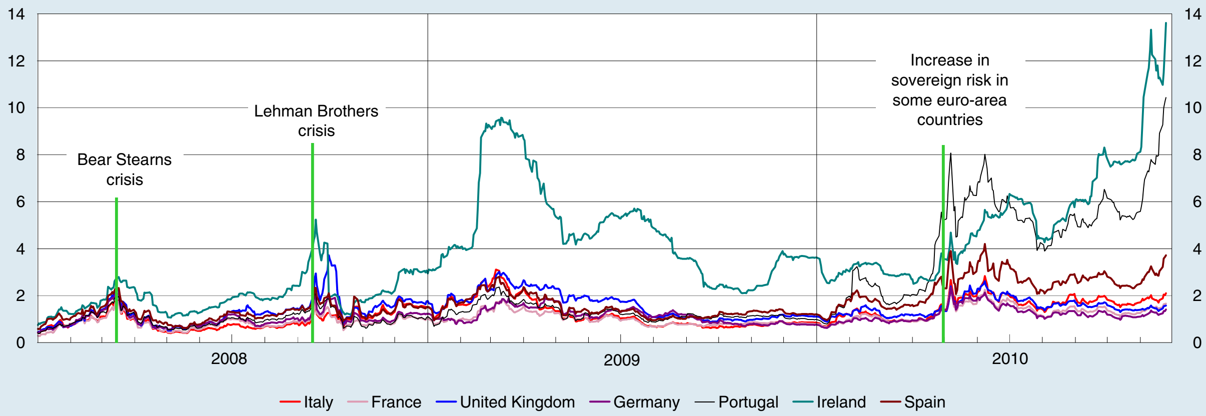
Source: Based on Thomson Reuters Datastream data.
(1) Daily data. Simple average of the correlations between the equity returns of pairs of banks calculated on daily data and 6-month moving windows. – (2) Banks included in the FTSE Italia All-Share index. – (3) UniCredit, Intesa Sanpaolo, Monte dei Paschi di Siena, Unione di Banche Italiane and Banco Popolare. – (4) UniCredit, Intesa Sanpaolo and Monte dei Paschi di Siena. – (5) Five-bank sample composed of UniCredit, Intesa Sanpaolo, Monte dei Paschi di Siena, Unione di Banche Italiane and Banco Popolare. – (6) Left-hand scale. Expected number of sample banks with share price returns below the 5th percentile of their distribution (estimated on the last year), conditional on at least one bank having share price returns below that threshold. – (7) Right-hand scale. Percentages. Average change in the share prices of the sample banks, conditional on at least one bank having share price returns below the 5th percentile of their distribution.

confirm the greater co-movement of the share prices of the major Italian banks (Figure A.b). The increase in these measures of dependence stems primarily from the fear that a recrudescence of sovereign debt risk in the euro area might have repercussions on the conditions of the banking system.

Figure B

Joint probability of distress of the largest international banks (1)

(daily data; per cent)



Sources: Based on Bloomberg and Thomson Reuters Datastream data.
(1) Italy: UniCredit and Intesa Sanpaolo; France: BNP Paribas and Société Générale; Germany: Deutsche Bank and Commerzbank; Ireland: Bank of Ireland and Allied Irish Bank; Portugal: Banco Espirito Santo and Banco Comercial Portugues; United Kingdom: Barclays and Royal Bank of Scotland; Spain: Santander and Banco Bilbao Vizcaya Argentaria. The top two banks of each country were selected for the liquidity of their credit default swap contracts.

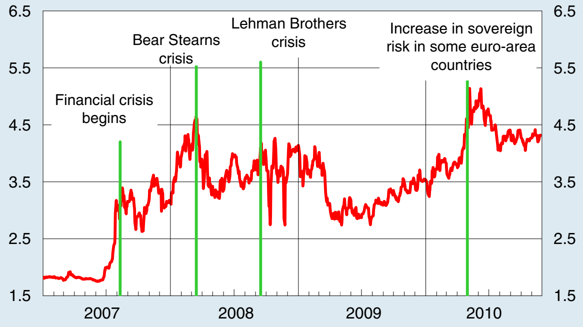
Using statistical models, it is possible to estimate the joint probability of distress (JPoD) for a set of intermediaries, starting out from the spreads on five-year credit default swaps.[1] According to

[1] The JPoD is estimated with non-parametric methodologies (consistent information multivariate density optimizing), which capture the interactions (linear and non-linear) between a considerable number of banks. See M.A. Segoviano and C. Goodhart, "Banking Stability Measures", *IMF Working Paper*, 4, 2009.

this indicator, the perception of the risk that the two largest Italian banks will come under distress at the same time is closely correlated with analogous measures calculated for the other major European banks (Figure B). Italian banks' JPoD currently stands at 2.0 per cent. Recently, the JPoD indicators of the Irish and Portuguese banks and, to a lesser extent, that of the Spanish banks have risen significantly.

Figure C

International banking stability index (BSI) for ten large cross-border banking groups (1)



Source: Based on Bloomberg data.
(1) The number of banks is shown on the y-axis. The ten groups are UniCredit, Intesa Sanpaolo, MPS, Santander, BNP-Paribas, Deutsche Bank, UBS, Barclays, Lloyds TSB and Citigroup.

Indications regarding the stability of the international banking system are drawn from the banking stability index (BSI), it too derived from the joint probability of distress. The BSI provides an estimate of the number of banks expected to become distressed when one of them has become distressed. The indicator shown in Figure C, for a sample of ten large cross-border banking groups, rose sharply between April and May 2010, peaking at five in the latter month, in connection with growing doubts about the soundness of Greece's public finances. The indicator subsequently fell back but still remained high.

2.2 CREDIT IN ITALY

Lending to households and firms

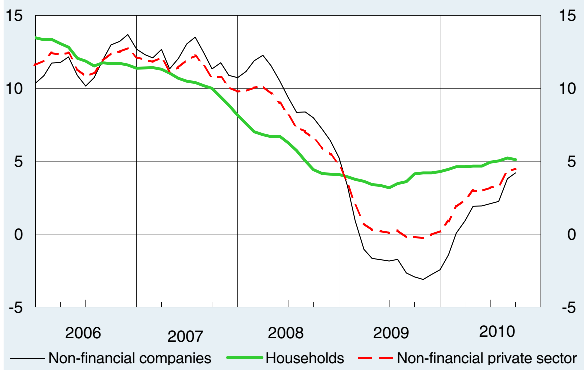
Lending to firms is recovering ...

With the return to economic expansion the slowdown in bank lending came to an end, giving way to rapid recovery (Figure 2.2). The improvement is primarily the result of the upturn in lending to non-financial firms (small and large alike), the three-month change in which has been positive since last spring; it reflects the upturn in demand as well as the end of the restrictions of banks' credit supply (see the box "The supply of credit to firms in Italy"). Lending to households is also gaining pace.

Figure 2.2

Lending to the non-financial private sector in Italy (1)

(monthly data; annualized three-month percentage changes)



(1) The percentage changes are calculated net of reclassifications, exchange-rate variations, value adjustments and other variations not due to transactions. Includes an estimate of loans not recorded in banks' balance sheets because they are securitized. The data are seasonally adjusted.

... especially as regards lending by the largest banks

From the standpoint of intermediaries, the recovery mainly involves lending to firms by the five largest banking groups, the twelve-month contraction in which has steadily diminished almost to the point of ending (Figure 2.3); in the last two quarters the flow of their lending to firms turned positive after being negative for a year and a half. Lending by other banks, which maintained a higher pace during the international financial crisis, shows a more gradual acceleration.

THE SUPPLY OF CREDIT TO FIRMS IN ITALY

According to our analyses, the sharp fall in the growth rate of bank lending during the crisis can be traced largely to the decline in loan demand. For firms, this mainly reflected the marked contraction in investment, which reduced their funding requirement, while for households it was a consequence of the drop in consumption and the weakness of the housing market.

Cyclical indicators and empirical evidence show that supply-side strains also helped to slow the flow of lending to firms, as in the other main countries. The responses of the major Italian banks to the euro-area Bank Lending Survey indicate that the tightening of lending standards emerged during the most acute phase of the crisis, the last quarter of 2008 and first of 2009, and then gradually moderated. The increase in banks' assessment of credit risk – a typical development during recessions – appears to have played a significant role in reducing the supply of loans to firms. Factors tied directly to the conditions of the banks also seem to have contributed. The crisis presumably heightened banks' risk aversion, especially in concomitance with the failure of Lehman Brothers. In addition, it negatively affected their balance-sheet and liquidity position and their ability to obtain external financing.

The Bank Lending Survey indicates that the tightening of lending standards virtually ceased by the end of 2009; standards were made slightly more restrictive in the third quarter of 2010 for specific sectors. Surveys of firms conducted by the Bank of Italy and other national and international institutions suggest that the difficulty of accessing credit has eased considerably, although there are residual strains in lending to small businesses.

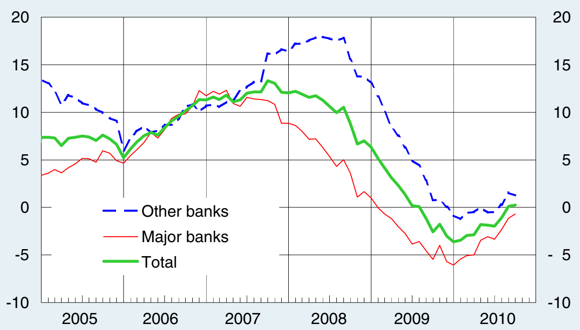
Lending should continue to grow in the next two years

On the basis of econometric estimates consistent with the expected evolution of the main macroeconomic variables, the recovery in bank lending to non-financial companies will continue over the next two years, bringing the growth in lending back stably into positive territory (Figure 2.4.a). Loan demand is expected to be spurred by a moderate recovery in economic activity, whose impact is likely to be counterbalanced in part by firms' smaller funding requirement (resulting, under the baseline macroeconomic scenario, from higher growth in gross operating profit than in investment).

Figure 2.3

Bank lending to firms by size class of bank (1)

(monthly data; twelve-month percentage changes)



Source: Supervisory statistical reports.
(1) The percentage changes are calculated net of reclassifications. Includes an estimate of loans not recorded in banks' balance sheets because they are securitized. Loans exclude repos and bad debts, which are included instead in the Eurosystem harmonized definition. Major banks are those belonging to the following groups: UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Unione di Banche Italiane and Banco Popolare.

The rate of growth in loans to households for house purchases is forecast to continue to increase in the final part of 2010 and then stabilize over the next two years at an average of close to 6 per cent (Figure 2.4.b). It should be pushed up by a slight rise in house prices (see Section 1.3) but then also restrained, towards the end of the forecasting horizon, by a rise in borrowing costs. These indications are subject to a high degree of uncertainty, as is shown by the width of the fan charts of the forecasts.

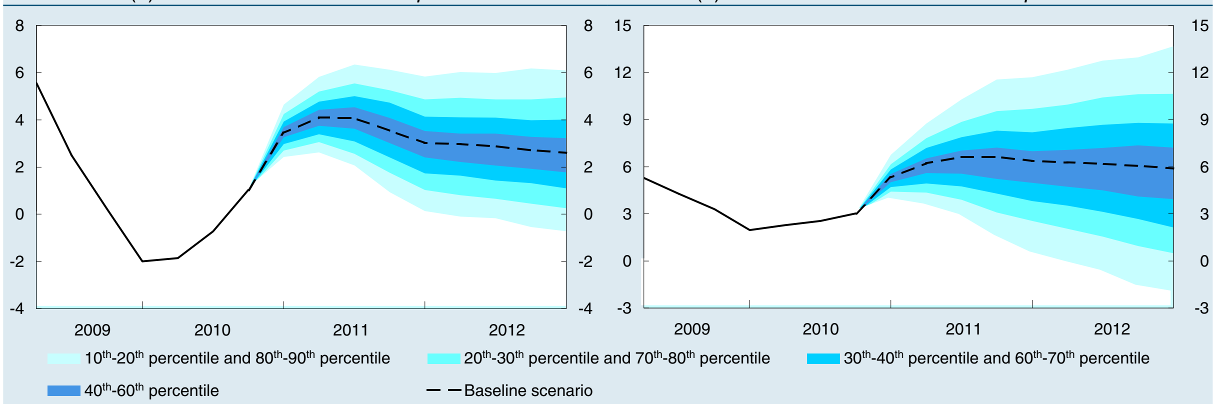
The upside and downside forecasting risks are broadly in balance

The projections for credit are consistent with the hypothesis of no new strains in loan supply over the forecasting horizon, against a backdrop of moderate economic growth and improvement in banks' funding conditions. As for the downside risks, a number of factors could cloud the outlook for the loan market. First, resurgent fears regarding sovereign debt at international level could limit the supply of

Figure 2.4

Bank lending in Italy (1)

(quarterly data; percentage changes on year-earlier quarter)



(1) Loans include an estimate of those not recorded in banks' balance sheets because they are securitized. The probability distribution of the forecasts, which permits assessment of the size and direction of the risks characterizing the baseline forecast, was calculated on the basis of stochastic simulations performed with random extractions of the distribution of the shocks of the Bank of Italy's quarterly econometric model. The distribution is shown graphically by percentile classes.

medium- and long-term market funding for the banks, with possible repercussions on credit supply. Also, the deterioration in credit quality could extend beyond the start of the upturn. The exceptional nature of the recession just ended makes it hard to estimate precisely the impact of these effects on lending growth. Among the upside risks, pulling out of the recession could trigger a spate of mergers and acquisitions among non-financial companies, which would fuel the demand for loans. In addition, the effects of the measures taken by the authorities since the outbreak of the crisis to support firms financially may not have fed through in full yet.

Credit quality

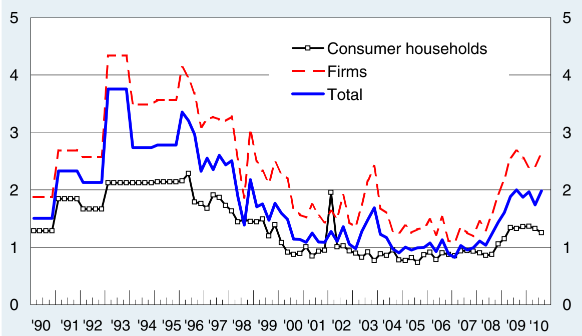
Credit quality has worsened but less than in the 1992-93 recession

The quality of credit still shows the effects of the recession of 2009. The ratio of adjusted new bad debts to lending is significantly above the pre-crisis levels, especially for firms (Figure 2.5). The fact that this ratio is now lower than it was just after the 1992-93 recession is mainly ascribable to the low level of both real and nominal interest rates, which limits the pressure of interest expenses on companies' balance sheets and households' disposable income. A contributory factor is the advances in banks' credit risk management. On the eve of the current crisis, the default rate on banks' loans was already considerably lower than in the early 1990s. These structural changes suggest that the increase in the flow of bad debts in relation to outstanding loans could be smaller and less protracted than in similar cyclical phases in the past. The stabilization of the loan default rate in the last few quarters could

Figure 2.5

Ratio of new bad debts to outstanding loans (1)

(per cent)



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

foreshadow an end to the deterioration in credit quality.

The outlook for credit risk is uncertain

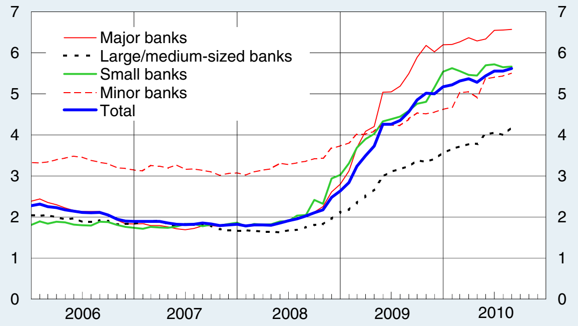
The leading indicators of credit quality do not provide unambiguous signals, however. The share of loans to customers in temporary difficulty ("substandard" loans) is down slightly for consumer households, to 2.5 per cent, but not for firms (Figure 2.6). In addition, the estimates of firms' probabilities of default within one year have ceased to rise and have stabilized overall, but they have not yet begun to fall (Figure 2.7) owing to the still poor performance of some sectors (such as construction).

Around the cyclical turning point, however, these indicators might only partially capture the possible benefits of the recovery under way in the Italian economy. Econometric estimates consistent with the expected evolution of the main macroeconomic variables suggest that the default rate will improve in the next two years. For loans to firms, it could begin to decline as early as the fourth quarter of 2010, although it is not expected to subside to the pre-crisis levels over the forecasting horizon (Figure 2.8.a). The expected pattern in the quality of loans to households would be similar, but with a more marked improvement, which in the next two years would bring the default rate back close to the pre-crisis levels (Figure 2.8.b). Here too, the estimates are subject to uncertainty, primarily in connection with the evolution of the macroeconomic context.

