

BANCA D'ITALIA

**Economic Bulletin**



**Number 14 February 1992**

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**Economic Bulletin**

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# *Economic Developments and Policies*

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## **The international economy**

The sluggishness of the industrial economies has lasted much longer than expected. In the three largest economies growth is now slowing down, and the prospects for recovery are uncertain. Except in Germany, inflationary pressures have eased.

With the Gulf war over, the international economic organizations' forecasts of recovery in mid-1991 were partially realized, as the cyclical indicators improved in the countries where the recession had been the most severe – the United States, Canada and the United Kingdom – as well as in France and Italy. The financial markets also expected an upturn in activity. Even though the Federal Reserve maintained its policy of gradually lowering short-term interest rates and inflation continued to abate, long-term yields remained virtually unchanged throughout the first half of the year. The dollar appreciated against the Deutschmark and the yen until July. Wall Street recouped the losses it had suffered during the Gulf conflict, and in August the Dow Jones industrial average reached a new all-time high.

The situation deteriorated rapidly in the second half of the year. The economic indicators ceased to improve in most countries, and in some they declined. Above all, the cycle turned down in Germany and Japan, the two economies in which domestic demand had continued to expand at an exceptionally rapid pace. In both countries the current phase is generally viewed as a natural, policy-assisted adjustment to protracted overheating. In Japan fiscal policy continued to be directed to reducing the public debt, despite the fact that the budget was in surplus.

Nominal interest rates came down slightly faster than inflation. In Germany priority was still given to redressing the public finances, which deteriorated sharply following unification, and to reducing inflation, which was running at more than 4 per cent. Inflation is now being fueled partly by expectations caused by wage claims significantly in excess of the rate of productivity gains.

The German contribution to the growth of world trade evaporated. The expansion of total imports in volume terms, including those of the eastern *Länder*, plunged from an annual rate of 17 per cent in the first half to one of about 3 per cent in the second. This was a factor in the deterioration of the economic climate in other countries. Export growth was less than forecast almost everywhere; in the United States it fell from an annual rate of 10 per cent in the first six months of the year to one of 4.4 per cent in the last half.

In the United States, however, and to varying degrees in other countries as well, there were also domestic causes for the hesitancy of the recovery and the length of the downturn, which has now lasted longer than the average for post-war cyclical downswings. Monetary stimulus appears to have been less effective than in the past owing to the structural weakness of the US economy, which can be attributed partly to the large volume of private sector debt, the crisis among savings and loans associations and commercial banks' increased attention to strengthening their capital bases and improving asset quality. Bank credit to the private sector expanded only very slightly and at times actually contracted.

The growth of the money supply was near the bottom of the target range even though money market rates were reduced, cautiously at first but very rapidly from September onwards when it again became clear that the economy was not responding.

These cyclical patterns, the divergent monetary policy stances and difficulties in coordination led to a renewed weakening of the dollar. Despite the appreciation of the yen, the currency's exchange rate still does not fully reflect the competitive advantage of the Japanese economy. Japan's trade surplus soared in the second half, undoing several years of slow adjustment of payments imbalances thanks to the growth of domestic demand. Trade tensions were exacerbated, especially between the United States and Japan, and the stalemate in the Uruguay Round led to more vigorous efforts to conclude regional and bilateral trade agreements.

The European foreign exchange markets experienced their most pronounced strains since 1987. The tensions were resolved by means of the instruments foreseen in the 1987 Basle-Nyborg agreement among the central banks. In January interest rate differentials between the Deutschmark and the other EMS currencies narrowed again to very small margins. The credibility acquired by the Exchange Rate Mechanism in the last few years does not appear to have been undermined. It would be further enhanced if the treaties on European Union signed in Maastricht on 7 February were ratified swiftly by national parliaments.

### Economic activity and inflation in the industrial countries

In the United States, economic growth appeared to have resumed in the middle months of the year but virtually ceased in the fourth quarter. Consumer spending began to decline again, partly as a result of rising unemployment, which reached 7.1 per cent in December.

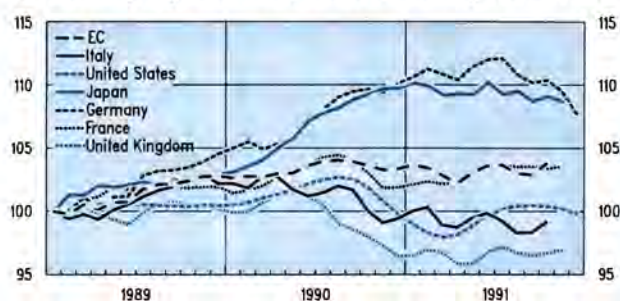
Public expenditure also contracted in the fourth quarter, by about 6 per cent on an annual basis. The decline was due principally to a 15 per cent cut in

defence spending, which accounts for about one third of the federal budget, net of interest expenditure. Investment continued to stagnate, partly because banks were reluctant to make new loans in view of the high priority they assigned to strengthening their balance sheets. Industrial production, which had expanded during the first part of 1991, slowed down during the summer and contracted again in the closing months of the year (Figure 1). Signs of a slowdown also came from the composite index of leading economic indicators, which turned downwards in August (Figure 2).

Inflation slowed down sharply, from 6.1 per cent at the end of 1990 to 3.1 per cent a year later, as a result of the reduced pace of economic activity and the fall in world raw materials prices.

Figure 1

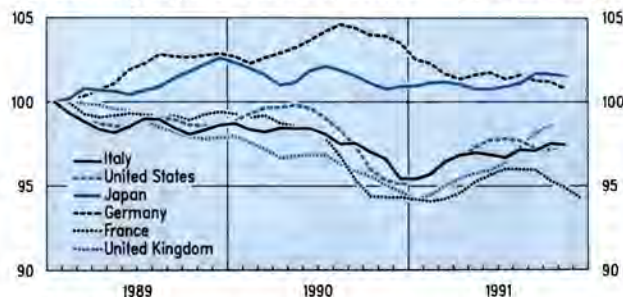
Industrial production (1)  
(seasonally adjusted data; indices, January 1989=100)



Sources: OECD and Istat data.  
(1) Centred 3-month moving average.

Figure 2

Business cycle indicators (1)  
(seasonally adjusted data; indices, January 1989=100)



Source: OECD.  
(1) Composite leading indices calculated by the OECD; they are obtained by aggregating 11 basic indices relating to average weekly hours worked in manufacturing, the number of unemployed, orders for intermediate and consumer goods, sales, orders for capital goods, the number of building permits, the change in unfilled orders, the prices of raw materials and shares, money supply (M2) and consumer expectations.

