3.9 FORECASTS

The crisis has impacted world trade and economic growth

The deepening of the financial crisis since September triggered a recession that swept through first the advanced and then the emerging economies. In the fourth quarter of 2008 world GDP contracted at an annual rate of about 7 per cent compared with the third quarter, and the steepness of the decline appears to have

been confirmed in the early part of this year. These developments led to a drastic revision of the forecasts for world trade in 2009, which have now been lowered by more than 10 percentage points since December. The IMF's recent estimates indicate that world economic activity will decline by 1.4 per cent

in 2009, by far the worst result since the Second World War. Output is expected to return to growth (of 2.5 per cent) in 2010.

In Italy the recession is easing and should end in 2010

The pronounced worsening of the world economy has affected Italy's GDP and led to a deep revision of short-

and medium-term growth forecasts. The Bank of Italy had already revised its growth forecast sharply downwards, to -2 per cent, in January (*Economic Bulletin* No. 51), when the forecasts of the other main analysts were more optimistic. The data on world economic trends that have become available since then have confirmed the worsening of the cyclical situation we had predicted in January, necessitating an even sharper downward revision (see the box "The construction of the forecasting scenarios"). Adjustments to the growth forecasts of a magnitude comparable to those described here have been made or are being made in the other euro-area countries as well.

In the light of these developments (see the box "Technical assumptions and the international environment"), we estimate that Italy's GDP, which diminished by 1 per cent in 2008, will contract by 5.2 per cent this year and hold steady in 2010 (Table 9). Thanks to the gradual recovery in world trade, the powerful stimulus provided by monetary policy — in part through "unconventional" measures — and the countercyclical provisions enacted by the Government (see the box "Recent public finance measures"), the recession should ease considerably in the second half of 2009, and economic activity should return to growth in 2010.

Exports remain the prime factor in the fall in demand ...

The performance of the Italian economy chiefly reflects slumping sales abroad (Figure 33). The marked

Forecasts of the main macroeconomic variables in Italy

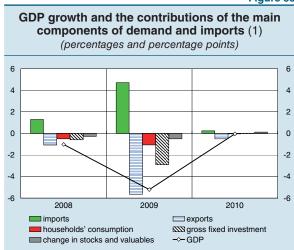
(percentage changes on previous year unless otherwise indicated)

	2008	2009	2010
GDP (1)	-1.0	-5.2	0.0
Household consumption	-0.9	-1.8	-0.1
Government consumption	0.6	1.1	0.7
Gross fixed investment	-2.9	-13.9	0.1
Exports	-3.7	-20.2	-2.2
Imports	-4.5	-16.8	-1.0
Change in stocks (2)	-0.3	-0.5	0.1
HICP (3)	3.5	0.8	1.6
Export competitiveness (4)	-4.2	-1.2	-1.3

Sources: Based on Bank of Italy and Istat data.

(1) For GDP and its components: chain-linked volumes; changes estimated on the basis of quarterly data adjusted for seasonal and calendar effects. – (2) Contributions to GDP growth; percentage points. – (3) Harmonized index of consumer prices. – (4) Calculated by comparing the price of foreign manufactures with the deflator of Italian merchandise exports (excluding energy and agricultural products).

Figure 3



Sources: Based on Bank of Italy and Istat data. (1) Adjusted for seasonal and calendar effects.

decline in world trade penalizes exports, which are expected to fall by more than 20 per cent in 2009 and by just over 2 per cent in 2010. Italian exports are not forecast to return to rapid growth until the second half of next year, and Italy's world market share will likely decrease further, reflecting the appreciation of the euro and the pricing policies of Italian exporters in a situation of low profitability.

... followed by investment

Investment is expected to undergo a record decline of nearly 15 per cent this year, more than the overall decrease during the 1992-93 recession (see the box "The behaviour of the macroaggregates in the main postwar recessions in Italy"). For

machinery and transport equipment, the contraction will presumably be sharper still, more than 20 per cent. The fall in investment, induced by the worsening prospects for economic growth, will most likely also reflect the persistent strains in the credit market (see the box "Credit supply and demand in Italy"). The full unfolding of the expansive impulse from monetary policy, more favourable corporate credit conditions and the measures recently enacted by the Government, which provide for tax exemption of profits reinvested in machinery (ATECO classification, Division 28) before the end of June 2010, should encourage the resumption of investment activity. Investment in machinery is expected to expand by 1.2 per cent in 2010 as a whole, and total investment by 0.1 per cent. It is estimated that without the tax incentives next year would have registered the third consecutive decline in the country's stock of physical capital. These assessments posit that the share of total machinery investment accounted for by the subsidized expenditures is in line with the official estimates; the forecasting scenario assumes not only the recovery of world trade but also the absence of liquidity constraints on firms.