Figure 2.6

Share of loans to firms in temporary difficulty (1)

(per cent)

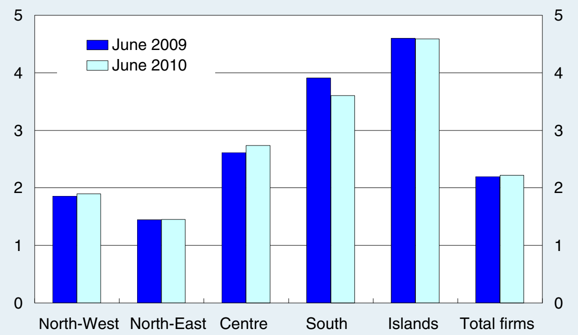


Source: Central Credit Register.
(1) Loans classified by intermediaries as "substandard" and restructured loans. The division into size classes is based on the composition of banking groups at October 2010 and total non-consolidated assets at December 2008. Major banks: banks belonging to the UniCredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Unione di Banche Italiane and Banco Popolare groups. Large and medium-sized banks: banks belonging to groups or independent banks with total assets ranging from €21,532 million to €182,052 million. Small banks: banks belonging to groups or independent banks with total assets ranging from €3,626 million to €21,531 million. Minor banks: banks belonging to groups or independent banks with total assets less than €3,626 million. Excludes branches of foreign banks.

Figure 2.7

Probability of default within one year (1)

(per cent)



Sources: Central Credit Register and company accounts.
(1) The probabilities of default are estimated for some 800,000 non-financial firms on the basis of indicators of vulnerability derived from company accounts and indicators of financial strain in credit relationships.

The dispersion in the quality of credit across banks is high

Default rates differ significantly from bank to bank. Some 160 intermediaries, accounting for just under half the banking system's consolidated assets, had default rates above 2 per cent last June (Figure 2.9). Within this group, the largest intermediaries had generally low default rates, albeit with ample dispersion.

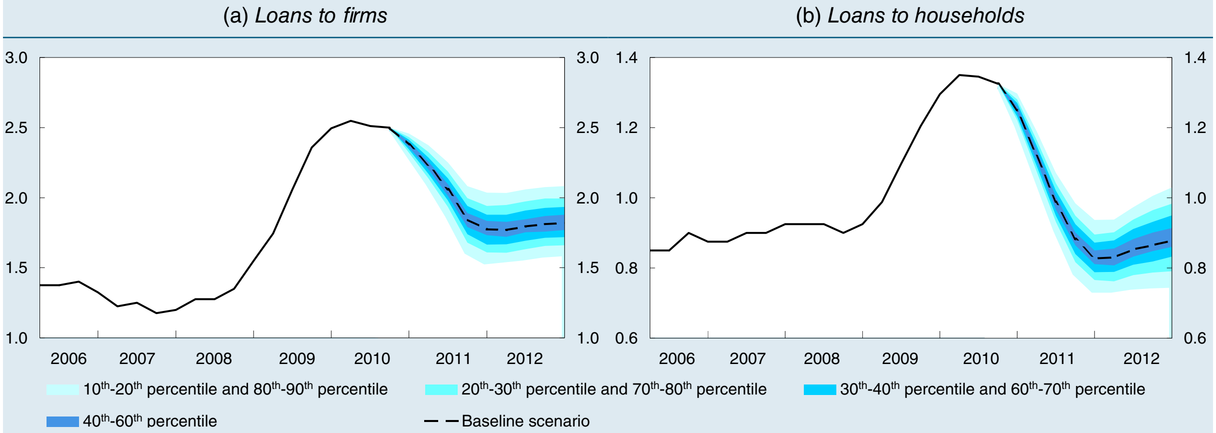
The impact of credit risk on the major banks' balance sheets is potentially significant

According to the consolidated reports released by the five largest Italian banking groups, in the first half of this year gross non-performing loans to non-bank customers decelerated relative to the second half of 2009. Net of value adjustments, these loans amounted to 59 per cent of regulatory capital in June. The coverage ratio – value adjustments as a proportion of the gross exposure – is stable at 42 per cent (Table 2.1). The economic recovery under way in Italy will enable the banks to bring their coverage ratios up to the long-term standards (about 50 per cent of

Figure 2.8

Ratio of new bad debts to outstanding loans (1)

(per cent; four-quarter moving averages)



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

non-performing exposures). This will require further appropriate provisioning in the coming quarters.

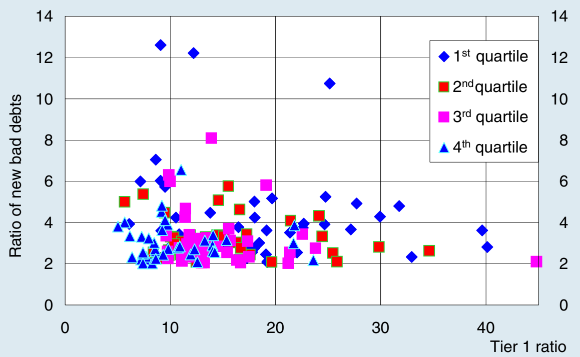
Corporate restructurings affect credit risk

The outlook for credit risk is also connected with the outcome of corporate debt consolidation operations, particularly those of medium-sized and large firms. In several cases, companies awaiting a final agreement on loan restructuring have negotiated moratoria or temporary loan freezes with the banks. There is the risk, however, that these operations, if not accompanied by adequate recapitalization plans and realistic programmes of corporate reorganization on the part of the borrower firms, could produce loan losses in the next years.

Figure 2.9

Ratio of new bad debts to outstanding loans and tier 1 ratio of a set of Italian banks (1)

(per cent)



Sources: Supervisory statistical reports and Central Credit Register.
(1) The tier 1 ratio is the ratio of tier 1 capital to risk-weighted assets. Banks with a new bad debt ratio exceeding 2 per cent. Each bank is identified with the quartile to which it belongs according to the distribution of total assets. The first quartile comprises the smallest banks, the fourth the largest. The data refer to June 2010.

External assets

External assets are stable ...

Italian banking groups' exposure in loans and securities to non-residents amounted to just over €700 billion at the end of last June, unchanged from a year earlier (Table 2.2). About three fifths of the external assets were on the accounts of units established in the counterparty's country, for the most part subsidiaries. Nearly all of the exposure to non-residents (89 per cent) regards the two largest banking groups, which operate through a network of local banks both within the euro area and outside it. For these two groups, external assets amounted to 46 per cent of total loans and securities holdings.

Table 2.1

Quality of the credit disbursed by the five largest Italian banking groups (1)
(millions of euros and per cent)

	Amount	Percentage change from December 2009	Share of total loans to non-bank customers		Coverage ratio (2)	
	June 2010		Dec. 2009	June 2010	Dec. 2009	June 2010
Gross non-performing exposures	137,712	7.3	9.5	10.2	41.2	41.5
Bad debts	74,913	11.0	5.0	5.6	60.4	59.6
Substandard loans	44,255	3.1	3.2	3.3	23.2	23.3
Restructured loans	11,584	30.1	0.7	0.9	15.8	13.0
Overdue instalments	6,960	-22.5	0.7	0.5	7.9	9.2

Sources: Intermediaries' press releases and presentations to analysts.
(1) Unicredit, Intesa Sanpaolo, Banca Monte dei Paschi di Siena, Banco Popolare and Unione di Banche Italiane. Loans to non-bank customers, gross of value adjustments. – (2) Value adjustments as a percentage of the corresponding gross exposure.

... with an increase vis-à-vis the Central and Eastern European countries

Italian banking groups have an especially large volume of operations in the Central and Eastern European countries, where economic and financial conditions are improving (on average, their forecast economic growth rates are higher than for the euro area; see Section 1.1). Household debt is low by international standards, but it is rising swiftly. Its ratio to GDP has doubled in the last five years, reaching 30 per cent; among the larger countries, the ratio ranges from 23 per cent in Romania to 40 per cent in Croatia.

The on-balance-sheet exposure (including that to Slovakia and Slovenia, euro-area members) grew by 11 per cent from a year earlier, to €156 billion, with significant increments in Ukraine, Serbia, Russia and Poland. Intra-group loans to local subsidiaries, not included in the consolidated data reported in Table 2.2, amount to about €23 billion.

The main risk factor is the deterioration of credit quality

The main risk factor for banking activity in the countries of Central and Eastern Europe is the deterioration of credit quality. In June 2010 Italian banks' stock of non-performing loans (bad debts, substandard loans, restructured loans and overdue instalments, gross of guarantees) amounted to 10.6 per cent of their total lending to these countries, with ample dispersion (the incidence of non-performing loans is higher than average in Hungary, Ukraine and – for exposures to households only – Russia and the Baltic countries).

Another factor of vulnerability is the state of the residential housing market, as property collateralizes mortgage loans to households. According to estimates, in the years before the crisis house prices rose at very rapid rates especially in Poland and Russia (100 per cent between 2005 and 2008), as well as in Bulgaria, the Czech Republic, Slovakia and Slovenia (between 40 and 60 per cent); by contrast, they slipped slightly in Hungary. The correction that began in 2008 was sharpest in Russia and Bulgaria (more than 50 per cent) and more moderate in Slovenia, Slovakia, the Czech Republic and Poland (between 15 and 20 per cent). In the last two countries the decline halted at the end of last year.

A further element of fragility is represented by the large share of loans denominated in foreign currency (about 54 per cent of the total, not counting loans in local currency that are indexed to foreign currency, for which detailed data are not available). The share is particularly high in Hungary, Croatia, Romania, Bulgaria and Russia (60 per cent or more); it is lower in Poland and the Czech Republic (about 30

Table 2.2

Consolidated exposure of Italian banking groups and banks to non-residents (1)
(millions of euros)

	30 June 2009		30 June 2010		% change in loans and securities June 2010 / June 2009	% of total exposures reported to the BIS (2)
	Loans and securities	Guarantees, commitments and derivatives	Loans and securities	Guarantees, commitments and derivatives		
Euro area	446,774	260,198	436,835	257,420	-2.2	5.6
Other industrial countries	96,042	262,109	92,637	270,747	-3.5	0.9
International institutions	4,050	499	4,001	587	-1.2	5.9
Developing countries	140,728	59,007	157,547	60,238	12.0	4.4
Europe and former USSR	*122,230*	*44,585*	*136,758*	*42,334*	*11.9*	*13.1*
of which: *Poland*	*27,413*	*8,133*	*31,519*	*7,867*	*15.0*	*15.0*
Croatia	*21,358*	*5,134*	*22,666*	*4,877*	*6.1*	*38.7*
Hungary	*18,506*	*3,988*	*17,745*	*4,184*	*-4.1*	*16.8*
Russia	*13,932*	*5,524*	*16,201*	*5,784*	*16.3*	*11.4*
Czech Rep.	*10,120*	*5,288*	*10,054*	*5,047*	*-0.6*	*7.7*
Romania	*8,873*	*4,425*	*9,141*	*3,559*	*3.0*	*11.2*
Bulgaria	*5,787*	*3,413*	*6,099*	*2,148*	*5.4*	*20.3*
Serbia	*3,091*	*1,125*	*5,187*	*1,294*	*67.8*	*27.8*
Turkey	*2,530*	*3,588*	*2,791*	*4,151*	*10.3*	*2.1*
Ukraine	*1,855*	*524*	*5,421*	*988*	*192.2*	*16.3*
Africa and Middle East	*8,503*	*6,260*	*8,874*	*5,977*	*4.4*	*1.8*
Asia and Pacific	*5,559*	*6,480*	*7,579*	*8,493*	*49.1*	*0.6*
South and Central America	*4,436*	*1,683*	*4,335*	*3,434*	*-2.3*	*0.5*
Offshore centres and n.e.c.	15,012	8,348	12,769	8,458	-14.94	0.7
Total exposure to non-residents	702,605	590,161	703,789	597,451	0.2	3.1
Memorandum item						
Total exposure (3)	2,528,607	1,248,626	2,648,741	1,264,079	4.8	

Sources: Consolidated supervisory reports for banking groups, individual supervisory reports for banks not belonging to groups.
(1) Exposure to the "final obligor", gross of bad debts and net of write-downs. – (2) Per cent of total foreign exposures to each country reported to the BIS in June 2010 by a large set of international intermediaries. – (3) Total exposure to residents and non-residents.

per cent). However, banks' supervisory reports do not indicate significant differences up to now in the incidence of non-performing loans depending on whether they are denominated in local or foreign currency.

The banks are increasing the value adjustments to loans

The two largest Italian banking groups have further increased the flow of value adjustments as a proportion of the stock of loans, raising it to an average of 1.93 percentage points in June for the Central and Eastern European countries, about 0.2 percentage points higher than a year earlier. The figures for Ukraine, Romania and Hungary are particularly high (6.33, 3.18 and 2.76 percentage points respectively). According to financial statement data and information gathered by the Bank of Italy, the total stock of value adjustments to non-performing loans in the area is large (some 70 per cent in the case of bad debts).

The exposure to foreign banks involves low-risk counterparties

The fortnightly survey conducted by the Bank of Italy shows that at mid-November 2010 Italian banks' direct exposure to a sample of large foreign banks had contracted further, to 4 per cent of the system's total assets. About two thirds of the exposure refers to intermediaries having a high credit rating, with CDS spreads smaller than the average for the sector.

Loans to borrowers in the euro-area countries under financial strain amount to less than 1 per cent of assets

Most of Italian banks' lending to the euro-area countries involves borrowers resident in Germany and Austria (Table 2.3). At the end of June the exposure to Greece, Ireland and Portugal totalled around €20 billion, or less than 1 per cent of total system assets; for the five largest groups, it ranged from 0.1 to 1.3 per cent. Assets issued in the three countries and held for custody, safekeeping or in individually managed portfolios at banks operating in Italy are modest in relation to the total of bonds held on deposit by customers (1.7 per cent), but their absolute amount could nonetheless involve reputational risks for intermediaries in the event of a decline in the securities' market value.

Table 2.3

Consolidated exposure of Italian banking groups and banks to euro-area residents according to counterparty's country and sector (1)

(millions of euros; at 30 June 2010)

	Public sector	Banks	Financial corporations	Households and firms	Total	% of total exposures reported to the BIS (2)
Germany	27,480	52,933	23,053	103,586	207,052	12.9
Austria	9,631	24,094	2,592	62,398	98,714	41.0
France	1,269	13,972	2,506	9,682	27,429	2.0
Spain	2,024	7,425	4,698	6,931	21,077	3.0
Luxembourg	424	4,343	10,247	4,331	19,344	3.7
Netherlands	204	5,093	6,308	6,125	17,730	2.2
Ireland	672	2,336	8,240	663	11,911	2.0
Greece	2,184	740	143	1,216	4,284	3.0
Portugal	649	2,032	181	885	3,746	2.0
Other countries (3)	5,513	3,251	752	16,032	25,549	3.3

Sources: Consolidated supervisory reports for banking groups, individual supervisory reports for banks not belonging to groups.
(1) Exposure to the "final obligor", gross of bad debts and net of write-downs. – (2) Per cent of total foreign exposures to each country reported to the BIS in June 2010 by a large set of international intermediaries. – (3) Slovenia, Slovakia, Belgium, Finland, Cyprus and Malta.

2.3 OTHER RISKS

Funding risk, liquidity risk, refinancing risk

The share of retail in total funding is large, the funding gap small ...

Italian banks are distinguished internationally by a high proportion of retail funding, which provided funding stability during the crisis. The latest, unconsolidated data (for September) show that total retail liabilities – deposits other than those of monetary financial institutions and other financial companies plus bonds held by customers other than euro-area banks and money market funds – account for 51 per cent of total funding, compared with 46 per cent in the rest of the area. For bonds alone, the portion placed with retail investors is slightly above the average for the other euro-area countries (63.2 against 61.4 per cent).

Italian banks' funding has held broadly stable in 2010. The relative size of the retail component has increased slightly, thanks to the modest expansion of the retail deposits of residents. In September the funding gap (the portion of lending not financed by retail funding) was a modest 8.9 per cent. The average cost of funds remains low at about 1.3 per cent.

... but considerable volumes of bank bonds are nearing maturity

Given the large-scale recourse to the bond markets by private and public issuers alike in all the main countries (see Section 1.2), in the coming months Italian banks could be faced with rising costs in rolling over maturing liabilities. In October the 30 largest Italian banking groups, including subsidiaries abroad, had outstanding issues of €652 billion (one fourth of their total liabilities). The share of those maturing by the end of 2011 is 27 per cent (comparable to the proportion recorded by the main euro-area banking groups); but the percentages at the larger banks are lower (Figure 2.10). The portion of bank bonds held by retail investors, marked by very great stability, is substantial for smaller banking groups in particular.