Economic activity in the other two leading industrial countries, which had increased rapidly over the previous two years, decelerated significantly in the second half of 1991. In Japan GNP appears to have grown at an annual rate of under 1 per cent (Table 1), owing primarily to a slowdown in investment, which was discouraged by high real interest rates. In the fourth quarter industrial production was 0.6 per cent lower than in the third and 0.7 per cent less than in the fourth quarter of 1990. The downturn helped reduce inflation by more than 1 percentage point in the course of the year to 2.7 per cent.

Table 1

**Gross product and domestic demand  
in the leading industrial countries**

(constant prices;

annualized percentage changes on preceding period)

	1990	1991 (1)	1991	
			H1	H2 (1)
<b>United States</b>				
GDP .....	1.0	-0.7	-1.9	1.3
Domestic demand ..	0.5	-1.4	-3.2	1.5
<b>Canada</b>				
GDP .....	0.5	-1.1	-2.2	2.5
Domestic demand ..	-0.4	-1.0	-2.5	1.3
<b>Japan</b>				
GNP .....	5.3	4.5	5.8	0.8
Domestic demand ..	5.5	3.3	3.4	1.6
<b>EC</b>				
GDP .....	2.7	1.4	1.5	0.7
Domestic demand ..	3.0	1.3	1.7	0.7
of which:				
<b>Germany (2)</b>				
GNP .....	4.5	3.2	4.9	-1.4
Domestic demand	5.2	3.3	4.8	-0.4
<b>France</b>				
GDP .....	2.9	1.4	0.8	2.2
Domestic demand	3.2	1.4	0.9	1.8
<b>Italy</b>				
GDP .....	2.0	1.0	0.9	1.1
Domestic demand	1.9	1.5	2.5	1.0
<b>United Kingdom</b>				
GDP .....	1.1	-2.5	-3.0	-0.7
Domestic demand	0.0	-3.2	-5.1	0.6

Sources: OECD and national bulletins.

(1) For US, Germany and UK, provisional data; for the other countries, forecasts of OECD Economic Outlook. - (2) Figures refer to West Germany only.

In Germany, GNP in the western *Länder* contracted during the second and third quarters, mainly because of a reduction in private consumption following tax increases introduced during the summer to curb the budget deficit. High interest rates and a deterioration in the prospects for growth dampened investment. At the end of the year industrial production was 4 per cent lower than in the summer and 1.3 per cent below the level recorded at the end of 1990. The unemployment rate remained static during the year at 5.6 per cent. The German authorities contend that the contraction in output is temporary and quite normal, after two years in which the economy outgrew its capacity, generating inflationary pressures. Consumer price inflation eased from 4.4 per cent in July to 3.5 per cent in October but accelerated again to 4.2 per cent in December, partly as a result of wage increases.

In eastern Germany, economic activity picked up in some sectors, notably construction and services, where demand rose by 30 per cent between the second and third quarters, largely as a result of government expenditure. The situation in manufacturing is less encouraging; provisional data indicate that in the third quarter output was about 3.5 per cent above the very low levels recorded last spring.

Among the other EC countries, the United Kingdom experienced the greatest difficulties. After contracting for four consecutive quarters, GDP stabilized during the second half of 1991; on an annual average basis it declined by 2.5 per cent. Investment continued to contract, owing partly to high real interest rates; nominal rates were reduced by about 3 percentage points in the course of the year, while inflation came down by 5 points. Industrial production hovered around the low levels recorded at the end of 1990, and the unemployment rate rose to 9 per cent.

In France, the services sector showed signs of recovery. GDP grew by more than 2 per cent in the second half of the year, but industrial output remained slightly below the level recorded in the same period of 1990. The unemployment rate rose to 9.8 per cent at the end of December, 1 point higher than a year earlier. The index of leading indicators turned downwards in October and remained significantly

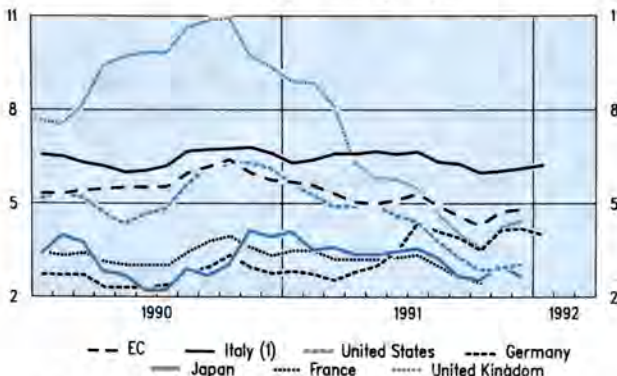


lower than in 1990. Inflation continued to be moderate at 3.1 per cent in December.

The GDP of the Community as a whole is estimated to have grown by 1.4 per cent last year, barely half the rate achieved in 1990. Unemployment increased from 8.4 to 9.3 per cent. Inflation slowed down to a twelve-month rate of 4.3 per cent in October, but accelerated again to 4.8 per cent in December (Figure 3); it remained above the EC average in Italy (6 per cent, on the basis of the cost-of-living index), Spain (5.6 per cent), Greece (17.8 per cent) and Portugal (9.6 per cent, although this was a substantial improvement on the rate of 13.7 per cent registered at the end of 1990).

Figure 3

**Consumer prices**  
(percentage changes on corresponding month of previous year)



Sources: OECD and Istat.

(1) From November 1991 estimated data for Italy are based on the month-to-month changes in an indicator constructed on the basic components of the cost of living.

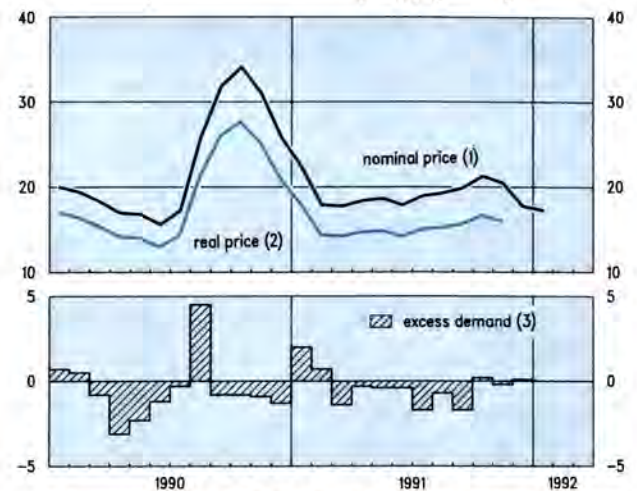
The sluggish pace of economic activity in the industrial countries helped produce a glut in the oil market (Figure 4). By the end of the year the price of crude oil was again close to the lowest levels recorded in 1990, which in real terms were the lowest for a decade and more than 70 per cent below the 1980 level. On the supply side, exports from the Soviet Union fell by about 18 per cent in the fourth quarter, but this was less than had been expected. Kuwaiti production should resume in the near future, as the oilwell fires were extinguished more quickly than had been imagined. In mid-February OPEC lowered its overall production ceiling to 22.9 million barrels a

day, compared with actual production of 24.3 million in January.