After falling for 2 years, consumption will stabilize in 2010

Private consumption is forecast to diminish by nearly 2 per cent this year and to stagnate in 2010. The transfer payments to low-income households decided by the Government, the extension of social buffers and the sharp decline in inflation should sustain disposable income, thereby attenuating the fall in household

spending in real terms. Expenditure on consumer durables, although boosted by the increase in motor vehicle sales thanks to the scrapping incentives, is expected to decrease significantly (by nearly 6 per cent over the two years).

THE CONSTRUCTION OF THE FORECASTING SCENARIOS

The scenario presented here is the result of a simulation exercise conducted using the Bank of Italy's quarterly econometric model. The model contains about 800 equations, of which nearly 100 are stochastic, and provides a detailed description of the private sector and the public finances. In the short term the performance of the economy is determined by the evolution of aggregate demand, taking rigidities in the price and wage formation mechanisms into account; in the long term supply factors prevail, and economic growth is the result of capital accumulation, productivity and demographic trends.¹

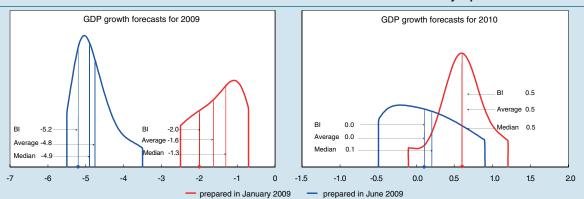
The macroeconomic scenario depends on a set of assumptions that mainly concern: (a) the performance of the international economy (which is estimated by the leading international organizations); (b) fiscal policy (which reflects measures already approved by Parliament or outlined by the Government in sufficient detail); (c) short and long-term interest rates (based on market expectations); (d) the exchange rate (assumed constant at the average level observed in the two weeks before the publication of the *Economic Bulletin*); and (e) the prices of oil and other raw materials (based on futures).

For a detailed description of the econometric model, see "Modello trimestrale dell'economia italiana", *Temi di discussione*, Banca d'Italia, no. 80, 1986. A summary description of the latest version of the model is to be found in F. Busetti, A. Locarno and L. Monteforte, "The Bank of Italy's Quarterly Model", in G. Fagan and J. Morgan (eds.), *Econometric Models of the Euro-area Central Banks*, Edgar Elgar Publishing, Cheltenham, Northampton (MA), 2005.

The projection also depends on the initial conditions of the economy (given the time taken to process the national accounts, these are known with a lag of about 75 days) and takes account of discretionary assessments, suggested by supplementary analyses and information external to the model, and of any instability in the estimated economic relationships, associated, for example, with structural changes under way in the economy. ²

The differences between scenarios prepared at different times mainly reflect the updating of the underlying assumptions and, to a lesser extent, changes in the initial conditions (due, for example, to revisions of the data published by statistical institutes), as well as different assessments of the information "external to the model". Compared with the estimates published in the January Economic Bulletin, the growth in GDP in the macroeconomic scenario presented here has been revised downwards by more than three percentage points for this year and by half a point for next year. The largest revisions to the exogenous variables concerned the evolution of the international environment: the rate of growth in world trade is now assumed to be more than ten percentage points lower in 2009 and more than five points lower in 2010, in line with the latest estimates of the leading international organizations, while the price of oil is assumed to be nearly 13 per cent higher on average in the two years. Nor are the changes to interest rates negligible: those at short term are about 100 basis points lower both in 2009 and in 2010; those at long term are 40 points lower this year and almost unchanged next year. Taken together, the changes to the exogenous variables subtract more than three percentage points from the forecast of GDP growth in 2009 and imply a correction to the estimates for 2010 slightly larger than is envisaged here; the effect is almost entirely due to the new assumptions concerning world trade. Revisions on a similar scale were also made to the forecasts released by Consensus Economics.