The cost of medium- and long-term funding could be held down by recourse to covered bonds. Purchases by the Eurosystem revived demand for these securities, increasing their liquidity, but in recent months recurrent strains in sovereign debt markets within the euro area have widened interest-rate spreads over risk-free assets. To date the main Italian banking groups have issued €21.3 billion worth of covered bonds; a good many banks have already undertaken further issues, and others plan to do so.

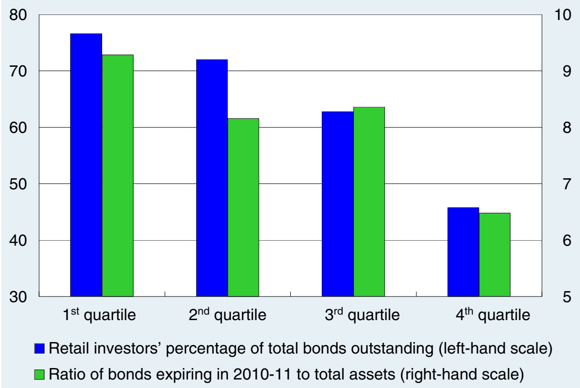
The short-term liquidity position remains balanced

The financial market turmoil has not affected the short-term liquidity position of the main Italian banking groups, which remains balanced (Figure 2.11). However, the primary bond market has lost depth, while the short-term institutional funding markets (interbank, commercial paper, CDs) have been affected by a shortening of maturities and, in some segments, diminishing liquidity. Intermediaries have increased their reserves of eligible assets, in part by purchasing their own asset-backed securities (see Section 3.2).

Figure 2.10

Bonds of the main Italian banks: Share held by retail investors and ratio of bonds maturing by end-2011 to total assets (1)

(weighted averages; per cent)

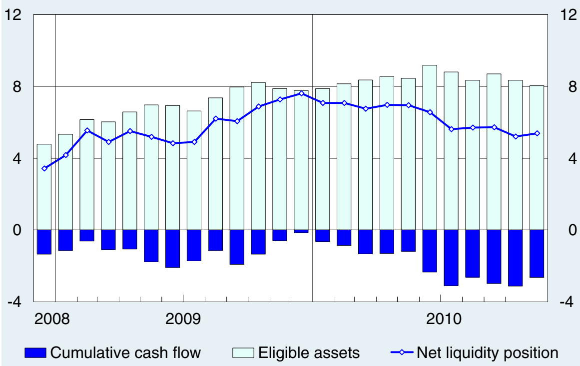


Source: Consolidated reports to the Bank of Italy from the 30 largest banking groups for periodic monitoring of liquidity positions.
(1) Quartiles are computed according to total assets. First quartile comprises the smaller banks.

Figure 2.11

Net liquidity position (1)

(percentage of balance-sheet assets)



(1) The net liquidity position is calculated as the sum of holdings of assets eligible for use as collateral for Eurosystem refinancing operations plus cumulative expected cash flow. The time frame is 1 month; no roll-over of maturing obligations is assumed. Average for a sample of 32 banks subject to frequent monitoring.

While Italian banks are now well-equipped to manage liquidity risk, the state of the markets requires continuous monitoring by the authorities and the banks themselves. Looking ahead, the Eurosystem's exit strategy of progressive return to ordinary forms of liquidity supply will require the banks to adapt their fund-raising practices to achieve a balanced mix of different short-term funding instruments.

Interest-rate risk

A rise in market rates would have limited or even beneficial effects

Interest-rate risk is assessed by assuming an unexpected variation in rates and estimating its effect on the balance sheet, taking account of the duration of assets and liabilities. Banks can use methodologies of varying degrees of complexity (see the box "The methodologies for measuring interest-rate risk").

THE METHODOLOGIES FOR MEASURING INTEREST-RATE RISK

A bank's exposure to interest-rate risk is ordinarily calculated by estimating the effect on its banking book of a shift in the yield curve. Based on specific assumptions concerning market interest-rate movements and the evolution of each balance-sheet item, the potential impact on the bank's capital is measured, taking account of the maturities of all items.

The results depend to a considerable extent on the assessment of the financial duration of banking book components that have no pre-set maturity, which banks quantify by looking at the past behaviour of both depositors and borrowers. On the liability side, a decisive factor is the estimate of the duration of retail deposits, which in practice the banks' internal models treat partly as liabilities of protracted maturity, in view of their great stability and the viscosity of their yields with respect to market rates. On the asset side, assessing the duration of residential mortgages is especially complicated; their effective maturity depends, for example, on whether or not there are early repayment clauses allowing the borrower to modify the length of the contract.

The Bank of Italy asks intermediaries to take account of interest-rate risk in their internal capital adequacy assessments. The largest banking groups are required to use measurement methodologies based on internally developed statistical models, whose results are discussed with supervisors. The other intermediaries can follow the standard approach suggested by the Basel Committee and incorporated in Community legislation, which involves less sophisticated criteria for measuring duration and centres on the impact on regulatory capital of a 200-basis-point parallel shift in the yield curve. Here too, the banks' results are checked by supervisors, with special attention to instances in which the impact is greater than 20 per cent of regulatory capital.

The analyses of the major Italian banks using internal models – which estimate the duration of balance-sheet items with no fixed contractual maturity on the basis of customers' past behaviour – indicate that a rise in market rates would have limited, possibly positive, effects on balance sheets. In part these results are due to the use of derivatives to hedge interest-rate risk.

This assessment is confirmed by the Bank of Italy's own analyses. But the magnitude of the effect on banks' balance sheets is difficult to quantify with precision, as it depends on the technical assumptions made in assessing the stability of assets and liabilities of indeterminate maturity, most notably customer deposits. For the four largest Italian groups the estimated impact of an upward shift in the yield curve of 200 basis points is negligible for two banks and positive for the other two.

Figure 2.12

VaR of banks using internal models validated by the Bank of Italy (1)
(index, January 2009=100)

(1) The index is designed to reflect trends in the measures of risk used for operational purposes; a decrease indicates a reduction in risk. Data updated to September 2010. Refers to banks accounting for more than half of the banking system's capital charges for market risk.

Market and counterparty risk

Market risk is subsiding ...

The market risk of the banks most active in the financial markets, which are those calculating their capital requirements using internally developed Value at Risk (VaR) models validated by the Bank of Italy, has been falling steadily from the peaks recorded in 2009 (Figure 2.12). This reflects both the reduced volatility of the markets (one of the parameters used in calculating value at risk) and the shrinking of the trading book. The rise triggered by the market turmoil in April and May 2010 was largely reversed in the months following.

Italian banks' market risk exposure derives chiefly from their holdings of government securities and bonds. By comparison with the period preceding the crisis, the risk contribution from equities has fallen still further, reflecting the smaller volume of business in this segment. The contribution of foreign exchange positions has remained stable. Just a few banking groups report a modest exposure to commodity-linked financial products.

... even considering assets outside the trading book

Partly in consideration of the rise in capital charges against market risk under the new Basel rules (see the box "Calculation of capital charges for market risk"), the banks have been decreasing the share of trading assets held for own account and increasing that of assets directed to providing services to customers. This has been accompanied by an expansion of assets not included in the trading book, principally government securities held in order to increase reserves of liquid assets and classified in the banking book, partly due to their favourable regulatory treatment (for high-grade securities, this accounting classification entails no capital charge). The VaR calculated on this broader set of assets comprising both the banking and the trading book also shows a downward trend.

CALCULATION OF CAPITAL CHARGES FOR MARKET RISK

The Basel Committee envisages two options for computing banks' capital charges for market risk. One calculates exposure to various types of risk using standardized methods established by the supervisory authorities, the other requires the application of models developed by the banks themselves and recognized by the supervisory authority.

Developing internal models requires substantial investment in methodologies, technological infrastructure and skilled personnel, in order to compute regulatory capital requirements by measuring Value at Risk in the trading book: VaR is defined as the level of trading book loss that will not be exceeded in a certain interval (10 days) with a certain confidence level (99 per cent). Internal models generally result in significant savings of capital compared with the standard approach, mainly because they can take full account of hedges (which the standard rules recognize only in part). The three Italian banking groups whose internal models have been recognized account for more than 60 per cent of the banking system's capital charges for market risk.

The Basel Committee has now revised the portion of the Capital Accord concerning the trading book, acknowledging the inability of VaR models to capture the risk of rare events with very great impact – such as default by a bond issuer – and their inherent pro-cyclicality. By the end of next year the Committee plans to revise the trading book rules, deciding among other things whether or not to maintain the present distinction, for supervisory purposes, between banking book and trading book.

The revision of the Accord already decided on by the Committee and incorporated in the latest amendment to the European directive on banks' capital, which goes into effect at the end of 2011, [1] will significantly increase capital charges for the trading book. First, banks will also be required to compute capital charges for "stressed VaR" (i.e. in unfavourable conditions), so as to create capital buffers less sensitive to cyclical market changes. Second, the VaR measurements will be flanked by incremental risk charges to remedy the shortcomings of VaR models in accounting for the risk of a sharp fall in the price of bonds due to default or downgrading of the issuer. Finally, specific attention

[1] See the Basel Committee documents of July 2009: *Enhancements to the Basel II framework*, www.bis.org/publ/bcbs157.htm; *Revisions to the Basel II market risk framework*, www.bis.org/publ/bcbs158.htm; and *Guidelines for computing capital for incremental risk in the trading book*, www.bis.org/publ/bcbs159.htm.

is devoted to structured credit products, whose value is affected not only by the probability of the issuer's default but also by broader market conditions. The difficulty of measuring the risk on these products led the Committee to extend banking book treatment based on external ratings to trading book positions as well. This approach does not recognize hedges but determines capital charges solely on the basis of issuer default risk. There is a limited exception for financial instruments deriving from the securitization of assets traded on liquid markets (such as CDS index tranches), for which internal models can be used provided that in recognizing hedges they quantify both the probability of credit losses and the risks of negative price changes.

Given the prevalence of traditional lending business, all in all the impact of the new trading book risk rules on Italian banks will be modest.

Investment in structured credit products is limited ...

Italian banks' investment in structured credit products is concentrated at the leading banking groups and constitutes a tiny fraction of their total assets. Within this aggregate, only a minor share consists of complex securities based on underlying assets that are themselves composed of securitized instruments. This assessment does not refer to operations designed to increase banks' holdings of assets eligible for use as collateral for Eurosystem refinancing (self-securitizations), which do not alter the banks' risk profile.

... and shrinking

The main banking groups are reducing their investment in structured products still further. So far they have done this more by not renewing maturing positions than by disposals of long-term products, which are more sensitive to fluctuations in credit spreads and market illiquidity.

The market value of derivatives increases, but counterparty risk is still low

Four fifths of Italian banks' counterparty risk stems from the largest banks' positions in derivatives traded in OTC markets. The rest is in connection with repos with financial counterparties.

In June 2010 the gross fair value of Italian banks' derivatives (calculated as the sum of positive and negative positions) amounted to €400 billion (Figure 2.13). Given this, the banks' counterparty risk on these instruments is low.

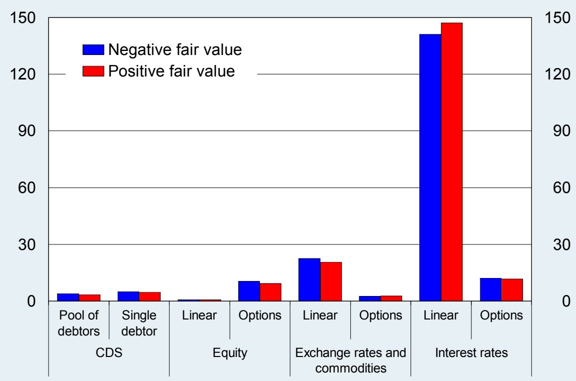
Under the rules now in place, in fact, the risk is calculated by offsetting the derivatives with positive and negative fair value, provided that the contracts are with the same counterparty and there is a netting agreement with that party. Since the amounts of positive-value and negative-value contracts are generally balanced, both in the aggregate and bilaterally, counterparty risk so computed is small: at present the net exposure of banks operating in Italy is about €24 billion, three quarters of it (€18 billion) at the branches of foreign intermediaries.

Counterparty risk is mitigated further by collateral (cash and securities), which banks require the counterparty to post when the net credit balance exceeds a predetermined threshold. Taking this

Figure 2.13

Positive and negative fair value of Italian banks' derivatives (1)

(data at June 2010; billions of euros)



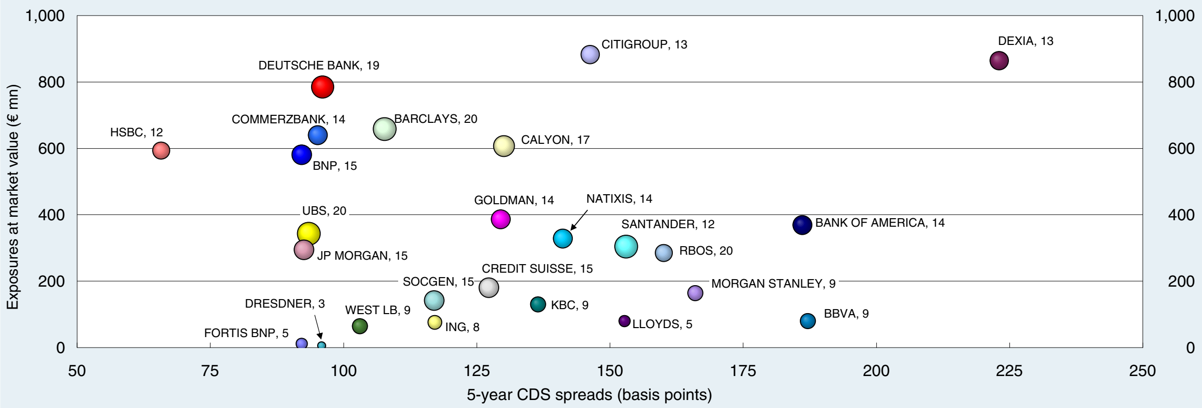
Source: BIS, regular survey of OTC derivatives markets.
(1) Market value of derivatives contracts of the five Italian banks participating in the BIS survey, subdivided into positive and negative values. Each column gives the total value of the contracts grouped according to type of underlying risk factor: interest rates, exchange rates, equity, credit, commodities. For each factor the chart shows the contribution of the various instruments classed by complexity: linear products consist mostly in forward and swap contracts. Credit default swaps are disaggregated into hedges on single issuers (debtors) and groups of issuers (pools).

into account, Italian banks' net exposure in derivatives is further reduced, to €9.8 billion. Here too, a large part of the exposure consists in the claims of Italian branches of foreign banks on their home-country parent, as a result of the waiver of collateral within groups. Most of the exposure is with high-rated counterparties, with which all Italian banks active in the financial markets do business (Figure 2.14). The total capital charges related to counterparty risk were about the same in June 2010 as at the end of 2009.

Figure 2.14

Italian banks' net exposures on unsecured derivatives (1)

(millions of euros; basis points)



Source: Supervisory statistical reports.
(1) On the horizontal axis, spreads on 5-year credit default swaps for foreign counterparties at the end of October 2010. On the vertical axis, the counterparty risk of the Italian banking system vis-à-vis foreign intermediaries, measured as the exposure on derivatives with positive fair value after the application of netting agreements (if the positive fair value of the contracts covered by the netting agreement is greater than the negative value, the exposure is equal to the net balance; in the opposite case, in which the Italian bank is a net debtor, the counterparty risk exposure is put at zero). The size of each circle is proportional to the number of banks exposed, specified alongside the counterparty's name. An exposure of about €1 billion to KFW Bank, for which CDS data are not available, is not shown.

Operational risk

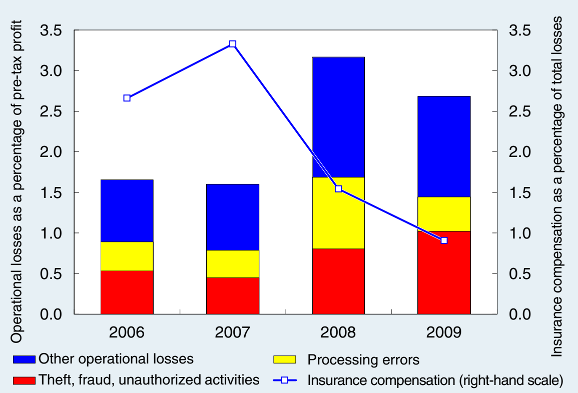
Operational risk is coming down again

Total operational losses for Italian banks turned back down in 2009, owing mainly to a reduction in processing errors and in litigation concerning the issuance and placement of securities of major industrial groups that defaulted (Figure 2.15).