The slackening of world demand resulted in a further decline in the prices of metals and agricultural products. At the end of 1991 the index of non-oil raw material prices was 50 per cent below the 1980 average in real terms.

Figure 4

**World petroleum demand, supply and prices**



(1) Average of quotations for Brent, Dubai and Wti in dollars per barrel. – (2) Nominal prices deflated using OECD consumer price index (1985=100). – (3) Millions of barrels per day.

**Economic policies**

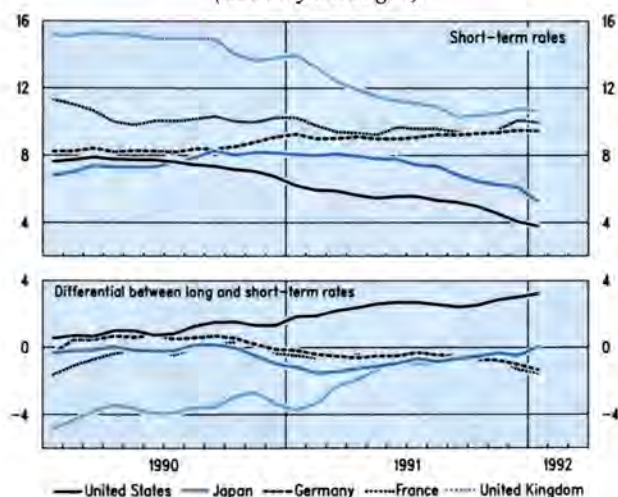
Despite the unfavourable economic climate, fiscal policies almost everywhere continued to be directed towards redressing the public finances, but monetary policy divergences among the leading industrial countries became more pronounced. In Germany the first priority was to combat inflationary pressures. In the United States, and to a lesser extent in Japan, the abatement of inflation made it possible to adopt a more expansionary monetary policy stance.

The US and Japanese authorities lowered their discount rates on three occasions in the second half of 1991, by a total of 2 and 1.5 percentage points respectively. Nevertheless, the growth of the monetary aggregates in both countries continued to be slower than planned, owing in part to the behaviour of the banks, which sought to improve profitability

and strengthen their capital bases by lowering deposit rates by more than the reduction in money market rates. Investors consequently turned to alternative financial instruments, chiefly Treasury bills in the United States and postal deposits (which are not included in the central bank's target aggregate) in Japan. In both countries short-term and, to a lesser extent, long-term market rates declined in response to the reduction in official rates (Figure 5).

Figure 5

Short-term interest rates and differential between long and short-term rates (1)  
(monthly averages)



(1) For sources and definitions, see Notes to Appendix Tables a5 and a6.

In Germany monetary policy remained restrictive, in part for the avowed purpose of preventing wage settlements from having an inflationary effect. In December the Bundesbank raised the discount and lombard rates by half a percentage point to 8 and 9.75 per cent respectively, following an acceleration in money supply growth in the second half of the year, which caused the twelve-month rate of increase to overshoot the target range of 3-5 per cent. Short-term market rates, which had already increased in November in anticipation of the raising of the official rates, rose further and by the end of the year were some three-quarters of a point higher than in June. Long-term yields gradually declined, however, reflecting expectations of lower inflation and slower economic growth.

The monetary policy stance of the other EMS countries fell somewhere between the restrictiveness of Germany and the expansiveness of the United States. Until October interest rates declined in France, Italy, the United Kingdom and Spain, narrowing the differential with respect to Germany. At the end of the year, in the face of the exchange market strains provoked by the increase in the discount rate in Germany and the cut in the United States, all the leading EC countries except the United Kingdom raised official interest rates; although not increasing the discount rate, the United Kingdom nevertheless also tightened monetary conditions in order to support sterling.

Fiscal policy continued to be directed to attenuating the budgetary impact of the economic slowdown and, in Germany, the costs connected with unification. Nevertheless, budget imbalances generally worsened.

The US federal deficit widened to \$270 billion in the 1991 fiscal year ending in September, or 4.8 per cent of GDP, compared with \$220 billion in 1990. This was slightly less than had been forecast, but only because part of the cost of rescuing the savings and loan associations was deferred. The measures taken in the new year to stimulate the economy are expected to increase the deficit for the 1992 fiscal year to nearly \$400 billion, or about 6.8 per cent of GDP. This would be far above the target of \$232 billion set in the Omnibus Budget Reconciliation Act of October 1990.

In Japan the budget surplus contracted from 2.7 per cent of GNP in 1990 to 2.3 per cent in 1991, owing mainly to a substantial decline in revenue from taxes on corporate income and securities transactions. In 1992 it is expected to diminish further to 1.9 per cent of GNP as a result of the economic slowdown.

In Germany, the deficit of the public sector (including regional and local authorities) totaled DM 130 billion, or 4.5 per cent of the nationwide GNP; this was more than DM 20 billion less than originally forecast, thanks to a strong increase of 14 per cent in revenue, but does not include borrowing of about DM 20 billion by the Treuhandanstalt, the governmental privatization agency. The public finances were heavily affected by transfer payments

to the eastern part of the country, which were officially estimated at DM 140 billion in 1991 and could rise to DM 175 billion this year. The federal Government is considering further tax increases and a cut in defence spending to contain the deficit.

France maintained the severe fiscal stance of recent years, keeping the public sector deficit unchanged at about 1.7 per cent of GDP. The cyclical decline in revenue was offset by tax increases that raised the equivalent of around 0.5 per cent of GDP.

In the United Kingdom, which had recorded a small budget deficit in 1990 following two years of surplus, the downturn in the economy caused the public sector borrowing requirement to increase to about 2.1 per cent of GDP in 1991. A further substantial deterioration, net of privatization receipts, is expected this year.

For the Community as a whole, the net general government deficit rose to 4.3 per cent of gross product, compared with 4.1 per cent in 1990. The ratio was above average in Belgium (6.4 per cent), Portugal (5.4 per cent), Italy (10.2 per cent) and Greece (18 per cent).