Distribution of the forecasts of Consensus Economics and the Bank of Italy's point forecasts



Source: Based on Consensus Economics data.

The figure shows the distribution of GDP growth forecasts made in January and June by private analysts and, for the sake of comparison, by the Bank of Italy. The average revision made by the analysts for 2009 is 3.2 percentage points, while the median, which is a more reliable statistic because it is less sensitive to outliers, is 3.6 points. The revision for 2010 is equal to about half a percentage point in both cases. These corrections are of the same order of magnitude as those made by the Bank of Italy.

See I. Visco, "The financial crisis and economists' forecasts", University of Rome, La Sapienza, Rome, 4 March 2009, available on the Bank of Italy's website.

TECHNICAL ASSUMPTIONS AND THE INTERNATIONAL ENVIRONMENT

The assumptions regarding the growth of the world economy and world trade on which the macroeconomic scenario is based are the same as those used for the euro-area forecasts published in June in the ECB's Monthly Bulletin and are not significantly different from the estimates recently published by the World Bank and the IMF. The continued fall in activity in the first months of the year in the major advanced economies and the sharp slowdown in the emerging countries translate into a marked contraction in the volume of international trade in 2009. From the end of the year, the attenuation of the decline in output in the advanced economies and the recovery of the emerging countries bring a steady improvement in world trade, which is forecast to contract by more than 13 per cent in 2009 and then to return to a path of moderate growth next year (0.8 per cent).

The assumptions regarding interest rates and exchange rates and the price of oil take account of the information available in the ten working days preceding 12 July 2009. The price of crude oil averages \$60.10 a barrel this year and, on the basis of futures contracts, is forecast to rise to \$72.70 next year. The gradual reduction of risk premiums, with respect to the exceptionally high levels observed in the last quarter of 2008 and the first quarter of 2009, together with the strongly expansionary stance of monetary policy in the last six months, induce a fall in short-term interest rates of more than three percentage points compared with the second half of last year. According to futures contracts, three-month Euribor averages 1.4 per cent this year and 1.5 per cent in 2010. Long-term interest rates (corresponding to the yield of a basket of government securities with a duration of about 6 years) are 3.9 per cent this year and 4.6 per cent in 2010. The assumption that all bilateral exchange rates remain unchanged at recent average levels implies a dollar/euro conversion rate of 1.37 this year and 1.40 over the forecasting horizon.

The projections for the public finances take account of the provisions approved at the end of June (see the box "Recent public finance measures").

RECENT PUBLIC FINANCE MEASURES

At the end of June two measures were approved that are officially estimated to modify the composition of revenue and expenditure without affecting the public finance balances.

The law in favour of the population hit by the earthquake in Abruzzo. – Law 77/2009, which ratified Decree Law 39/2009, specifies the interventions in favour of the population in Abruzzo hit by the earthquake in April. The immediate aim of the legislation is to tackle the emergency and in the longer term the objective is to finance reconstruction activity through 2032. For the part of the plan that is quantified, the impact on net borrowing in the three years 2009-11 is virtually nil.

The increase in expenditure over the three years is estimated to be \in 2.9 billion (of which \in 1.2 billion in 2009). This year resources are absorbed primarily to cope with the emergency (relief and assistance for the population and construction of temporary housing); in the two years 2010-11 they will mostly be used to disburse grants and state-guaranteed subsidized loans for the reconstruction of buildings damaged or destroyed by the earthquake.

The funding of the interventions planned for the three years consists of an increase in revenue of about $\in 1.7$ billion (of which $\in 0.5$ billion in 2009) and a decrease in expenditure of more than $\in 1.3$ billion (of which $\in 0.8$ billion in 2009). In particular, the increase in revenue will come from a broadening of the range of gaming activities offered to the public (with the introduction of new lotteries and

the opening of tobacconists on public holidays) and a tightening of controls in the sector. In 2009 expenditure savings will derive from a revision of the mechanisms for reimbursing the prices of generic drugs (accompanied by a reduction from 14 to 13.6 per cent in the ceiling established for pharmaceutical expenditure) and a decrease in the use of the fund for family bonuses. In 2010-11 the interventions will draw mainly on funds set up for other purposes (the flexibility fund, the fund for offsetting financial effects and the fund for underutilized areas).