Figure 2.15

Operational losses of Italian banks

(percentages)



Sources: Prudential reports and data from banks.

The economic recession increased other categories of operational loss, such as those due to robbery, fraud and unauthorized activities (e.g. computer fraud or cloning of payment cards). There was also an increase in losses due both to improper actions by employees (such as the granting of loans to fictitious borrowers) or third parties (loans based on false documentation) and to negligence or error in the granting, disbursement or management of loans (e.g. violation of mandates, inefficient management of collateral). The emergence of these risks adversely affects the ability to recover bad debts. Insurance coverage against operational risk is negligible: reimbursements fell from 3 per cent of total operational losses in 2007 to 1 per cent in 2009.

This trend in operational losses is only partly reflected in the capital requirements for the banks that use the basic or standardized risk approach (see the box "The regulation of operational risk"). Between June 2009 and June 2010 the capital charge in connection with operational risk contracted by 5 per cent, to stand at 7 per cent of total capital requirements.

THE REGULATION OF OPERATIONAL RISK

Operational risk refers to the potential losses from shortcomings or malfunctioning of procedures, human resources and internal systems, and from exogenous events. For the most part it relates to single intermediaries, but at times operational risk may take on systemic relevance (as in the case of malfunctioning of information systems or payment system infrastructures, terrorist attacks and natural disasters). Supervisory regulations allow banks to compute capital requirements for operational risk in three distinct ways, differing in complexity and organizational requirements. The basic and standardized approaches calculate the capital requirement as a percentage of gross income (a gauge of the intermediary's volume of business) and may therefore be relatively unresponsive to actual changes in operational risk. The advanced measurement approach uses internal models validated by the Bank of Italy. At present three banking groups (UniCredit, Intesa Sanpaolo and Banca Monte dei Paschi di Siena) use the advanced approach; a dozen or so groups use the standardized approach, the rest the basic indicator approach.

Observations carried out within the framework of the Basel Committee's work indicate that the Italian banking system's exposure to operational risk is low by comparison with other countries (in the euro area and the G20). For some intermediaries, however, operational risk is significant both in absolute terms and in relation to their capital endowment.

2.4 PROFITABILITY

The profits of the main listed groups are declining

As in analogous cyclical phases in the past, banks' profits are still suffering the effects of the recession of 2009. The recovery has not yet determined significant benefits. According to the consolidated reports of the 14 largest listed banking groups, in the first three quarters of 2010 profits were down 7 per cent from a year earlier. For the top five groups the contraction came to 8 per cent, and ROE slipped from 4.3 to 3.7 per cent.

Gross income has contracted ...

Net interest income fell by 10 per cent as a consequence of lower short-term interest rates (which compressed lending spreads) and, for some banks, a contraction in lending. Other income remained stable. Income from securities trading performed discontinuously; following the market fluctuations in the course of 2010, its growth was rapid in the first quarter, then slower (see the box "Accounting standards and bank profit"). Net fee income improved substantially (by 12 per cent), thanks in part to portfolio administration and asset management services. Overall, gross income diminished by 6 per cent.[1] The relative shift from interest to fee income stemmed in part from the replacement of the maximum overdraft fee, which had been classed as interest income, by other fees (such as the fee on fund availability), in most cases included in other income.

... as has operating profit

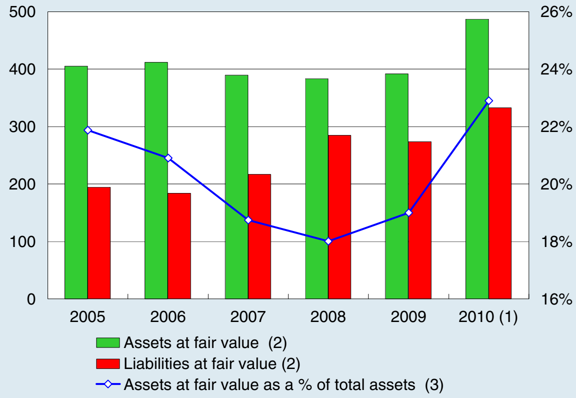
The operating profits of the 14 listed banking groups declined by 15 per cent even though operating expenses were stable. Indeed, the expenses of the top five groups actually diminished slightly, helping to limit the operating profit decline. In particular, staff costs decreased.

[1] These data are drawn from quarterly reports, so the definition of the aggregates used may differ from the corresponding items in the yearly balance sheet. For instance, the definition of "gross income" includes some minor items (such as the results of insurance operations).

ACCOUNTING STANDARDS AND BANK PROFIT

During the years of the financial crisis, balance-sheet values have been heavily affected by the application of fair value accounting, by the revision of accounting standards in 2008, and by the imputing of some income components to shareholders' equity.

Assets and liabilities of the five largest banking groups valued at fair value
(billions of euros; percentages)



(1) Data refer to June. – (2) Left-hand scale. – (3) Right-hand scale.

Assets at fair value. Under current international accounting standards (IAS/IFRS), the items that must be entered at fair value may be assigned to three classes depending on the method used to assess their value. Level-one assets are those whose prices are determined by trading on liquid markets. Level two comprises financial instruments valued according to internal models that use observable market data. Level three, finally, comprises assets whose price is determined by internal models from inputs that are not observable on the basis of market data. This class therefore consists of assets (such as structured products) that may be subject even to large valuation errors. In June 2010 the instruments of the top five Italian banking groups carried at fair value amounted to 23 per cent of total balance-sheet assets (see figure). On average, level-three items ranged from a minimum of 3 to a maximum of 17 per cent of regulatory capital, with an average of 11 per cent. The incidence of both total and level-three assets at fair value on balance sheets is considerably lower in Italy than in the other main countries.

The amendment of IAS 39. [1] At the height of the crisis in autumn 2008, the International Accounting Standards Board modified the accounting rules to allow banks to exclude from their income statement significant unrealized losses and to charge them instead to shareholders' equity. Four of Italy's five leading banking groups took advantage of this opportunity. As of June 2010 such unrealized losses were an average of 33 per cent less than their initial amount. For some groups, they represent a risk for profitability that could emerge in circumstances requiring write-downs or the disposal of the assets affected.

Comprehensive income. The IAS/IFRS rules establish that some revenues and costs are to be entered directly in shareholders' equity, not through the income statement. These are items classified as "other comprehensive income" which, together with the standard income statement result, produce "comprehensive income". In the first half of 2010 the income components of the leading five groups charged to shareholders' equity were negative by a total of about €1 billion. Total profits thus came to less than the income statement result. In the whole of 2009 there had been an opposite (positive) effect of about €2 billion.

[1] The amendment came into effect in October 2008. It allows banks to reclassify non-derivative financial instruments from "held for trading" to other books and also to reclassify certain assets from "available-for-sale" to "loans and receivables", when the intermediary has the intention and the ability to hold them for the "foreseeable future". Such reclassifications allow the standard for valuing these instruments to be modified. For instance, for assets reclassified from available-for-sale to loans and receivables, the valuation standard changes from fair value (with a counter-item in shareholders' equity) to amortized cost. In 2008 the application of the amendment allowed banks to value the reclassified assets at the fair value observed on 1 July, i.e. prior to the Lehman Brothers failure, when it was considerably higher.

For the five largest banks, staff costs came to 36 per cent of gross income. According to their financial disclosure on related parties, in 2009 compensation to directors and executives with strategic responsibilities amounted to 1.2 per cent of total staff costs and 0.5 per cent of gross income (see the box "Executive compensation schemes in Italian banking").

Allocations to provisions and value adjustments decreased by 16 per cent but continued to absorb a substantial portion (56 per cent) of operating profit. The decline in net profit, due in part to increased taxes, was attenuated by non-recurring profits and profit generated by the disposal of assets.

EXECUTIVE COMPENSATION SCHEMES IN ITALIAN BANKING

One of the major factors that led to the crisis was the excessive reliance, in the compensation of bank managers, on variable components or components too closely bound up with short-term results. Such pay schemes apparently tempted executives and directors at some large foreign banks to take excessive risks.

In the executive pay schemes of Italian banks, fixed salary predominates and bonuses are relatively modest. The variable portion is generally linked to the bank's earnings, both annual and over the longer term, adjusted for risk; it is mostly paid in cash, although in the larger banks it typically consists in deferred stock options. For the six largest listed banking groups the variable portion of the compensation of executive directors, general managers and executives with strategic responsibilities averaged 48 per cent of their total earnings; in the other main listed banking groups the proportion was 25 per cent.

Early in 2008 the Bank of Italy reaffirmed the supervisory relevance of banks' compensation and incentive policies, laying down principles under which banks shall: appropriately involve corporate organs in setting pay policy; disclose decisions in this matter to the shareholders' meeting; link total compensation to medium/long-term results; balance the fixed and variable components of compensation; link the variable portion to definite, stable results; consider risk in valuing the bank's results; and provide for the deferment of variable compensation paid in the form of shares or share-linked instruments. These principles concord with those developed by international organizations such as the Financial Stability Board, the European Commission and the Committee of European Banking Supervisors.

In autumn 2009 the Bank of Italy asked six large banking groups to adopt the FSB's recommendations on executive compensation for major banks, to assess their compliance with those standards, and to plan any actions necessary to bring their practices promptly into line. The banks' responses indicate that the process of pay-setting and control is in compliance with national and foreign regulations, as is the balance between the fixed and variable components. In some cases, however, the deferred portion of variable compensation was small; and at several intermediaries too little weight was assigned to risk components in valuing the corporate results on which pay schemes were based.

All the large groups are already taking the necessary steps for complete alignment with national regulations and international principles.

The profit outlook remains cloudy

The earnings prospects of Italian banks are highly uncertain. The main source of vulnerability is the possible financial market repercussions of fears over euro-area sovereign debt, driving down the value of securities portfolios and raising medium- and long-term funding costs. Other factors are the low level of interest rates and the aftermath of the 2009 economic recession, which could affect lending growth and asset quality over the months to come. Nevertheless, the credit market is improving (see Section 2.2). The recovery in lending growth, if durable, will sustain interest income. The signs of improvement in credit quality may foreshadow a period of declining loan losses. Overall, however, the enhancement of profitability will require efficiency gains that permit permanent reduction of the ratio of costs to income.

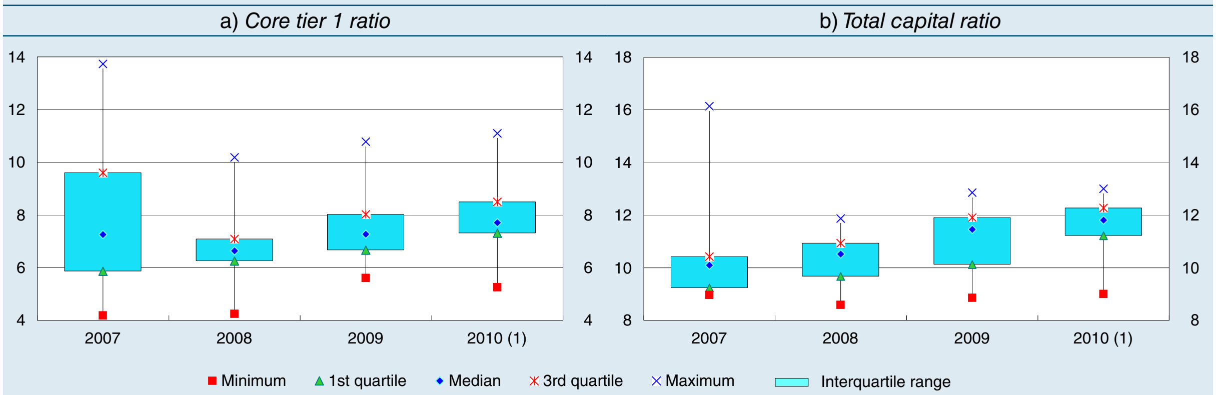
2.5 BANKS' CAPITAL

The capital base of the major Italian banks is strengthened ...

The capital ratios of the 14 largest Italian listed banking groups improved in 2010, thanks to retained earnings, capital increases, issues of hybrid and subordinated instruments, and the disposal of non-strategic assets. The improvement involved above all the groups with the lowest initial ratios. By the end of June the median core tier 1 ratio had risen to 7.7 per cent (Figure 2.16.a) and the total capital ratio to 11.8 per cent (Figure 2.16.b). The capital ratios of smaller banks not belonging to groups are higher, with a median tier 1 ratio of 14.9 per cent in June.

Figure 2.16

Italian banks' capital ratios
(per cent)



Sources: Half-yearly financial statements of the fourteen leading listed banking groups.
(1) As of June.

... but is less ample by international comparison

The capitalization of the large Italian banks, although well above the regulatory minimum, is less ample by international standards. Last June the average tier 1 ratio of a sample of 12 large European banks was 11.6 per cent, against 8.5 per cent for the leading Italian groups. The gap is largely the product of public injections of capital, which were very substantial for this group of foreign intermediaries and negligible for Italian banks, which strengthened their capital bases without significant government support. Thanks to their proportionally large traditional intermediation business and the small scale of their financial market activity, our banks' balance sheets show a more favourable leverage ratio (the ratio of total unweighted balance-sheet assets to tier 1 capital) than that of the foreign groups (19 for the entire Italian system and 22 for the major Italian groups, compared with a value of 27 for the large euro-area banks).

Capital positions will have to adapt to the new regulations

The capital position of Italian banks is closely related to profits and to the effectiveness of capital strengthening through the disposal of non-strategic assets. Earnings prospects can weigh both on profits and on income components that directly affect capital (such as changes in the worth of available-for-sale assets). At a time when capital must be sufficient to cope with large risks, credit risk in particular, banks must continue to strengthen their high-quality capital. Decisions on the distribution of dividends must be fully consistent with this objective. The support of controlling shareholders is essential to consolidate the expansion of own funds. From a broader perspective, banks will have to adapt to the new prudential regulations (see the box "The economic impact of the new capital adequacy and liquidity rules").

THE ECONOMIC IMPACT OF THE NEW CAPITAL ADEQUACY AND LIQUIDITY RULES

In November the G20 Heads of State and Government approved the essential structure of the new prudential rules for banks developed by the Basel Committee and by the Group of Governors and Heads of Supervision (see the box "The reform of the rules on banks' capital and liquidity", *Economic Bulletin*, October 2010).

The capital increase that will be required of Italian banks cannot yet be precisely estimated. Some of the technical details are still under discussion at the Basel Committee. A reasonably accurate assessment will be possible within the next few weeks.

In any case, it can be foreseen that in Italy, as elsewhere, banks will have to make a considerable effort to comply with the new standards, especially the capital adequacy requirements. By comparison with other countries, the medium-term effort required of Italian banks is distinguished by two main factors. First, in years past, unlike many countries' banks, Italian banks have not received significant government aid. And second, banks' regulatory capital will be affected by the decisions concerning the deduction of deferred tax assets and non-controlling equity interests. Nevertheless, Italian banks will benefit from the generally higher quality of their capital than foreign intermediaries'. What is more, the gradual phasing-in of the new capital rules will attenuate the effects on banks and on the real economy.

The impact of the new liquidity standards on Italian banks is also hard to quantify at the moment. Preliminary assessments suggest that the impact of the liquidity coverage ratio and the net stable funding ratio will be larger for the smaller banks included in the sample of the Quantitative Impact Study (QIS). [1]

The effects of the new method of computing capital charges for counterparty and market risk will be modest, overall, for Italian banks, reflecting the small scale of their business in the area of securities and finance. Nor should the imposition of a leverage cap beginning in 2018 have substantial effects, thanks to the large portion of Italian banks' total volume of business that consists in traditional lending and above all to the capital strengthening that must be carried out over the next few years.

The transmission of the regulatory impulse and the effects on the Italian economy

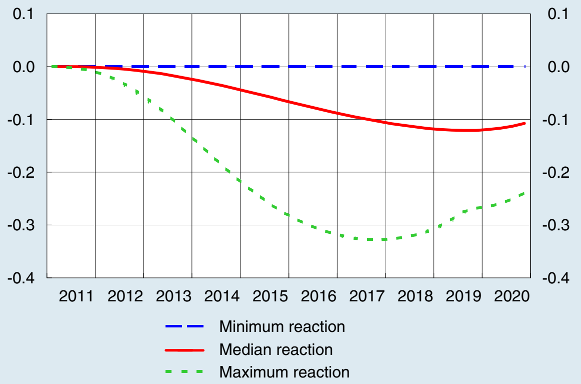
In recent months central banks and international institutions have examined the mechanisms by which the new rules will be transmitted to the credit market and the real economy in the short and medium term. First, using a spectrum of models, the effect of a 1-percentage-point increase in the capital requirement on banks' lending spreads was estimated. A similar procedure was followed for the new liquidity requirements, to assess the impact on the spread. Then an estimate of the effect of the consequent wider spreads on economic growth over the next few years was derived.