### Exchange rates and the balance of payments

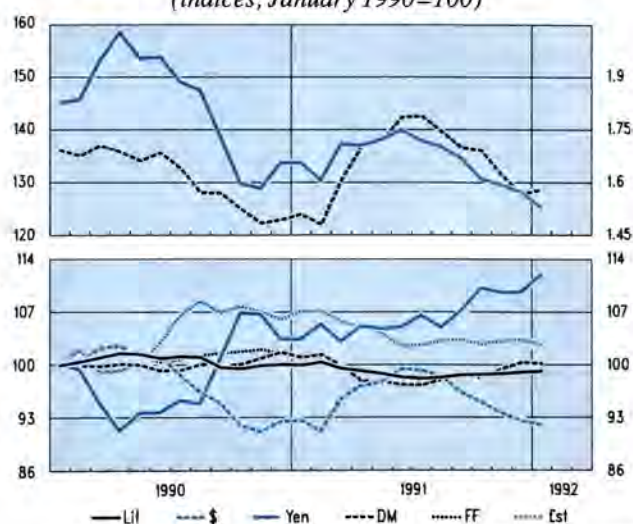
Notwithstanding the cyclical and monetary policy divergences between the leading countries, on average exchange rates remained comparatively close to their long-run values in 1991, despite considerable short-term volatility. At the end of the year nominal and real exchange rates did not differ greatly from the averages recorded in 1987. Such a pattern is not entirely consistent with the correction of payments imbalances, however; the adjustment that has been under way for several years has recently showed signs of slowing down, and in the case of Japan has actually ceased.

The dollar, which had appreciated strongly following the conclusion of the Gulf conflict, depreciated by 8.4 per cent in the second half of 1991 in effective terms, so that by the end of the year it was back at the level recorded twelve months earlier (Figure 6). Investment in dollar-denominated financial instruments was discouraged by the

relaxation of US monetary policy, which caused short-term interest rate differentials vis-à-vis the yen and the Deutschmark to widen to 2 and 5.5 percentage points respectively at the end of the year, and by the failure of the expected recovery to materialize. The weakening of the dollar was due partly to the widening of the trade deficit to \$38 billion in the second half of 1991, \$4 billion more than in the first half, after four years of steady reduction. The modest revival in domestic demand in mid-year was accompanied by a surge in the volume of imports, while export growth slowed down further. The current account of the balance of payments should close the year with a small deficit; the first-half surplus of \$34 billion, which stemmed mainly from unrequited transfers in connection with the Gulf conflict, was probably outweighed by the second-half deficit, estimated at \$35 billion.

Figure 6

Bilateral exchange rates against the dollar (1)  
and nominal effective rates of leading currencies (2)  
(indices, January 1990=100)

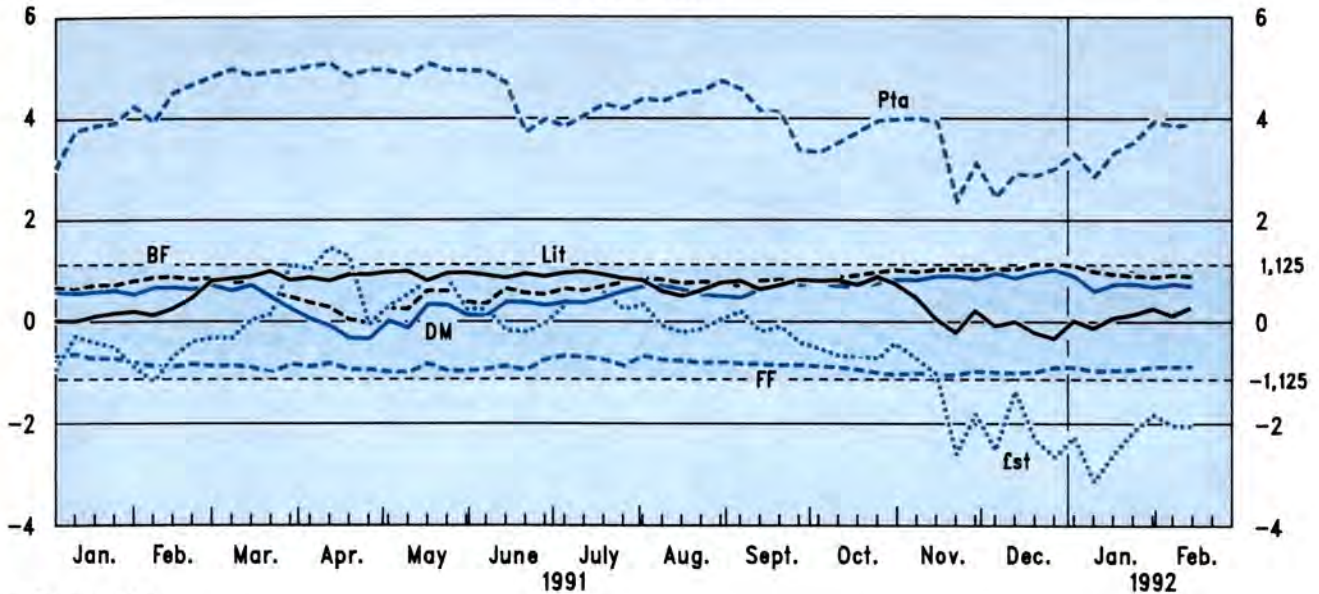


(1) Expressed in units of each currency per dollar. - (2) Vis-à-vis a trade-weighted average of 14 other currencies.

The yen appreciated by 6 per cent in nominal effective terms, bolstered by a slowdown in Japanese direct investment overseas and by net disposals of foreign assets by Japanese banks totaling some \$60 billion during the first three quarters. In real terms, at the end of the year the exchange rate of the yen was at about its 1987 average, despite a substantial growth

Figure 7

Position of ERM currencies in the fluctuation band (1)  
(percentages)



(1) End-of-week data.

in the trade surplus, which returned to the peak values registered in the eighties. Trends in import and export volumes and an improvement in the terms of trade in the second half of the year swelled the surplus to \$113 billion on an annual basis. The surplus for the entire year came to \$103 billion, compared with \$63.5 billion in 1990. The current account surplus should amount to \$73 billion, twice as large as that recorded in 1990.

The Deutschemark appreciated in the second half of 1991 but ended the year at about the same effective exchange rate as twelve months earlier. Its appreciation, to which higher short-term interest rates have contributed, has been checked by the resurgence of industrial disputes in Germany and by political instability in some Central and Eastern European countries and in the former Soviet Union.

From October onwards, tensions re-emerged among the currencies participating in the Exchange Rate Mechanism of the EMS, ending the period of relative stability that had lasted since 1987. As market interest rates in Germany rose, the mark strengthened, the lira fell by about 1 per cent to the middle of the fluctuation band, and the French franc

approached the lower intervention limit (Figure 7). The two currencies with wider margins of fluctuation – the pound sterling and the peseta – depreciated against the mark by 2 and 1.5 per cent respectively.

Figure 8

Short-term interest rate differentials  
vis-à-vis Germany (1)  
(monthly averages)



(1) Interbank rate on 3-month funds; for Italy, gross of withholding tax.