The law provides for other interventions, including the payment of an unspecified amount of compensation to firms. On the funding side, no indication is given of the amount to come from fines imposed by the Antitrust Authority or of that to come from the fund that will receive the proceeds of future measures to counter tax evasion, nor does the law specify the distribution over time of the resources diverted from the fund for underutilized areas, approved by the Interministerial Committee for Economic Planning for a total of $\{4\}$ billion.

The end-of-June anti-crisis decree. – At the end of last month the Government issued Decree Law 78/2009, which includes provisions to counter the effects of the economic crisis and supplement those contained in the decrees issued in November and February (see the boxes "The anti-crisis decree", Economic Bulletin, no. 51, 2009, and "February's anti-crisis decree", Economic Bulletin, no. 52, 2009). According to the official estimates the anti-crisis interventions will cause an increase in expenditure of €6.4 billion in the period 2009-12 (of which €0.7 billion this year) and a decrease in revenue of €5.2 billion (concentrated largely in 2010-11). The interventions will be financed by measures contained in the decree, which is therefore estimated not to affect net borrowing, either this year or in the three following years.

The most important anti-crisis measure in quantitative terms is the provision of tax incentives for new investments in machinery (division 28 of the ATECO classification of economic activities), which account for four fifths of the decrease in revenue the decree is expected to produce. The measure provides for the exclusion from firms' income of half the cost of machinery purchased in the next twelve months; the consequent loss of revenue is expected to occur over the next two years and to amount to about $\[\in \] 2$ billion per year.

More than two thirds of the resources needed to finance the expansionary measures are to come from additional revenue, amounting to $\in 8.4$ billion in the period as a whole and to $\in 1.1$ billion in 2009. In particular, the increase in revenue in 2009 is related to the revision of the procedures for issuing gaming licences ($\in 0.5$ billion), the strengthening of tax collection activities ($\in 0.2$ billion) and the introduction of more stringent requirements for offsetting tax credits ($\in 0.2$ billion). From 2010 onwards substantial increases in revenue of about $\in 1$ billion per year are expected from the introduction of rules to counter tax evasion in relation to tax bases held in tax havens and international tax arbitrage.

Estimates of net borrowing and effects of the June legislative measures (1) (billions of euros and percentages)					
	Outturn 2008	2009	2010	2011	
Estimates on a current legislation basis – April 2009 (2)	43.0	71.0	71.3	69.6	
as a % of GDP	2.7	4.6	4.6	4.3	
Abruzzo Law (3)		0.0	0.0	0.0	
increase in revenue	-	-0.5	-0.7	-0.5	
decrease in revenue	-	0.0	0.1	0.0	
increase in expenditure	-	1.2	1.0	0.7	
decrease in expenditure	-	-0.8	-0.4	-0.2	
End-June anti-crisis decree (4)		0.0	0.0	0.0	
increase in revenue	-	-1.1	-2.7	-2.5	
decrease in revenue	-	0.5	1.9	2.5	
increase in expenditure	-	0.7	1.9	0.9	
decrease in expenditure	-	-0.2	-1.1	-0.9	
Memorandum item:					
April 2009 (2)					
Nominal GDP	1,572	1,529	1,555	1,601	
Rate of real GDP growth	-1.0	-4.2	0.3	1.2	

⁽¹⁾ A negative sign indicates an improvement in net borrowing. – (2) Taken from the Combined Report on the Economy and the Public Finances. – (3) Based on official estimates (Atto parlamentare della Camera dei deputati, 16th Legislature, no. 2468). – (4) Based on official estimates (Atto parlamentare della Camera dei deputati, 16th Legislature, no. 2561).

Lastly, as regards expenditure savings (expected to amount to €3.2 billion over the whole period, of which €0.2 billion in 2009), a significant part concerns the health sector and derives from the savings realized in pharmaceutical expenditure (by means of the mechanisms for reimbursing the prices of generic drugs and a further reduction, from 13.6 to 13.3 per cent, in the expenditure ceiling established at national level).