The provisional results of the exercise, conducted by the BIS Macroeconomic Assessment Group (MAG), were released in August. A second working group studied the long-term economic impact of the stronger capital and liquidity requirements, estimating the costs and benefits over the long run and concluding that the net effect on growth will be strongly positive. [2] The MAG's interim findings were based on the assumption that the reform would be fully phased in within four years. The estimates for Italy discussed here, like those of the forthcoming final report of the MAG, assume eight years, and are accordingly attenuated with respect to the earlier, interim estimates.

[1] The QIS was conducted by the Basel Committee to gauge the quantitative impact of the reform on the banking systems of the main countries. The results at international level will be released in the next few weeks.
[2] The Bank of Italy participated in these groups. Both reports are available at http://www.bis.org/press/p100818.htm.

A 1-percentage-point increase in the capital requirement is estimated to cause a widening of Italian banks' lending spreads of between 0 and 0.31 percentage points, depending on the estimation method employed. Assuming that the widening occurs gradually from 2011 to 2018, when the reform will be fully in effect, it can be estimated that a 1-point increase in the capital requirement would have a negative impact on Italian GDP of between 0 and 0.33 percentage points, with maximum values between 2017 and 2019 (see figure). GDP would subsequently recover and within 3 or 4 years regain the level it would have had without the regulatory reform. Thus, each 1-point rise in the capital requirement can be estimated to cost Italy between 0 and 0.04 percentage points of average annual GDP growth between 2011 and 2018.

Reaction of GDP to 1-percentage-point rise in capital requirements (1)
(percentage points)



(1) The performance of the economy has been simulated both on a current regulations basis (baseline scenario) and assuming that the increase in interest-rate spreads induced by a 1-point increase in capital requirements occurs gradually through 2018. For each estimate, a simulation was run and the difference from the baseline GDP growth curve calculated. The red curve is the median of these differences. The broken curves represent the extreme paths obtained by the various methodologies.

These estimates are subject to a number of uncertainties, the sign of whose net effect is not readily determinable. First, the estimates assume no monetary policy response to the possible restrictive effect of the reform; if instead the effect were countered by expansive policy, the negative impact on growth between 2011 and 2018 would be attenuated. On the other hand, the repercussions of the new rules would be aggravated if credit rationing emerged or if market conditions led banks to front-load recapitalization instead of fully exploiting the long transitional period allowed. In the worst-case scenario (which assumes adaptation to the new rules within two years, credit rationing, and no monetary policy response), the negative impact on average annual GDP growth in the three years from 2011 through 2013 would be between 0.02 and 0.14 percentage points for each 1-point rise in the capital requirement. This estimate is determined above all by the credit-rationing effect, which is more pronounced the shorter the transitional period. These estimates do not take account of other factors that might attenuate the impact on GDP, such as the potential lowering of banks' funding costs thanks to greater capitalization.

The estimated effect of the new liquidity requirements on the Italian economy is quite small, reducing annual GDP growth by less than 0.02 percentage points during the transitional period.

Overall, the estimates for Italy are in line with those for the G20 countries as a group.

If the impact on the economy as a whole should be relatively modest, the repercussions could be more severe on firms with weak financial structures, notably small businesses. Company Accounts Data Service indicates that firms with fewer than 50 workers are heavily indebted. In 2005-08 their financial debt was 58 per cent of financial debt plus equity, 2 points higher than for medium-sized firms and 10 points higher than for large firms. The lack of alternative sources of finance makes Italy's small enterprises dependent on bank credit, which accounts for more than 80 per cent of their financial debt.

However, the reform's ultimate impact on small firms will be attenuated by a number of factors. First, the new rules maintain the Basel 2 provisions on credit risk, under which – for a given customer credit rating – banks are subject to smaller capital charges for loans to small than to large firms. Second, small businesses borrow less from the large banks, which will be most affected by the reform (small firms get 45 per cent of their credit from the top five banking groups, compared with 53 per cent for large firms). Finally, most small and medium-sized banks, with their local roots and close relationships with customers, have a large enough capital base to maintain an adequate flow of funds to their customers, as they did during the financial crisis.

2.6 NON-BANK FINANCIAL INTERMEDIARIES

Specialized intermediaries

The situation of investment firms improves, but many remain in difficult conditions

In 2010, Italian investment firms' activity continued to pick up, especially in order collection and portfolio management. Profitability is improving, thanks partly to the measures taken to keep operating costs down. For the sector as a whole, the growth in regulatory capital (9 per cent) exceeded that in capital requirements (4 per cent). The effects of the recent market turbulence have not, however, been completely absorbed. Numerous intermediaries are still in difficult conditions (51 out of 114 investment firms recorded losses in the first half of the year), and could prove vulnerable to fresh financial turmoil.

Leasing, factoring and consumer credit companies are still feeling the effects of the recession

Business is picking up for companies specialized in leasing, factoring and consumer credit, but continues to be affected by the uncertain economic phase. The data on flows indicate that in the first half of 2010 the volume of new lending ceased to contract in the leasing sector and grew by 6.5 per cent in factoring, while in consumer credit it fell slightly (3.5 per cent). The modest level of activity in the securitization market did not lead to problems in the availability of funds, thanks to intra-group support.

Credit quality deteriorated in all sectors. The stock of non-performing loans rose to 12.0 per cent of the total for leasing, 6.8 per cent for factoring and 10.8 per cent for consumer credit, where bad debts alone rose to 7.9 per cent of total exposures.

Real-estate investment funds continue to have a high risk profile ...

The current cyclical phase of the Italian economy is affecting the operating results of real-estate investment funds, whose assets consist mainly of non-residential properties, which are especially sensitive to the business cycle. In recent months, numerous funds have recorded situations of fragility, because the composition of their liabilities is overweight towards the short-term (which could produce strain if the evolution of market conditions made it particularly costly or difficult to roll over loans). Not infrequently, the loans obtained by the funds contain covenants that are triggered by the deterioration of certain indicators (for example, the ratio of the loan granted to the value of the property used as collateral), obliging the borrower to repay all or part of the loan. Analyses conducted in recent months – under the hypothesis of a negative scenario – indicate that, in particularly negative property market conditions, the capital and income situation of a group of funds that at the end of 2009 accounted for around 10 per cent of the sector's total assets could become precarious.

... especially those set up as hedge funds

In recent months the tensions affecting real-estate investment funds reserved to qualified investors have persisted, above all for hedge funds. In particular, conditions are difficult for a set of funds accounting for 6.6 per cent of the total assets of the real-estate funds sector, due to the high risk associated with property development projects, high financial leverage, high vacancy rates and the realized capital losses on asset sales. By contrast, tensions have subsided for retail funds, which appear stable in the main, mostly because of their less risky investment policies and lower financial leverage.

There have been significant private equity write-downs

The financial market fluctuations have made it more difficult for private equity fund managers to carry out their strategies. In more than one case, the value of holdings fell significantly (by around €1 billion in the two years 2008-09); at times disposals proved difficult. In several instances the difficulty of closing the funds within the time limits set out in the management rules necessitated an extension by the Bank of Italy.

Based on supervisory data, the return achieved by the subscribers of the private equity funds in operation at end-2009 (calculated from the fund's inception and including fees) was negative overall by €260 million (against total resources paid in of around €8.6 billion). Fewer than a quarter of the 116 funds analysed achieved a positive rate of return. The investors had contractual commitments (for cash calls) equalling some €8 billion as of June this year. These are amounts that the investors must pay to the fund managers if the managers decide to undertake new investments.

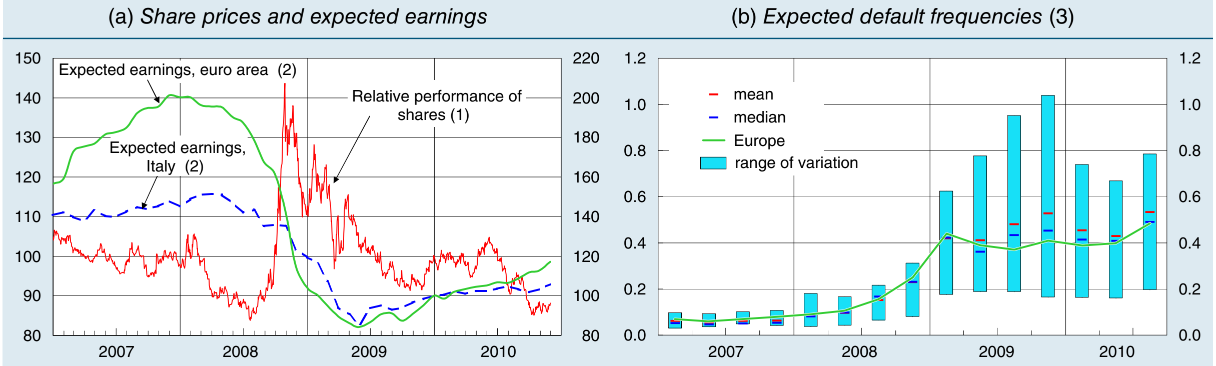
Insurance companies

The markets signal ongoing uncertainty for insurance companies

Market indicators signal uncertainty over the outlook for Italian insurance companies. The 2010 first-half results show a drop in profitability with respect to the previous year. The one-year forecasts of Italian companies' future profits formulated by financial analysts in 2010 have recouped part of the previous decline, while nonetheless deteriorating with respect to companies in the euro area (Figure 2.17.a), in part owing to changes in the tax treatment of life insurance reserves. The sector's share index has lost ground compared with the analogous euro-area index. The indicators of expected default rates derived from the share markets have deteriorated in recent months (Figure 2.17.b).

Figure 2.17

Insurance companies in Italy



Sources: Based on data from Thomson Reuters Datastream, IBES and Moody's KMV.
(1) Left-hand scale. Thomson Reuters Datastream index of share prices of the Italian insurance companies, in relation to the index for the insurance companies in the euro area. Daily data. Index, 31 December 2009=100. – (2) Right-hand scale. Average earnings per share expected for the 12 months following the reference date. Monthly data. Index, December 2009=100. 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 Morgan Stanley index of the insurance sector. – (3) Quarterly averages of daily data (monthly before August 2009 for the European index), in per cent. Expected default frequencies (EDFs), based on price and volatility of the shares of the reference companies, measure the probability that the market value of assets will fall below that of liabilities within 12 months. The chart shows the median and mean values and the range of variation for the quarterly averages of EDFs of the Italian insurance companies considered (listed above) and quarterly averages of the median EDFs for the companies included in Moody's KMV index of the European insurance industry.

The risks stemming from potential financial strains in the euro area are moderate

Overall, Italian companies have low levels of exposure to potential instability on the financial markets. They must, however, deal with low interest rates and the difficult conditions of the non-life sector, in particular that of third-party motor liability insurance.

Based on 2009 data, debt securities made up more than 70 per cent of the financial portfolio of Italian insurance companies (around 40 per cent of the total was in Italian government securities). Shares made up just over 10 per cent of the total. On the whole, exposure to the sovereign issuers in the euro area affected by strong tensions is very limited: according to a survey conducted by Isvap, last September Greek, Irish and Portuguese public and private securities accounted for about 2 per cent of the companies' total assets, significantly down from the early months of the year. This portfolio composition helps contain the effects of possible turbulence linked to a resurgence of the pressures on the sovereign borrowers.

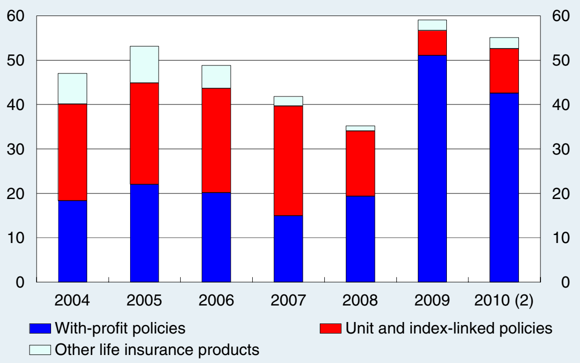
Profitability could be affected by low interest rates ...

In the current phase of low interest rates, the profitability of life insurance companies is being dented by the high share of liabilities with a guaranteed minimum return. It is estimated that these amounted to almost 70 per cent of the technical reserves in 2009, and the proportion has presumably increased in 2010, owing to the strong expansion of with-profit policies (Figure 2.18).

Figure 2.18

Life premiums written (1)

(annual data; billions of euros)



Source: Ania.
(1) Only premiums on new policies. – (2) January-October.

Looking ahead, an increase in market yields would have a positive effect on life insurance both because it would improve the profitability of the policies with a minimum return and in view of the high duration of the companies' liabilities. Higher rates could, however, affect the growth of new premiums written, especially if they were associated with heightened financial tensions or market volatility (which could curb demand for unit-linked and index-linked products, as happened during the financial crisis) and low economic growth, which would dampen households' and firms' demand for insurance products.

... and by the developments in premiums written

In the life sector, the large volume of premiums written in 2009-10 may not be sustained in the years to come: demand for with-profit policies could be affected by the downward revision of the guaranteed minimum returns by several companies. The contraction in margins could diminish the efforts of the distribution networks. The most recent data point to a deceleration in premiums written, to which the companies are responding also by offering unit-linked products with a guarantee at maturity. In the third-party motor liability sector, the companies increased the average premiums and have begun cutting costs, including through a rationalization of the distribution network. According to the rating agencies' assessments, these actions could help rebalance companies' technical account performance already in 2011.

Financial conglomerates can generate synergies but also risks

The corporate ties between banks and insurance companies within financial groups can enhance the profitability of the individual components and that of the group as a whole, but they can also generate risks of contagion between the two sectors (see the box: "Financial conglomerates: idiosyncratic risks and the framework of supervision"). There are currently six financial conglomerates in Italy. Three are primarily involved in banking or finance (Intesa Sanpaolo, Carige and Azimut), while the others are mostly active in insurance (Generali, Unipol and Mediolanum). Given the typical structure of these groups, in which one of the two sectors (banking or insurance) clearly dominates, the risk factors are not substantially different from those for financial groups that are not conglomerates.

FINANCIAL CONGLOMERATES: IDIOSYNCRATIC RISKS AND THE FRAMEWORK OF SUPERVISION

Since the beginning of the 1990s there has been a worldwide increase in corporate ties between banks and insurance companies, with an increase in the number and size of financial conglomerates. This was prompted by the quest for greater diversification of sources of income and for potential synergies in financial product placement. In recent years, and especially during the crisis, this trend was inverted. Some banking groups gave up their strategic holdings in the insurance sector in favour of simple trade agreements for the distribution of insurance products. In Europe the number of conglomerates subject to supplementary supervision fell from 69 in July 2007 to 57 in June 2010.

As often happens in diversified corporate groups, financial conglomerates can heighten the risk of contagion, accelerating the transmission of financial tensions at any firm within the group. For example, a "sound" component in a conglomerate could be obliged to help one in difficulty, through transfers of liquidity or capital. Additional elements of vulnerability may stem from difficulty in building adequate governance and control systems against a backdrop of highly diverse corporate cultures and from the potential for regulatory arbitrage, given sectoral norms that have not been fully harmonized.

European legislation on the supervision of financial conglomerates is designed to supplement the sectoral rules on banking and insurance with regulations capable of guaranteeing the scrutiny of the capital base, risks, and control systems of the conglomerate as a whole. The regulations are aimed at safeguarding the ability of supervisors to ensure the stability of each individual component of the conglomerate, even in particularly complex groups. The 2002 Financial Conglomerate Directive provides for supplementary supervision, in addition to the controls envisaged for the banking and insurance components. In particular, the rules concern capital adequacy, risk concentration, intra-group transactions and the internal control system.

The main synergy created by the group structure lies in the possibility of distributing insurance products through the bank branch networks. In the first ten months of 2010, Italian banks collected around 70 per cent of total premiums on new life insurance policies; in 2009 it is estimated that around one quarter of the life insurance premiums collected through bank branches derived from cross-selling within the same group. This method of distribution has, however, led to friction during the most acute phases of market illiquidity, when the banks gave precedence to the placement of their own liabilities.