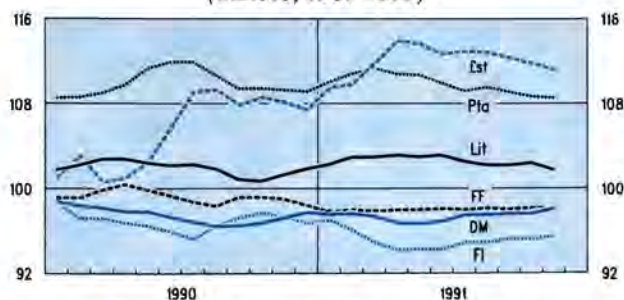
The strains were exacerbated in mid-December by the increase in the German discount rate and the subsequent reduction in the US rate. The Italian and French monetary authorities responded first by intervening on the foreign exchange market and then by raising official interest rates. Short-term interest

rate differentials with respect to the Deutschemark promptly widened again. This action helped to stabilize the markets. In January 1992, as the dollar began to emerge from its period of weakness, the main ERM currencies recovered against the mark, and short-term interest rate differentials narrowed again to about the values recorded in June (Figure 8).

Real exchange rates within the EMS remained broadly stable in 1991 (Figure 9) as a result of the appreciable slowdown in producer prices in Italy, the United Kingdom and Spain and the variations in nominal exchange rates in the latter part of the year.

Figure 9

Real effective exchange rates of ERM currencies (1)  
(indices, 1987=100)



(1) Monthly averages, based on producer prices of manufactures in the currencies of: Belgium, France, Germany, Netherlands, United Kingdom, Italy, Denmark, Ireland and Spain.

The correction of trade imbalances within the Community, which had been under way for two years thanks chiefly to the large increase in German imports, came to a halt in the second half of 1991. The softening of German domestic demand slowed the expansion of the volume of imports, while exports grew by about 1 per cent after a 4 per cent contraction in the first half of the year. The German trade surplus was probably running at an annual rate of around \$10 billion in the second half, \$2 billion more than in the first six months. The current account deficit appears to have decreased to some \$14 billion at an annual rate, owing to the decline in unrequited outward transfers. This would bring the deficit for the year to about \$21 billion, compared with a surplus of \$48 billion in 1990.

The EC's trade with the rest of the world is likely to have swung from a surplus in 1990 to a deficit of

\$37 billion, principally owing to the reduction in Germany's surplus. In France the trade deficit remained broadly unchanged, while the current account deficit narrowed from 1.1 to 0.7 per cent of GDP owing to a decrease in unilateral transfers. The UK trade deficit narrowed further, from 3.2 to 1.8 per cent of GDP, as a result of persistently weak imports. The current account deficit improved accordingly.

### The financial markets

After a period of rapidly rising prices, all the main stock markets except New York suffered a sharp downturn in the fourth quarter (9 per cent in London and Milan, 6 per cent in Frankfurt and Paris, 5 per cent in Tokyo; Figure 10).

Figure 10



(1) For sources and definitions, see Notes to Appendix Table a6. - (2) October 1987 stock market crash.

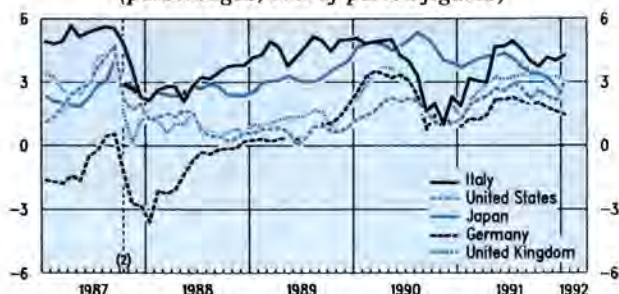
In Europe, the decline in share prices can be ascribed to the economic slowdown and the rise in interest rates. In Japan, prices were adversely affected by the financial irregularities that came to light and by massive sales by investment trusts.

Only New York registered a marginal gain in the fourth quarter, rising by 0.4 per cent. The sharp fall of 3.7 per cent on 15 November proved to be only transitory; earnings yields had declined to levels comparable to those observed on the eve of the October 1987 crash, but since interest rates were lower, there was a smaller yield differential with respect to bonds (2 percentage points; Figure 11). By the end of the month the market had recovered the lost

ground. The sharp 9 per cent rise in the last ten days of the year stemmed partly from the decline in long-term interest rates, which induced investors to switch from bonds to shares.

Figure 11

**Differential between bond and share yields (1)**  
(percentages; end-of-period figures)



Sources: BIS, Morgan Stanley and Bank of Italy.

(1) Share yields are calculated as the inverse of the P/E ratios x 100. – (2) October 1987 stock market crash.

Activity on the international credit markets revived in the second half of 1991 after having been at a virtual standstill during the first half; international bank assets and lending had totaled more than \$1 trillion in 1990 (Table 2).

Gross international lending by banks contracted sharply in the first six months of the year but stabilized in the third quarter. The flow of net bank lending to final borrowers totaled \$75 billion in the first nine months, compared with \$465 billion in the whole of 1990. Interbank deposits declined even more sharply; growth of \$249 billion in 1990 gave way to a contraction of \$288 billion in the first three quarters of 1991.

These developments can be traced to the weakness of economic activity in the industrial countries and to the banks' strategic preference for asset quality over asset growth, owing partly to the need to comply with the capital adequacy ratios introduced by the 1988 Basle Agreement. This factor was especially significant in curbing the interbank business of Japanese banks, whose capital bases had been seriously eroded by the fall in share and real estate prices.

Gross non-bank lending decreased from \$200 billion in the first half of 1991 to \$188 billion in the

second. The total for the year was nonetheless larger than in 1990, thanks chiefly to the substantial increase in gross bond issues. This was due to the popularity of fixed rate paper in view of the decline in US and Japanese interest rates and investors' demand for prime quality instruments in response to the recession. There was a pronounced contraction in floating rate issues, which fell to \$8 billion in the second half; issues of bonds with equity warrants, most of which were offered by Japanese companies, also declined owing to the fall in the Tokyo stock market. Syndicated loans decreased by 20 per cent between the first and second halves of the year; the differential between the average spreads on loans to LDC and OECD borrowers widened.

Table 2

**Lending and assets in international markets**  
(billions of dollars)

	1990	1991	
		H1	Q3
<b>Gross bank assets (1)</b>			
Interbank deposits .....	248.5	-275.1	-12.7
Net bank lending .....	465.0	55.0	20.0
<b>Total ...</b>	<b>713.5</b>	<b>-220.1</b>	<b>7.3</b>
		H1	H2 (2)
<b>Gross lending</b>			
Bonds (3) .....	229.9	150.9	149.8
<i>of which: floating rate</i> ....	37.1	8.8	8.1
Syndicated loans (4) .....	124.5	46.0	36.6
Back-up facilities (5) .....	7.0	3.3	1.5
<b>Total ...</b>	<b>361.4</b>	<b>200.2</b>	<b>187.9</b>
		Percentage composition by country of borrower (6)	
OECD .....	87.0	87.1	87.3
<i>of which: Italy</i> .....	7.3	6.7	1.7
LDCs .....	7.3	8.7	7.4
Eastern Europe .....	1.3	0.2	0.9
Other .....	4.4	4.0	4.3

Sources: OECD, BIS.