The external accounts should improve in 2009, but only temporarily

Imports will be affected by the slump in the demand components with the greatest import content – namely investment and exports – and will fall by 16.8 per cent in 2009. Even so, this reduction should be less than that estimated for exports. Imports are expected to pick up again towards the end of the year, driven by purchases of capital goods stimulated by the tax relief on reinvested profits, but

then to contract again in the third quarter of 2010 as this fiscal effect is exhausted. On average for 2010, imports should decline by 1 per cent. The external current account deficit is forecast to narrow temporarily this year, benefiting from the improvement in the terms of trade, but then to widen significantly in 2010.

Consumer price inflation should bottom out during the summer and rise to over 1 per cent in the latter part of the year

Harmonized consumer price inflation in Italy is forecast to average 0.8 per cent in 2009, nearly 3 percentage points less than in 2008. After recording a twelvemonth minimum in the third quarter owing to the lower level of energy prices than a year earlier, the inflation rate will gradually come back upwards. Net of the energy component the index will rise by 1.7 per cent this year, compared

with 2.9 per cent in 2008. The pronounced decline in labour productivity will result in a substantial acceleration in unit labour costs, which are expected to rise by more than 6 per cent in the private sector. The higher unit labour costs are expected to be partially offset by a compression of profit margins (Figure 34). In 2010, as raw materials prices rise, consumer prices can be expected to increase by 1.6 per cent (either gross or net of the energy component). Thanks to strong gains in productivity, unit labour costs in the private sector should rise very little (just 0.4 per cent).

Comparison with other forecasts

For this year, our forecast of GDP growth is slightly more optimistic than that

of the OECD, in line with that of the IMF, and about half a point worse than the average of the analysts consulted by Consensus Economics. The European Commission's more optimistic

Figure 34 Prices, margins and labour costs (percentage changes on year-earlier period) 15 10 5 0 -3 -5 -10 2010 2009 deflator of household consumption deflator of merchandise imports (1) private-sector unit labour costs (2) private-sector profit margins (3)

(1) Right-hand scale. – (2) Unit labour costs in the private sector (excluding energy and agriculture); calculated as the ratio between compensation of employees per standard labour unit and output per standard labour unit; output is value added at factor cost. – (3) Ratio between the deflator of value added at factor cost and unit labour costs in the private sector (excluding energy and agriculture).

estimates were made in April. For 2010 the OECD forecasts positive GDP growth of 0.4 per cent for Italy, while the IMF forecasts another, modest decrease (-0.1 per cent) and Consensus Economics predicts stagnation. Our inflation estimate for 2009 does not differ significantly from that of the other forecasters (it is in line with those of the OECD and the IMF, slightly below that of the Commission and the Consensus Economics average). Inflation forecasts for 2010 are more variable.

The uncertainty over the forecast for 2009 is relatively limited ...

The growth forecast for 2009 is based mainly on already acquired data on economic activity through the first quarter. Even just assuming that the pace of economic activity remains constant for the rest of 2009, there would be a fall of nearly 5 per cent in annual GDP, and estimates based on the indicators available

to date (such as industrial production and surveys) suggest that the second quarter witnessed a further marked contraction in activity at an annual rate of about 2.4 per cent. The effects of the Government's end-June anticrisis measures should mostly be felt in 2010.

... but that surrounding 2010 remains substantial

Considerable uncertainty continues to characterize the scenario for 2010 – in particular, the timing and strength of the recovery (Figure 35). First of all, the forecasts are based on the hypothesis that the credit markets return to normal operation. Second, if the cyclical weakness of the economy were to persist, then

starting in the second half of the year Italian firms could undertake more decisive staff downsizing, which would translate into a further curtailment of households' spending power and a more severe contraction of domestic demand. Consumption might also be curbed by an expansion of precautionary saving, which tends to increase, other things being equal, as job security decreases. On the other hand, there are also signs – albeit weak and intermittent – that the world economy is steadying, which could be the prelude to a somewhat sharper acceleration in the growth of world trade in 2010 than is assumed in the present forecasts. As for price developments, the risk of deflation would appear to be small but still present.

Uncertainty is graphed by fan charts, based on 50,000 stochastic simulations effected via random extractions from the historically observed distributions of model shocks. The figure shows year-on-year percentage changes of four-term moving averages. The value corresponding to the fourth quarter of each year coincides with the annual percentage change.

Figure 35