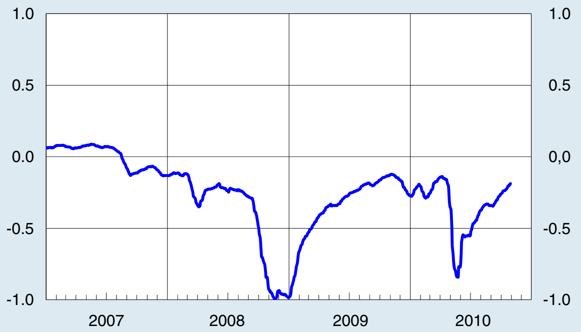
3 MARKETS, PAYMENT SYSTEMS AND INFRASTRUCTURES

Following the deterioration recorded in May and June in connection with worries about the sustainability of the public finances in a few euro-area countries, the liquidity conditions in Italy's financial markets improved. Fresh tensions emerged in November, with the Irish crisis (see the box "A financial market liquidity indicator for Italy"). Demand for Italian government securities remained high, even during the phases of greatest difficulty on the international markets, permitting the easy placement of the securities being issued.

A FINANCIAL MARKET LIQUIDITY INDICATOR FOR ITALY

This box describes an indicator of the degree of liquidity of the most important market segments for Italian banks: the euro money market, the secondary market for Italian government bonds (BTPs), the euro exchange rate against three major currencies, and the Italian stock exchange, Borsa Italiana.[1] The indicator's performance makes it possible to map the four phases in which the crisis unfolded in Italy. The first, which began in the summer of 2007, was marked by the rapid fall in the markets' liquidity, owing above all to the increase in interbank risk premiums. In the second phase, the early months of 2008, the turmoil spread to the bond market and intensified. Strains were most acute in the autumn of 2008 and the winter of 2009. The final phase, during the spring and summer of 2010, was linked to the concerns over the public finances in a few euro-area countries. In recent months liquidity conditions improved, up until the Irish crisis in November, which has rekindled tensions on the markets.

Composite liquidity indicator (1)
(daily data; index range: -1 to +1)



Sources: Based on data from Thomson Reuters Datastream, Bloomberg and Bank of Italy.
(1) Positive (negative) numbers indicate higher (lower) liquidity than the average for 1999-2006; 20-day moving averages.

[1] The indicator is calculated using standard methods (see the Bank of England's *Financial Stability Report*, April 2007, and the ECB's *Financial Stability Review*, June 2007), based on seven elementary series: (a) the average bid-ask spread on the shares that form the FTSE MIB index; (b) the average return-to-volume-ratio for the same group of shares, calculated for each as the ratio of the change in price to the volume of trading as a proportion of total market capitalization; (c) the average bid-ask spread on BTPs on the wholesale secondary market in government securities (MTS); (d) the volume of buy and sell proposals displayed by market makers on the MTS pages; (e) the liquidity risk premium, estimated as part of the spread between the rate on unsecured interbank lending (Euribor) and the overnight indexed swap (OIS) at 1-year maturity; (f) the sum of the volumes traded on the e-MID, MIC and MTS-general collateral markets; (g) the average bid-ask spread on the EUR/USD, EUR/JPY and EUR/GBP exchange rates. The indicator is calculated as the simple average of the seven elementary series, standardized using the corresponding means and standard deviations for the period 1999-2006. The daily series of the indicator so obtained was divided by the highest total value reached (on 20 November 2008), in order to keep the variation within the interval -1 to +1.

3.1 THE INTERBANK MARKET

In the last three years, Italian banks' attention to credit and liquidity risks has influenced the functioning of the interbank market.

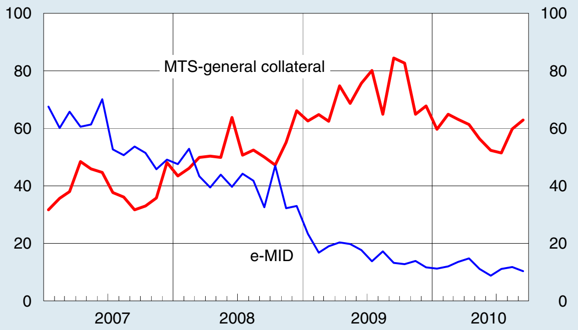
Preference for collateralized and OTC transactions grows

The preference of banks for transactions backed by collateral has grown. At the beginning of 2007, the volume of unsecured interbank fund trading on the e-MID platform was twice that of the repo transactions on the MTS-general collateral segment (Figure 3.1). Since then, the proportion has declined almost uninterruptedly, to a low of one fifth in 2010.

Figure 3.1

Trading on Italian electronic money markets (1)

(monthly data; billions of euros; overnight equivalent)



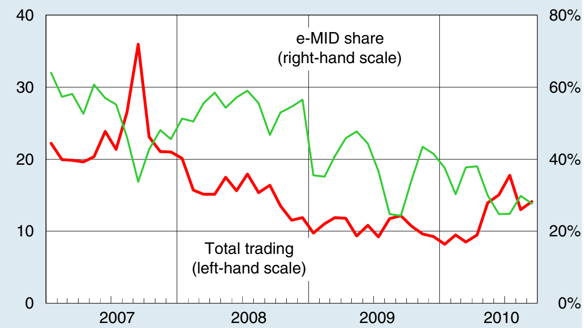
(1) Overnight equivalent is the average of trading volumes at the various market maturities weighted by contract duration.

Recourse to central counterparty services has also increased (see Section 3.6). In the MTS-general collateral segment, the share of trades cleared by a central counterparty has risen from 40 to 70 per cent, after reaching peaks of 90 per cent. The trend reflects the increase in the number of Italian banks that opt to work in this way (up to 23 in 2010, from 11 in 2007) and the possibility, since November 2009, of using a central counterparty for overnight repo contracts as well.

Figure 3.2

Overnight money market trading activity, total and e-MID (1)

(daily averages; billions of euros and per cent)



(1) Total overnight money market trading activity is estimated on the basis of TARGET2-Banca d'Italia data.

The share of transactions carried out in the over-the-counter (OTC) market has increased. With reference to the overnight, tomorrow-next and spot-next interbank deposits, it is estimated that in September 2010 the trades carried out by Italian banks on e-MID accounted for one third of the total (e-MID and OTC), down from two thirds before the crisis (Figure 3.2). The share of time deposits with one-week maturity traded on the OTC market has also risen significantly. [1]

These changes are the bequest of the crisis, which has heightened intermediaries' sensitivity to credit and liquidity risks. The increase in collateralized trading and the greater recourse to central counterparties have helped to contain the effects of a borrower default. The interposition of the central counterparty, aside from minimizing counterparty risk, makes the transactions anonymous and enables market participants to avoid disclosing their need for liquidity. Lower visibility can also be achieved by recourse to the OTC markets, which enable banks to contact directly, on a bilateral basis, the counterparties with whom they have the largest credit lines. These trends may continue to characterize interbank trading even after the crisis.

[1] The estimates of the OTC trades were derived from TARGET2-Banca d'Italia data using an algorithm that associates payment flows of opposite sign between two banks (see C.H. Furfine, "The Microstructure of the Federal Funds Market", *Financial Markets, Institutions and Instruments*, 8/5, 1999).

The NewMIC has commenced trading

Intermediaries' heightened preference for forms of anonymous and collateralized trading is the main reason behind the development of the Collateralized Interbank Market or MIC (see the box "The collateralized interbank market"). The new market has delivered benefits above all for smaller banks, which were particularly badly hit by the drastic reduction in bilateral credit lines following the crisis. Given the success of the new collateralized market, as the end date for the MIC drew near, its participants decided to establish the NewMIC.

THE COLLATERALIZED INTERBANK MARKET

To foster a recovery in interbank trading activity and to reduce its concentration on very short-term maturities, in February 2009 e-MID SIM S.p.A., together with the Bank of Italy, created the Collateralized Interbank Market (MIC), an anonymous and guaranteed market for euro-denominated interbank deposits with maturities of one week or longer (see *Economic Bulletin*, January 2009). The MIC has recorded substantial growth in both the volumes traded (Figures A and B) and the number of participants. In September, 58 banks participated in MIC, which together hold four fifths of the total assets of the Italian banking system. The outstanding amount of deposits traded reached €10 billion; their average maturity, which at the end of 2009 exceeded three months, declined naturally in the run-up to the expiration on 31 December 2010 of the Bank of Italy's guarantee scheme, which progressively limited the maximum maturity of the deposits. The value of the securities pledged as collateral by the participants peaked at €20 billion in April; the share of those not eligible for Eurosystem operations but admitted to the MIC gradually declined for almost all the banks, to an average of 5 per cent of the total. For a deposit for the same maturity, the rates on the MIC were generally lower than those on unsecured contracts (Euribor and e-MID) and higher than those on repos (Eurepo), mostly owing to the lower quality of the collateral posted in the MIC.

Figure A

Outstanding amount, residual maturity and duration of contracts
(weekly data)

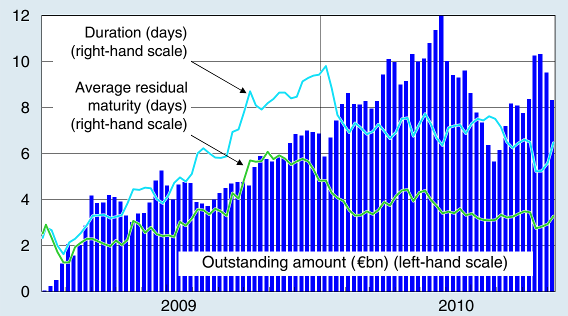
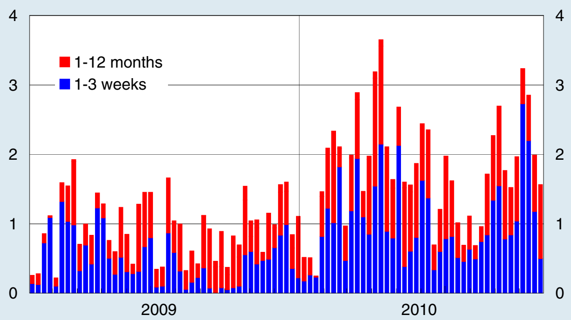


Figure B

Breakdown of volumes by maturity
(weekly data; billions of euros)



In view of the trading system's success, before the end of 2010 when the MIC was due to expire, market participants decided to create the NewMIC, whose main difference with respect to the MIC is the discontinuation of the Bank of Italy's role following the transfer of the management of the market guarantee scheme to Cassa di Compensazione e Garanzia S.p.A.[1] In the first two months of activity, the average daily volume on the NewMIC amounted to €600 million, while outstanding deposits progressively expanded to reach €10 billion at the end of November. All maturities were continuously quoted on the new market.

[1] The NewMIC also differs from the MIC in several technical respects. The maturities traded were increased, the securities accepted as collateral were limited to those eligible for Eurosystem operations, and diversification requirements were introduced.

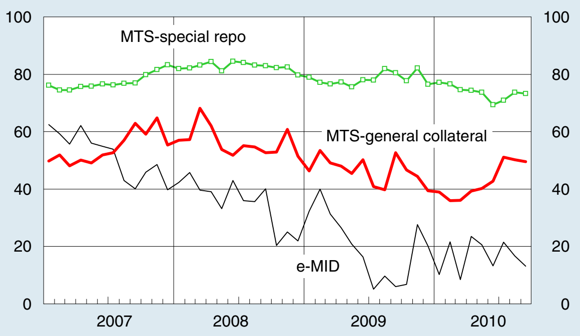
Trading between domestic and foreign banks is thinning

In Italy, as in the other euro-area countries, since the beginning of the crisis the share of unsecured interbank trades between domestic and foreign intermediaries has fallen, reversing the previous upward trend. The trades carried out by foreign banks on the e-MID platform have declined to between 10 and 20 per cent of the total, from 60 per cent three years previously (Figure 3.3). By contrast, in the special repo and general collateral MTS segments[2] the market share of foreign operators has varied much less. These trends presumably reflect the growing focus on default risk: in the absence of collateral, banks have favoured domestic counterparties, whose creditworthiness can be assessed more accurately; this preference may have been partly due to the fear of having to resort, in the event of default by a foreign counterparty, to credit recovery procedures in a foreign regulatory and legal jurisdiction.

Figure 3.3

Non-residents' share of Italy's electronic markets (1)

(monthly data; per cent)



(1) Based on remote access trading activity.

The main banking groups have centralized their treasury management

Italy's main banking groups have centralized the raising of liquid funds at the bank responsible for treasury management. The phenomenon, which is more marked in the case of trades with non-resident counterparties, was favoured by the review of treasury arrangements triggered by the migration to TARGET2. It can be ascribed, in the first instance, to the objective of efficiency, in a context that, up until the sharp increase in liquidity offered by the ECB in the autumn of 2008, was characterized by acute difficulty in fund-raising. It could also reflect the desire to centralize treasury operations at the banks deemed the most sound and best able to raise funds on behalf of the entire group.

3.2 ITALIAN BANKS' USE OF EUROSYSTEM REFINANCING

The Italian banking system makes limited use of central bank refinancing

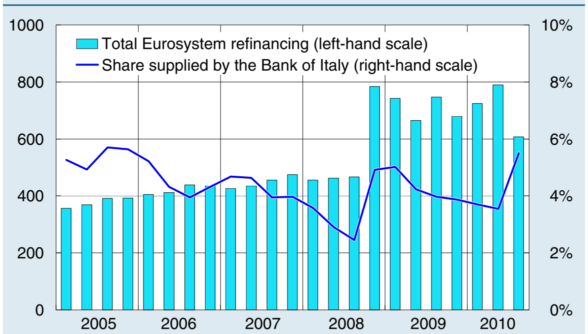
From the inception of the monetary union Italian banks have participated to a limited extent in Eurosystem monetary policy operations, mostly obtaining liquidity on the interbank market. Since the autumn of 2008, when the crisis became acute, the gross refinancing granted to the Italian banking system has grown in absolute terms but has remained close to 4-5 per cent of the total Eurosystem loans to euro-area banks (Figure 3.4). This percentage is much smaller than Italian banks' share of the euro-area banking system (about 12 per cent on the basis of the minimum reserve requirement).

The limited use of Eurosystem refinancing by the Italian banking system also reflects the structure

Figure 3.4

Italian participation in Eurosystem refinancing (1)

(quarterly data; billions of euros and per cent)



Sources: ECB and Bank of Italy.
(1) Refinancing disbursed by the Bank of Italy to banks operating in Italy.

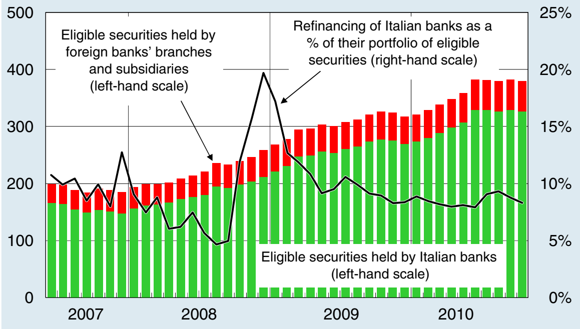
[2] In the general collateral repo contract the security posted can be selected from a basket, while the special repo contract provides for the delivery of a predetermined security.

of banks' balance sheets, marked by a large proportion of highly liquid securities; it is not due, instead, to a lack of collateral. In September 2010 the eligible securities held by Italian banks amounted to more than €350 billion (Figure 3.5); the proportion deposited with the Bank of Italy in connection with monetary policy operations was less than 10 per cent and even in the periods of greatest tension it did not rise above 20 per cent.

Figure 3.5

Italian banks' holdings of securities eligible for monetary policy operations (1)

(quarterly data; billions of euros and per cent)



Sources: ECB and Bank of Italy.
(1) Including foreign banks' branches and subsidiaries.

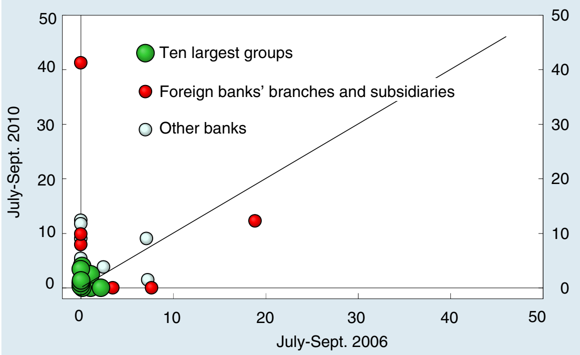
Some banks have begun to make use of the Eurosystem

Some Italian banks that until the summer of 2007 had raised funds exclusively on the interbank market have recently obtained liquidity from the Eurosystem. This development – on a very limited scale, including by comparison with the rest of the euro area – in recent months has been of modest importance for some small and medium-sized banks and foreign banks' branches and subsidiaries (Figure 3.6).