(1) Variation, at constant exchange rates, of BIS reporting banks' claims on non-residents plus foreign currency claims on residents. – (2) Estimated on the basis of the first five months. – (3) Gross Euromarket issues plus foreign issues in domestic markets. – (4) Announced medium and long-term Eurocredits and foreign loans. – (5) Lines of credit granted in connection with the issue of securities. – (6) Percentage of gross lending.

Euroaira bond issues grew strongly in the second half of the year to account for about 4 per cent of total international issues, thus confirming the credibility of Italy's policy of open financial markets. One factor behind this development was the deregulation of the bond issue queuing system on 1 July, permitting non-Italian banks to act as lead managers for Euroaira issues. There was a parallel expansion in lira deposits with banks outside Italy, which increased by 19 per cent in the third quarter as the lead banks formed liquid reserves against their securities positions.

### **Central and Eastern Europe, the former Soviet Union and the developing countries**

The performance of the Central and Eastern European economies in the closing months of 1991 was more or less as predicted in the October issue of the Bulletin. Output declined in all the countries of the region. The contraction for the year as a whole appears to have been particularly severe in Bulgaria (20 per cent) and Czechoslovakia (12 per cent), which have been worst affected by the collapse of intra-Comecon trade. The decline in output in Romania, Poland and Hungary is estimated at 9, 8 and 7 per cent respectively. Poland and Czechoslovakia succeeded in slowing the rise in prices, but inflation continued to be extremely rapid in Bulgaria and Romania (400 and 160 per cent respectively), while in Hungary it accelerated from 29 to 38 per cent.

The former member republics of the Soviet Union established separate relations with international institutions following the dissolution of the USSR in December 1991. On 31 January 1992 Russia, Ukraine, Kazakhstan, Azerbaijan and Armenia applied for membership of the International Monetary Fund and the World Bank. At its meeting in January, the Group of Seven countries called on the IMF to complete the admission procedure by April, and to this end the Fund is examining the state of the republics' economies and the reforms they are introducing. These international institutions and the European Community have also undertaken to provide technical assistance. The IMF is working with the Russian Federation to formulate economic

adjustment policies and to modernize the statistical system. The World Bank has lent \$11 billion to fund reform projects in agriculture, energy, housing construction and the financial system. The EC provided \$400 million to the Soviet Union and the individual republics in 1991 for technical assistance schemes and has allocated an additional \$500 million for 1992.

The economic situation in the former Soviet Union deteriorated seriously in the second half of the year. The available indicators show a 12 per cent decrease in output during the first nine months, with the largest contraction being in the primary sector (extractive industries and agriculture) and in the capital goods industry. The rise in retail prices, which were more than 200 per cent higher in September than twelve months earlier, led to the indexation of wages and financial assets. The state budget deficit increased dramatically from 8 per cent of gross output in 1990 to between 15 and 20 per cent in 1991. Revenue declined owing to the recession and the loss of transfers from the republics to the central budget, while expenditure increased as a result of wage indexation, the growing cost of servicing the foreign debt and increased price subsidies. The financing of the public deficit led to a year-on-year expansion of 70 per cent in the money and credit aggregates. The market exchange rate of the rouble plunged from 35 to the dollar in August to 110 in December. The balance of payments on current account moved back into surplus (amounting to \$1.5 billion), owing chiefly to a 45 per cent decline in imports in the first nine months, compared with a 30 per cent reduction in exports.

Towards the end of the year, when the substantial outflow of foreign exchange reserves gave the first signs of an impending financial crisis, the authorities of the former Soviet Union and of eight republics concluded an agreement with the Group of Seven on debt and trade credit. The repayment of principal on Soviet medium and long-term debt contracted before 1990 was suspended for 1992, and a credit line guaranteed by gold reserves was opened with the BIS, acting as agent for the G-7 central banks. The Group of Seven pledged to maintain their credit guarantees for exports to the former Soviet republics. For their part, the republics and the central authority

acknowledged their joint responsibility for the debt and designated the Soviet Bank for Foreign Economic Relations as agent for all debt repayment operations; they also declared their willingness to enact the necessary economic stabilization measures and structural reforms in 1992, in consultation with the IMF, while preserving free trade within the area. In December the monetary authorities of the former Soviet Union unilaterally suspended the repayment of principal to foreign banks and subsequently reached an agreement with them. In January, however, the creditor banks were requested to grant a suspension of interest payments as well, owing to the agent bank's lack of funds. Part of the problem is that the Bank for Foreign Economic Relations is unable to obtain foreign exchange from the republics, which in turn are having difficulty collecting the compulsory foreign exchange deposits from firms.

In January the Russian Federation enacted a sweeping reform plan entailing the virtually complete liberalization of prices and the convertibility of the rouble for residents' current payment transactions. The commercial exchange rate of the rouble (which applies to the compulsory sale to the state of 40 per cent of the foreign currency proceeds from raw materials exports) was lowered by a factor of thirty, from 1.8 to 55 to the dollar, and the parallel foreign exchange market, where the rate was about 120 roubles to the dollar in January, was liberalized. The authorities also intend to establish a rouble stabilization fund, for which they have requested a contribution of \$5-6 billion in foreign exchange from Western countries. The plan also provides for balancing the state budget in the first quarter of 1992 by increasing taxes and reducing subsidies. Other provisions include: the immediate privatization of small enterprises and a start on converting large ones

into limited companies, with part of the shares being reserved for individual investors; the prompt creation of a legal structure appropriate to a market economy, while protecting the weakest sections of the population; and the preservation of free trade with the other republics. The programme also stipulates that the measures should be formulated in close cooperation with the IMF.

In the developing countries the pace of economic activity was highly uneven last year. Economic growth averaged 5 per cent in Asia, 3 per cent in Africa and about 1 per cent in Latin America, while the Middle East suffered a 4 per cent contraction. Growth was curbed by the Gulf conflict, the recession in the industrial economies and the deterioration of the terms of trade.

Progress was made in the fight against inflation, which slowed down on average for the first time in five years. The largest improvements came in Latin America, thanks to stabilization policies. Argentina and Peru implemented more severe programmes that successfully eliminated the hyperinflation with which 1991 had begun. The only country in which no improvement was visible was Brazil, where consumer prices rose at an annual rate of 500 per cent in the first ten months of the year.