Figure 3.6

Eurosystem refinancing as a proportion of Italian banks' total assets (1)

(averages of monthly data in the quarters indicated; per cent)



(1) Ratio of the average Eurosystem refinancing in the two quarters indicated to total balance-sheet assets. For Italian banks the figures are consolidated on a group basis.

At the end of June 2010 six and twelve-month refinancing operations, which the ECB has stopped renewing (see the *Abridged Version of the Annual Report for 2009*, Chapter 7 "The common monetary policy"), accounted for 62 per cent of the total loans granted by the Eurosystem to Italian banks (the corresponding figure for the euro-area banking system was 76 per cent). The maturity of these operations was not marked by significant liquidity strains among Italian banks. The ECB has recently announced that the method of fully allotting the amounts bid for at auction will be maintained in the early months of 2011. Looking ahead, with the progressive return to the offer of ordinary forms of liquidity by the Eurosystem, Italian banks will have to adapt, albeit only slightly, the ways in which they meet their need for liquidity.

3.3 THE EQUITY MARKET

Share prices do not appear out of line in relation to the underlying determinants

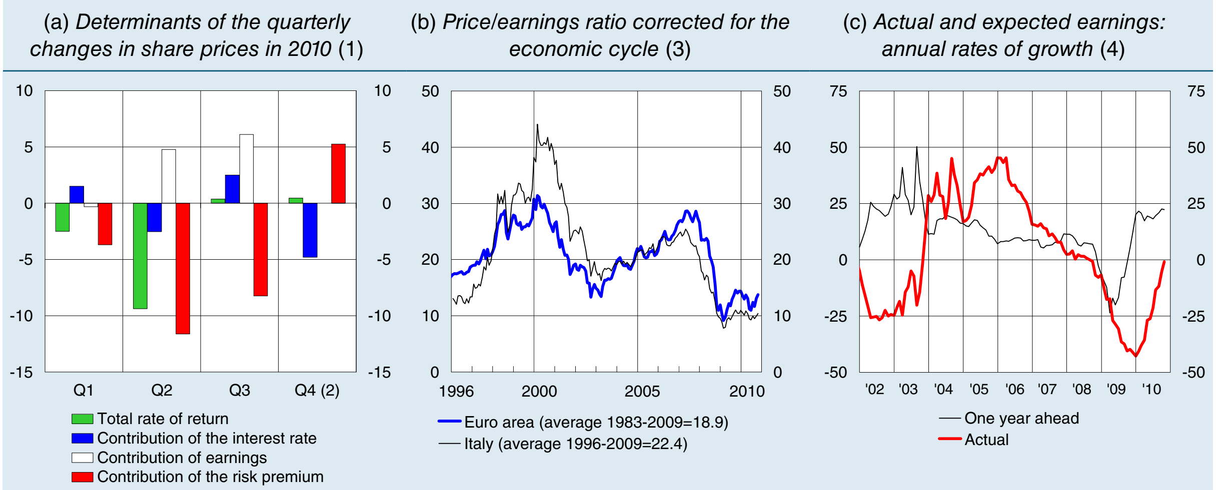
Since the summer Italian share prices have benefited from the improvement in corporate profits (Figure 3.7a). The cyclically-adjusted price/earnings ratio is below the average for the period since the mid-1990s (Figure 3.7b).

The risks of possible share price variations appear to be balanced. On the one hand, the uncertainty surrounding the growth prospects of the Italian economy increases the risk premium and depresses the value of the shares of listed Italian companies. On the other hand, the outlook for corporate profits, derived from financial analysts' forecasts, appears optimistic:

despite the weak cyclical recovery, profits are expected to grow at more than twice the average annual rate since the mid-1990s (Figure 3.7c). The risk of corrections in market valuations is related to the uncertainty of the economic cycle and the possibility of a worsening of the fears about the sustainability of the public finances in some euro-area countries. The performance of the Italian stock exchange has a limited impact, however, on the state of the country's economic and financial system, in view of its small size in relation to the real economy and households' total wealth.

Figure 3.7

Borsa Italiana: share prices and earnings



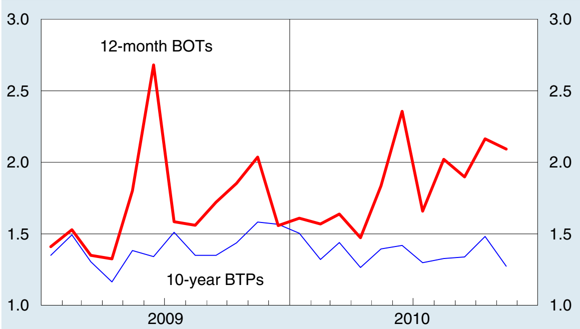
Sources: Based on data from Bloomberg and Thomson Reuters Datastream.
(1) Quarterly data; percentage rates of return in the quarter and their determinants. The quarterly rate of return is broken down into the contributions of the three fundamental determinants (expected earnings, long-term interest rates and the risk premium) assuming that the risk premium is equal to the difference between the nominal return on shares (equal to the ratio between earnings per share forecast by the financial analysts of the IBES panel for the following 12 months and the share price index) and the yield on 10-year government bonds. – (2) October and the first 20 days of November – (3) Monthly data; price/earnings ratio. Ratio of the share price index to the 10-year moving average of earnings per share, both adjusted for inflation. – (4) Monthly data; per cent.

3.4 THE MARKET FOR GOVERNMENT SECURITIES

In 2010 the placement of Italian government securities proceeded regularly, benefiting from strong demand. The cover ratio remained high, including during the periods of tension on the euro-area sovereign debt markets (Figure 3.8). Foreign investors' demand has progressively increased and they now hold 50 per cent of the total stock; the public debt thus remains spread across a broad and diversified range of investors. Further progress has been made in lengthening the average duration of Italian government securities, which is now in line with or longer than that of the other main euro-area countries (Figure 3.9).

Figure 3.8

Cover ratios at the auctions of 12-month BOTs and 10-year BTPs (1)
(data collected at new issue auctions)



(1) Ratio of the quantity demanded to the quantity offered at each auction.

The MTS market has guaranteed continuous trading in government securities ...

Despite the turbulence that has broken out on several occasions in the international markets, in 2010 the MTS market has guaranteed continuous trading in both on- and off-the-run issues. Misalignments between the prices of homogeneous securities (in terms of type and residual maturity) have been limited in number and small in comparison with those of the other major European sovereign issuers. The effects of the Greek crisis reversed during the summer (Figure 3.10): bid-ask spreads fell back to the levels obtaining at the beginning of the year, and the quantities quoted and the volumes traded increased for the least liquid securities as well. Tensions re-emerged in November in connection with the Irish crisis. The liquidity and depth of the secondary market in government securities are still less than before the financial crisis.

... and continued to guide dealers in the auction price-setting process

The functionality of the MTS electronic platform has facilitated the Treasury's placement of securities on the primary market. The volume of trading in on-the-run issues has been substantial and has helped to reduce potential purchasers' uncertainty, thus contributing to the determination of the prices at auction. The difference between placement prices and the MTS market prices just before auctions has remained modest, of the order of a few basis points for 10-year BTPs (Figure 3.11). Italian government bond specialists have contributed to the smooth functioning of the market (see the box "Italian government bond specialists' contribution to trading on the MTS market").

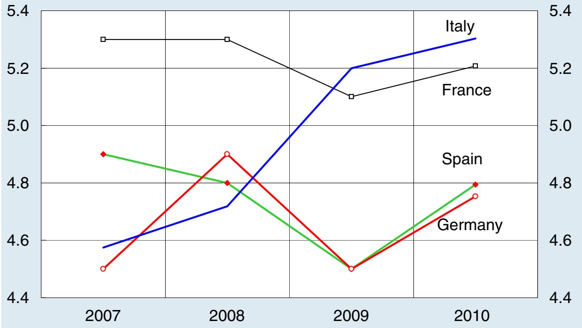
The concentration of trading at the main MTS dealers has increased slowly but steadily. A factor in diminishing the risks inherent in this trend has been the use of a central counterparty, which now handles more than 80 per cent of cash trades. The increased concentration reflects both the mergers among international dealers following the financial crisis and the transfer of some small and medium-sized Italian banks' trading to the BondVision market. By using an Internet-based platform, this market brings the main MTS dealers into direct contact with other intermediaries and institutional investors (insurance companies and asset management companies).

The new futures contracts could increase the liquidity of BTPs

The decrease in the correlation between the yields of Italian and German government securities in the

Figure 3.9

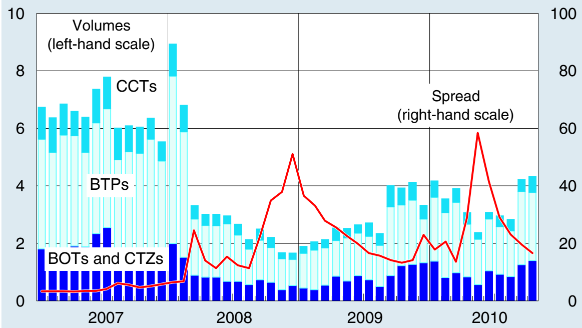
Average duration of government securities (1)
(duration in years of end-of-period stocks)



Sources: OECD, Thomson Reuters Datastream and Bank of Italy.
(1) Measured with reference to domestic debt. For 2010 the data refer to September and the source is Reuters. For the preceding years the source is the OECD (the Bank of Italy for Italy).

Figure 3.10

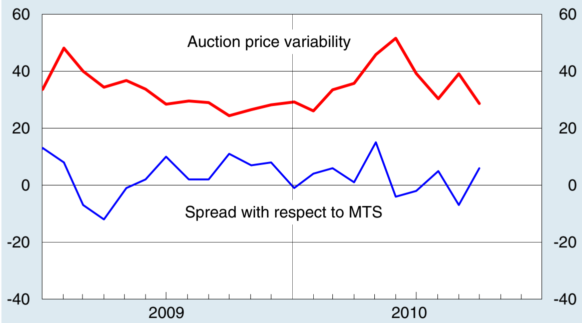
Bid-ask spread and volumes traded on MTS (1)
(monthly data; basis points and billions of euros)



(1) The spread is measured as the mean of the bid-ask spreads observed during the trading day for all the BTPs listed on MTS. Data to end-October 2010.

Figure 3.11

Auction price variability and spread with respect to the MTS market: 10-year BTPs (1)
(data observed at auctions; basis points)



(1) Standard deviation of the prices bid at individual auctions and the difference between the allotment price (equal to the marginal price in BTP auctions) and the price of the security observed on MTS five minutes before the deadline for presenting bids.

wake of the crisis reduced the effectiveness of the previously common practice of using Bund-based derivatives to manage the risk on BTPs. In September 2009 the Eurex derivatives market accordingly introduced a 10-year BTP futures contract, followed in October 2010 by a 3-year BTP futures contract. Although these contracts have not yet aroused any great interest among investors, looking ahead they could increase the liquidity of Italian securities and help to curb their volatility and yields.

The strong downward pressure recorded on several occasions on bond and equity prices led some regulatory authorities to introduce restrictions on short selling and the European Commission to adopt a proposal for a regulation (see the box "The proposal for a European regulation on short selling").

ITALIAN GOVERNMENT BOND SPECIALISTS' CONTRIBUTION TO TRADING ON THE MTS MARKET

The orderly functioning and efficiency of the MTS market are an important factor in the stability of the Italian financial system. Accordingly, the Bank of Italy is entrusted by law with a special role in the supervision of this market, as part of which it calculates quantitative indicators designed to assess the government bond specialists' contribution to the MTS market's overall efficiency. The securities listed on the market are divided into seven groups according to the category they belong to and their liquidity. For each group the Bank of Italy analyses a range of parameters with reference to each specialist: the average spread, weighted by the time the price was displayed on the platform; the orders received; the number of securities quoted and traded; and the quoted quantities weighted by the time they were displayed.

Taken together, these indicators show that during the crisis the specialists contributed to different degrees to the smooth functioning of the market. The contribution of some large international intermediaries diminished, while that of Italian banks remained basically unchanged compared with the past, with an improvement in their trading parameters. In particular, during the period of tension from April to June 2010, Italian banks continued to ensure liquid trading, both for the securities that are traditionally most important for the domestic market (such as CCTs) and for the others. The share of the MTS market of foreign dealers trading via remote access remains large (about 80 per cent); only three of the twenty government bond specialists selected by the Ministry for the Economy and Finance are Italian banks.

THE PROPOSAL FOR A EUROPEAN REGULATION ON SHORT SELLING

The European Commission has recently published a proposal for a regulation on short selling and certain aspects of credit default swaps.[1] The initiative, which concerns both securities and CDSs (often used to take short positions in the underlying bonds), is intended to mitigate the threats to orderly trading that can derive from short selling at times of tension on the financial markets. To this end the competent European national authorities and the European Securities and Markets Authority would be authorized to impose temporary restrictions on short selling and credit default swap transactions. The Authority would be charged with coordinating the different initiatives (see the box "The reform of financial supervision in Europe" in *Economic Bulletin*, October 2010). The proposal also provides for greater transparency vis-à-vis regulatory authorities.

The advantages of the proposal are coupled with possible drawbacks. In particular, the introduction of a transparency regime for short selling could curb transactions that contribute to the price-discovery process. The legislative text currently being examined by the European Council and the European

[1] Short selling is a practice where an intermediary sells a security not in its possession with the intention of buying an identical security at a later date. Naked short selling occurs when the seller has not arranged to borrow the securities before the settlement date of the sale.

Parliament takes account of these concerns with respect to the government securities market, by providing for the disclosure of information only to the authorities and exempting some types of transaction (market making and activity on the primary market) from the rules. Lastly, thresholds taking account of national characteristics are identified for the activation of the measures.

3.5 THE CREDIT DEFAULT SWAPS MARKET

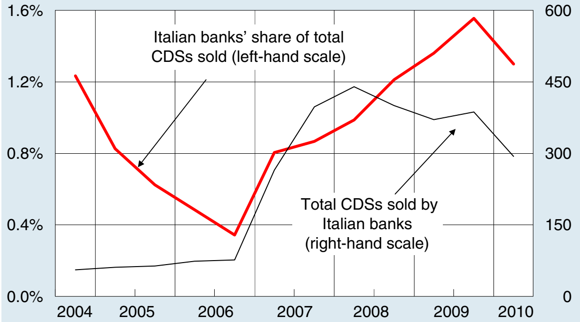
The notional value of CDSs on Italian issuers is substantial

Italian banks' net position in CDSs is basically balanced (see Section 2.3). Measured in terms of the gross notional value of CDSs sold, Italian banks' activity in this market in the middle of 2010 amounted to nearly $300 billion,[3] or 1.3 per cent of the global total (Figure 3.12).[4] Italian intermediaries' share of this segment is much smaller than their share of all international banking business (of the order of 5 per cent with reference to the leading countries).

Figure 3.12

Italian banks in the CDS market

(half-yearly data; billions of dollars and percentage share of the outstanding gross notional values)



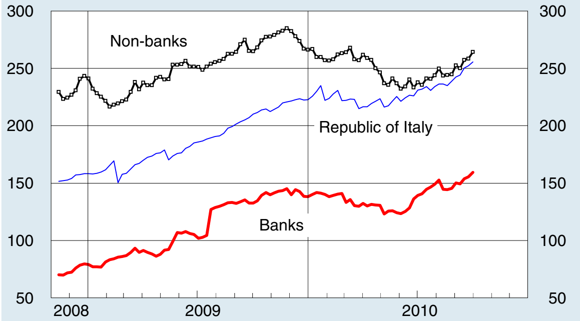
Sources: Based on BIS and Bank of Italy data.

Detailed information on the issuers of the securities underlying the CDSs sold by Italian banks (the reference entities) is not available. By contrast, statistics have been published since 2008 on reference entities, including Italian ones, regardless of the intermediaries that sold the CDSs. In September 2010 the gross notional value of the outstanding contracts on securities issued by the Italian government exceeded $250 billion (Figure 3.13), the highest value in the world for a single name. The gross notional value for all Italian non-bank corporations is about the same, while that for banking reference entities is about $160 billion. Overall, the CDSs of Italian issuers account for 4 per cent of the world total of single-name contracts.

Figure 3.13

CDSs on Italian reference entities (1)

(weekly data; stocks in billions of dollars; gross notional values)



Source: Based on Depository Trust & Clearing Corporation (DTCC) data.
(1) The reference entity is the issuer of the security underlying the CDS contract.

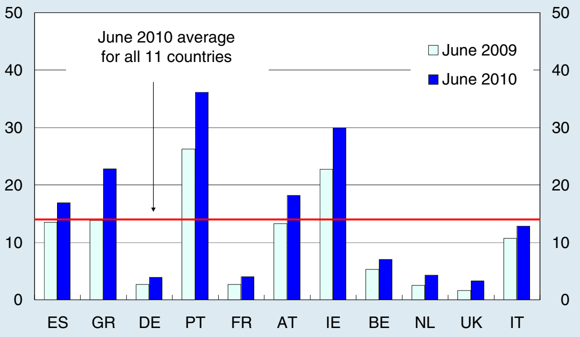
As a ratio to the value of deliverable securities,[5] CDSs on Italian government securities were equal to 13 per cent, which was less than the European average of 15 per cent (Figure 3.14). Significantly higher values have been recorded by the three countries affected in recent months by fears regarding the sustainability of their public finances. The ratio of CDSs

[3] This is the gross notional value of the CDS contracts sold by Italian banks. It is not comparable with the fair value of CDSs discussed in Section 2.3.
[4] With effect from mid-2008 the main intermediaries at global level agreed to eliminate redundant positions on a mutual basis; the industry calls this operation "compression" and conducts it on a multilateral basis, partly through specialist companies. This treatment has brought a contraction in the total stock of CDSs at global level.
[5] Deliverable securities are those issued by reference entities with respect to which, in the event of default, the holders of their CDSs are entitled to reimbursement by the intermediaries that sold them.

Figure 3.14

Ratio of CDSs to selected sovereign issuers' deliverable debt (1)

(per cent)

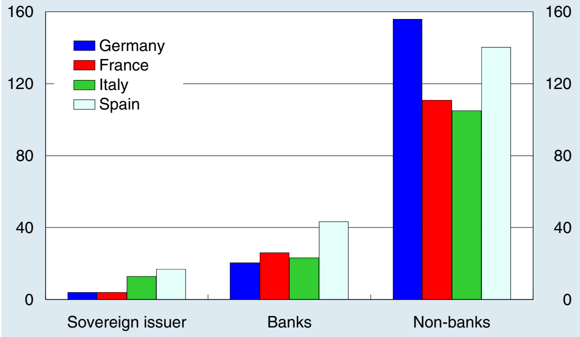


Sources: Based on Bloomberg and Depository Trust & Clearing Corporation (DTCC) data.
(1) Ratio of the gross notional value of the outstanding CDSs to the value of countries' deliverable debt, calculated on the basis of the International Swaps and Derivatives Association's definitions for credit derivatives.

Figure 3.15

Ratio of CDSs to some euro-area countries' deliverable debt (1)

(at 26 June 2010; per cent)



Sources: Based on Bloomberg and Depository Trust & Clearing Corporation (DTCC) data.
(1) Ratio of the gross notional value of the outstanding CDSs to the value of countries' deliverable debt, calculated on the basis of the International Swaps and Derivatives Association's definitions for credit derivatives.

to deliverable debt is particularly high for private issuers (Figure 3.15), especially non-bank corporations. The differences between the various categories of borrowers are much greater than those between countries, suggesting the existence of a positive relationship between the ratio and the issuer credit risk perceived by investors. However, they may also reflect the different stages of development of the various market segments (CDSs on sovereign securities are more recent than those on other issuers).

In the CDS market, as in the markets for other derivatives, the gross notional value of the outstanding contracts is much larger than the net value, that is the value of the positions that have not been offset by individual intermediaries with others of opposite sign. The ratio between these two aggregates is about 9 for the contracts on Republic of Italy securities and about 16 for the other Italian bank and non-bank reference entities (similar differences are found in the other leading European countries). The gap between the gross and net values is partly due to CDS contracts being used to take positions on the market and not only to hedge against issuers' insolvency.

3.6 THE ROLE OF CENTRAL COUNTERPARTIES

The CC&G has increased its margins

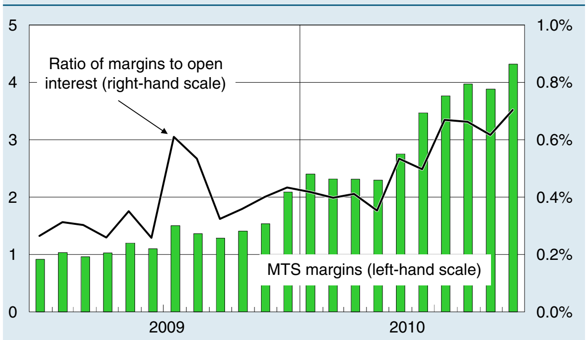
In the last few months the pronounced volatility of the market led Cassa di Compensazione e Garanzia S.p.A. (the CC&G) to increase its initial margins in several steps (Figure 3.16). The CC&G also increased the frequency of its stress tests and boosted the value of the default funds for bonds and shares (see the box "Cassa di Compensazione e Garanzia S.p.A.").

Looking ahead, the extension of central counterparty services to OTC derivatives

Figure 3.16

Cassa di Compensazione e Garanzia: government security open interest and margins (1)

(monthly data; billions of euros and per cent)



Sources: Based on Cassa di Compensazione e Garanzia data.
(1) MTS participants' open interest (commitments entered into) and initial margins paid to Cassa di Compensazione e Garanzia.

will simplify the contractual relationships between intermediaries and make the management of counterparty risk more efficient. The increased concentration of activity at a small number of central counterparties nonetheless requires close cooperation between the different regulatory authorities on the derivative markets, the related infrastructures and the intermediaries that operate on them (see the box "International initiatives on central counterparty services for OTC derivatives").

CASSA DI COMPENSAZIONE E GARANZIA S.P.A.

Cassa di Compensazione e Garanzia S.p.A. (the CC&G) acts as the central counterparty in the markets for shares, bonds and equity and energy derivatives. Since October 2010 it has also played this role in the NewMIC collateralized interbank market. Membership of the CC&G allows dealers to concentrate their trades on the market with a single body, the central counterparty, which clears the transactions (by offsetting each dealer's various buy and sell positions). This allows investors to minimize their counterparty risk and the operational costs associated with trading. The interposition of the CC&G also allows trading to be anonymous insofar as its guarantee of the performance of contracts makes the identity of the counterparty irrelevant.

To protect itself from dealer default, the CC&G requires each participant to pay margins on a daily basis (initial margins) or even an intraday basis in accordance with its open interest, assuming "reasonably likely" price variations. The parameter used to calculate the guarantee (the margin interval) is determined on the basis of the price variability of each financial instrument. Additional risks, connected with very large price variations in short periods of time, are covered by recourse to default funds, calculated on the basis of stress tests carried out by the CC&G, which also activates the buy-in procedures it has laid down for the compulsory purchase of financial instruments not delivered on the scheduled day establishing both timing and method.

On the electronic platforms for the trading of Italian government securities (MTS, EuroMTS, and BrokerTec), agreements between the CC&G and LCH.Clearnet SA make it indifferent for dealers which central counterparty they use.

INTERNATIONAL INITIATIVES ON CENTRAL COUNTERPARTY SERVICES FOR OTC DERIVATIVES

In September the European Commission published a proposal for a regulation on OTC derivatives and central counterparties (the European Market Infrastructure Regulation) intended to increase the transparency, efficiency and stability of the derivatives market. The most important innovations concern: the introduction of an obligation to clear standardized OTC contracts via central counterparties; the obligation to notify information on all OTC derivative contracts to trade repositories; the specification of a harmonized authorization and regulation regime for central counterparties located in the European Union, with the involvement of the European Securities and Markets Authority, central banks and bank and market regulatory authorities; and the authorization of the European Securities and Markets Authority to register and deregister trade repositories and supervise them. The provisions of the European Market Infrastructure Regulation are consistent with the rules introduced in the United States in July (the Dodd-Frank Wall Street Reform and Consumer Protection Act).

These measures have been accompanied by various international initiatives intended to foster cooperation and the sharing of information on the infrastructures for the OTC derivatives market. The Basel Committee on Banking Supervision is assessing the requirements to be applied to exposures backed by central counterparties.

3.7 SECURITIES AND CASH SETTLEMENT SYSTEMS

The settlement infrastructure has ensured reliable and continuous functioning

In 2010, despite the tensions that emerged on several occasions regarding the availability of liquidity, TARGET2 ensured perfect business continuity; no delays occurred in the closing of the working day or in settlements. An equally high degree of reliability was shown by the national infrastructure used not only to settle the Bank of Italy's receipts and payments in TARGET2, the transactions of the state treasury service and the multilateral balances of the BI-COMP retail system but also to manage the daylight credit provided to participants in the national component of the system (TARGET2-Banca d'Italia). The volume of payments settled in TARGET2-Banca d'Italia in 2010 was substantial, averaging about €125 billion per day (see the box "Simulation of the effects on TARGET2-Banca d'Italia of a shock in the interbank market").

SIMULATION OF THE EFFECTS ON TARGET2-BANCA D'ITALIA OF A SHOCK IN THE INTERBANK MARKET

The Bank of Italy periodically carries out stress tests to evaluate both the systemic risks created by the unsecured interbank market and the efficiency and reliability of TARGET2-Banca d'Italia. The exercise assesses the ability of Italian banks to fulfil their payment commitments in the event of an unexpected contraction in the supply of funds on the overnight market. It is assumed that on each working day banks are able to collect only a certain proportion of the value of the overnight deposits taken,[1] but are able to access other sources of funds (such as the liquidity available from the central bank and the secondary reserves of liquidity in the form of securities). The size of the shock is made to vary from 10 to 90 per cent of the total value of trading in unsecured deposits, whereas the repayment of the deposits obtained on the previous days and all the other outpayments recorded on TARGET2 are kept unchanged. The exercise was carried out with reference to two reserve maintenance periods: from 12 November to 9 December 2008, during the acute phase of the crisis, and from 11 November to 7 December 2009.

Simulation of a money-market shock on TARGET2-Banca d'Italia (1)
(average daily values)

Contraction of the money market	Payments not settled						Maximum amount of queued payments (2)		Daylight credit usage (3)	
	millions of euros		% of system total		number of banks involved		millions of euros		% of total	
%	period 1	period 2	period 1	period 2	period 1	period 2	period 1	period 2	period 1	period 2
10	36	35	0.04	0.04	5	4	589	2,452	0.6	0.1
30	340	61	0.34	0.07	8	8	3,838	2,820	1.0	0.3
50	785	90	0.87	0.10	14	8	8,521	3,151	1.6	0.7
70	1,436	139	1.51	0.15	18	9	15,444	3,615	2.3	1.2
90	2,069	188	2.22	0.23	23	12	22,940	4,023	2.9	1.9

(1) Period 1: 12 November to 9 December 2008. Period 2: 11 November to 7 December 2009. Simulations carried out using the BoF-PSS2 simulator developed by the Bank of Finland. – (2) The maximum amount of queued payments is calculated as the additional change therein compared with the actual data for the period. – (3) Difference compared with the values actually recorded in each period.

[1] Deposits traded on the e-MID platform and OTC identified using the methodology proposed by C. H. Furfine (see Section 3.1, footnote 1).

The results of the exercise, which need to be assessed taking account of the methodological simplifications used in carrying out the simulations,[2] show that even a drastic fall in trading on the interbank market would have limited effects on the functioning of the system. In the first maintenance period considered, a contraction of 50 per cent in overnight loans would have increased the quantity of unsettled payments to not more than 1 per cent of the total and involved 14 banks. In most cases the amounts not settled would have been extremely small in relation to those entered into the system. On the other hand, there might have been more substantial effects for queued payments, which would have increased by a daily average of more than €8 billion. The effects of the shock in the second maintenance period would have been less pronounced.

These broadly positive results depend basically on two factors. In the first place, both simulations refer to periods in which the ratio of unsecured overnight loans to the total quantity of settled payments was significantly lower than in the period preceding the crisis (see Section 3.1); in the second place, in both periods the average level of liquidity on participants' settlement accounts was relatively high.

[2] In particular, it was assumed that banks would not postpone the entry of their payments into the system, whereas in reality they would have an incentive to do so, thus aggravating the congestion of the system.

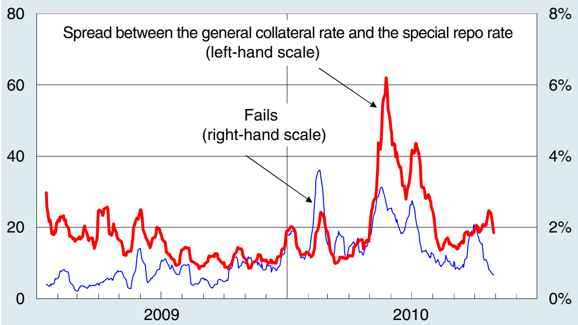
Securities delivery fails have increased

The volumes handled by the Express II securities settlement system, managed by Monte Titoli S.p.A. and supervised by the Bank of Italy and Consob, increased significantly in the first nine months of 2010 compared with the year-earlier period. In February, and then in May and July, the percentage of government securities not delivered on the settlement day (fails) spiked (Figure 3.17), but without upsetting the orderly settlement of transactions. The increase in the number of fails was accompanied by an increase in the cost of borrowing securities, measured by the difference between the general collateral repo rate and the special repo rate for contracts traded on MTS (see footnote 2 of Section 3.1). Basically the increase was related to cases of relative scarcity of certain types of securities, caused, for example, by short selling. Another possible cause is to be found in the rigidities in the functioning of securities settlement systems, especially in the international links between central securities depositories. Monte Titoli S.p.A. has begun a survey of its members to identify changes that will improve the management of fails, especially by the non-residents that interact the most with foreign and international depositories.

Figure 3.17

Government security fails in Express II and spread between the general collateral rate and the special repo rate (1)

(daily data; 10-day moving averages; basis points and per cent)



Sources: Monte Titoli and Bank of Italy.
(1) Fails recorded in the Express II settlement system.

Looking ahead, the start of TARGET2-Securities – the single Eurosystem platform for the settlement of securities transactions with central bank money – will make it possible to increase the liquidity and integration of the markets, thereby facilitating portfolio diversification and the spreading of risks, with benefits for the efficiency and stability of the financial system.

Transactions settlement remains highly concentrated

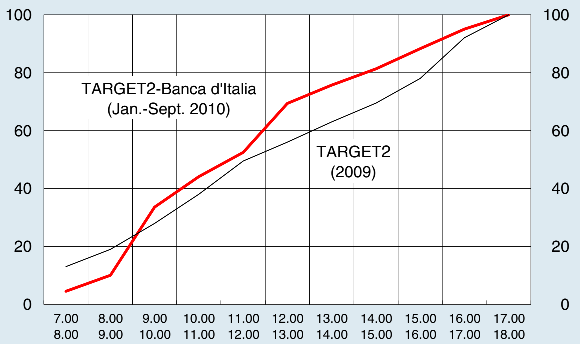
The concentration of cash settlement transactions remains high. In the first nine months of 2010 three banks settled more than 45 per cent of all the transactions entered by banks into TARGET2-Banca d'Italia. As for daylight credit usage, the share of the top three banks was 90 per cent. This reflects the activity of some branches of foreign banks that participate in TARGET2-Banca d'Italia and provide liquidity to their parent banks, which repay the funds during the day. For such banking groups difficulty in obtaining access to daylight credit could therefore cause problems for the settlement of transactions.

The systems functioned regularly even during the periods of tension

The smooth functioning of the gross settlement system requires transactions to be settled promptly. As in 2009, in the first nine months of 2010 nearly 70 per cent of the payments channelled through TARGET2-Banca d'Italia were settled by 13:00 (Figure 3.18). In 2009 the corresponding figure for the euro area, calculated with reference to the entire TARGET2 system, was 56 per cent. The good performance of the Italian component reflects both structural factors (for instance e-MID transactions are settled automatically in the morning between 09:00 and 10:00) and the good liquidity contitions of Italian banks. All the main banks settle their transactions promptly.

Figure 3.18

TARGET2-Banca d'Italia: distribution of payments by time of day
(annual averages of daily data; per cent)



Sources: Bank of Italy and ECB.

In the first nine months of 2010 the number of transactions cancelled as a result of a failure by the debtor bank was negligible.

From the beginning of 2007 to September 2010 the daylight credit disbursed by the Bank of Italy nearly doubled (to a daily average of more than €7 billion), but it declined in relation to the collateral provided (from 30 to 12 per cent). The increased use of central bank daylight credit for purposes of treasury management reflects banks' greater caution. [6]

[6] A further structural increase in daylight credit has occurred since June 2010, following the Bank of Italy's adoption of a pooling system (see "Sistema di Gestione delle garanzie in pooling e dei depositi in Titoli"; http://www.bancaditalia.it/sispaga/servpag/mtt/guida-cat.pdf).