According to preliminary estimates by the World Bank, the gross foreign debt of the LDCs and the countries of Central and Eastern Europe was unchanged in 1991 at about \$1,350 billion, compared with \$850 billion in 1982. It decreased in Latin America, thanks to debt reduction agreements under the Brady Plan and debt-equity swaps, and in Central and Eastern Europe, owing partly to the reduction in Poland's official debt but also to the reluctance of commercial banks to extend new credit.



## The Italian economy and the balance of payments

Expectations of a recovery in world economic activity in the second half of 1991 steadily receded, and Italy's results for the year as a whole were affected accordingly. Gross domestic product increased, but the rate of growth slowed down for the second year in succession, from 2 per cent in 1990 to about 1 per cent last year. The downturn in real net exports was directly responsible for more than half a percentage point of the decrease in GDP growth.

The sharp deceleration in world demand and the weakness of the subsequent recovery, combined with an accumulated loss of competitiveness, caused exports to contract in volume terms, albeit by only 0.1 per cent; although domestic demand remained sluggish in the second half of the year, the volume of imports increased by a substantial 4.0 per cent. The improvement in the terms of trade limited the effect of the deterioration in volumes, so that the *fob-fob* trade balance showed a small deficit of around 300 billion lire, a swing of only 800 billion by comparison with 1990.

Industry was worst affected by the downturn. Measured year on year, industrial output fell for the first time in seven years. The decline steadily worsened until August, but then leveled out on a seasonally adjusted basis.

Employment in industry excluding construction fell by an annual average of more than 2 per cent, displaying the usual lag in relation to output. In the services sector, however, the demand for labour increased by a further 250,000. Total employment grew much more slowly than in 1990, but still rose by almost 200,000, or around 150,000 if account is taken of increased recourse to the Wage Supplementation Fund. The unemployment rate fell by half a percentage point to an annual average of 10.9 per cent.

Consumer price inflation remained almost unchanged on an annual average basis, at 6.4 per cent.

The twelve-month rise in the cost of living fell to 6.0 per cent in December. The slowdown was anything but steady; indeed, in January 1992 there was a slight rise to 6.1 per cent, followed in February by a sharp fall to about 5.5 per cent on the basis of preliminary data. The monthly variations, net of seasonal factors, demonstrate that domestic inflationary forces are still at work, although less potent.

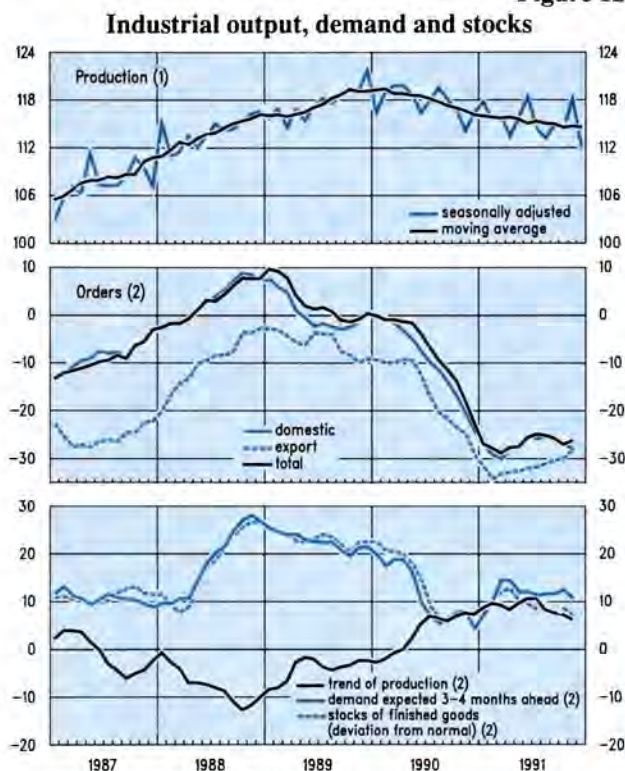
### Domestic demand and industrial output

The continued depressed state of the world economy and the near-stagnation in exports had repercussions on output and domestic demand. Demand continued to decline in the second half of the year, especially for capital goods.

The ending of the Gulf crisis led to an improvement in market expectations in the spring (Figure 12). A recovery was repeatedly said to be under way in the major industrial economies, especially the English-speaking countries, but its failure to materialize aroused fresh doubts about the economic outlook as well as having an immediate effect on output and real exports. The declining profitability and deteriorating financial situation of industrial firms depressed investment, compounding the effects of uncertainty about future demand and the accelerator mechanisms. The seasonally adjusted capital goods availability index shows that in the first eleven months of the year the average flow of investment in machinery, equipment and transport equipment was almost 3 per cent below the figure for 1990.

Construction investment was less vigorous than in 1990, when it had been boosted by public works projects associated with the World Cup football matches. The index of building permits for residential property, which had risen by 10 per cent in 1990, indicates continued sustained activity in property renovation.

Figure 12



Sources: Based on Istat and Isco-ME data.

(1) Overall index of industrial production (1985=100). Data adjusted for number of working days, readjusted by Denton's method and seasonally adjusted. The moving average is calculated from five centred terms, partly using forecasts based on electricity consumption. - (2) Centred moving averages (three terms) of the difference between positive replies ("high", "increasing", etc.) and negative replies ("low", "decreasing", etc.) to Isco-ME surveys of businessmen. Seasonally adjusted, except for stocks of finished goods.

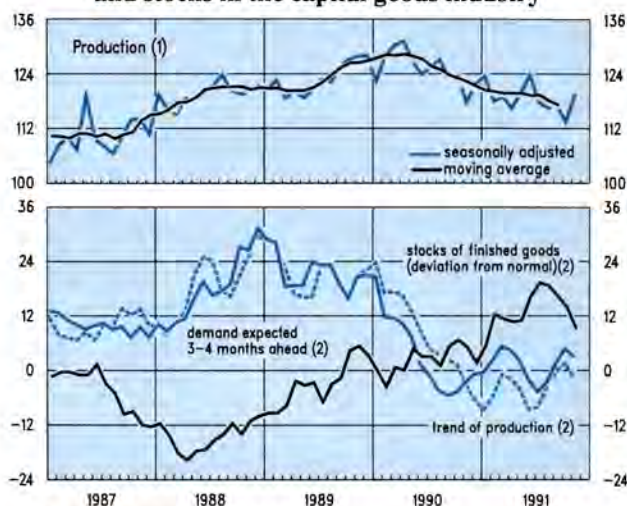
The Isco-Mondo Economico surveys of industrial companies show that the climate of business opinion remained mixed in the second half of the year (Figure 12). After rising in the spring, the level of orders began to decline again in the summer and stocks of finished products remained above the level companies considered normal. Short-term expectations regarding orders and production moved in opposite directions; the former improved slightly while the latter deteriorated, perhaps revealing firms' intentions to reduce their stocks of finished products rather than regard the growth in demand as sufficiently robust to justify expanding production. Expectations expressed by firms in the capital goods sector were even more pessimistic (Figure 13).

Thanks partly to the continued rise in disposable incomes, consumer spending was less affected by the decline in the rate of economic growth in the last two

years. The slowdown in consumption was due mainly to a contraction in purchases of durable goods. Sales of motor cars were 0.3 per cent lower than in 1990, when they had already been down by 0.6 per cent on 1989. The decline was more pronounced in the first half of the year, however; a slight recovery appears to have taken place in later months. Spending on non-durable goods and services, on the other hand, probably rose at an annual average rate similar to those of the previous two years (2.8 and 2.5 per cent in 1989 and 1990 respectively).

Figure 13

Current and expected production, expected demand and stocks in the capital goods industry



Source: Based on Istat and Isco-ME data.

(1) Overall index of industrial production (1985=100). Data adjusted for number of working days, readjusted by Denton's method and seasonally adjusted. The moving average is calculated from five centred terms. - (2) Centred moving averages (three terms) of the difference between positive replies ("high", "increasing", etc.) and negative replies ("low", "decreasing", etc.) to Isco-ME surveys of businessmen. Seasonally adjusted, except for stocks of finished goods.

Industrial activity declined. The reduction was particularly steep in the summer months, when many factories extended their usual shut-down period in order to accommodate the fall in demand. In the first eight months of the year, production was 2.6 per cent lower than in the corresponding period of 1990. The decline came to a halt in the autumn, so that the reduction in output for the year as a whole worked out at 2.1 per cent. In line with the pattern of demand, the fall was mainly in the sector producing capital goods, especially those used in industry itself; last November the seasonally adjusted capital goods production index was 10 per cent lower than in the first quarter of 1990.

Figure 14



Source: Isco.  
 (1) Capacity utilization rate. - (2) Assessment of capacity adequacy: difference between survey responses of "more than sufficient" and "insufficient" to meet expected demand for the next twelve months.

Capacity utilization rates declined further, but were still high by historical standards; the decrease in relation to the first quarter of 1990 was only 4 percentage points, much less than the fall during the recession in the early eighties. The percentage of surveyed firms that consider their present production capacity more than adequate to meet expected demand is still high, but is no longer rising (Figure 14).

### Employment and the labour market

According to the labour force survey, total employment rose by an annual average of almost 200,000 last year. However, recourse to the Wage Supplementation Fund increased by the equivalent of around 50,000 full-time workers. The growth in employment was half that recorded in 1990 and occurred entirely in the first half of the year; seasonally adjusted, total employment fell during the summer months.

The downturn in economic activity primarily affected the demand for labour in industry excluding construction. The contraction in employment steadily worsened during the year, in parallel with increasing recourse to the Wage Supplementation Fund. Ordinary Fund benefits, which are more sensitive to cyclical developments, almost doubled between 1990 and 1991. Difficulties were concentrated in certain industries and firms, especially in the mechanical and

electrical engineering sectors. A large number of companies applied for approval of early retirement schemes; Law 223 of July 1991 provided for 20,000 early retirements and the Government sanctioned a further 25,000 under Decree Law 16 of January 1992.

Employment in services continued to increase in the second half of the year, although more slowly than in the past. The increase in the year as a whole was more than 250,000. The construction industry helped sustain the overall growth in employment, and the decline in agricultural employment was smaller than in earlier years owing to the sector's favourable output figures, especially in the South.

The criteria for relating sample data to the overall population were amended in January 1991, leading to an upward adjustment of 0.4 percentage points in the 1990 estimates for labour force participation and unemployment; on the basis of homogeneous data that takes account of this change, the average unemployment rate fell from 11.4 to 10.9 per cent between 1990 and 1991. The decline was more pronounced in the South (Table 3).

The latest available labour force survey, which was taken in October, indicates that over a period of twelve months the unemployment rate fell by 1 percentage point in the South (from 20.6 to 19.6 per cent) but remained unchanged in the North and Centre (at 5.4 and 9.9 per cent respectively). These two areas of the country also recorded a substantial fall in unemployment in the early months of 1991, despite the sustained growth in the labour supply. The demand for labour stagnated in the final part of the year, and it was only thanks to the fact that the labour supply also remained constant that there was no increase in the general unemployment rate. However, the October survey showed that unemployment among male workers in the North, which is the most cyclical component, was slightly higher than twelve months earlier, although still very low (3.4 per cent). In the South, by contrast, the decline in unemployment gathered pace as the year proceeded, thanks partly to an increase in agricultural employment that contrasted with the usual trends in the Southern farm sector; the slight fall in the participation rate also contributed to the reduction in unemployment.

Table 3

## Unemployment rates and activity rates according to geographic area and sex

	NORTH			CENTRE			SOUTH			ITALY		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Unemployment rates</b>												
1990 - Jan. ....	3.1	9.6	5.6	7.1	18.0	11.3	15.4	32.6	21.2	8.2	18.4	12.0
Apr. ....	2.7	8.5	4.9	6.6	15.7	10.1	14.0	32.1	20.0	7.4	17.2	11.0
July ....	3.0	8.1	5.0	6.4	15.6	9.9	14.5	33.7	21.0	7.7	17.3	11.3
Oct. ....	3.2	8.8	5.4	6.0	16.2	9.9	14.5	32.5	20.6	7.7	17.4	11.3
<b>Average</b> .....	<b>3.0</b>	<b>8.8</b>	<b>5.2</b>	<b>6.5</b>	<b>16.4</b>	<b>10.3</b>	<b>14.6</b>	<b>32.7</b>	<b>20.7</b>	<b>7.8</b>	<b>17.6</b>	<b>11.4</b>
1991 - Jan. ....	3.0	8.7	5.2	6.1	15.7	9.8	15.1	32.0	20.7	7.9	17.1	11.3
Apr. ....	2.8	8.3	5.0	6.0	15.0	9.5	13.9	32.0	20.0	7.3	16.8	10.9
July ....	3.0	8.0	4.9	5.9	14.8	9.3	13.2	31.4	19.3	7.2	16.4	10.6
Oct. ....	3.4	8.6	5.4	5.9	16.2	9.9	14.0	30.9	19.6	7.6	16.8	11.0
<b>Average</b> .....	<b>3.1</b>	<b>8.4</b>	<b>5.1</b>	<b>6.0</b>	<b>15.4</b>	<b>9.6</b>	<b>14.1</b>	<b>31.6</b>	<b>19.9</b>	<b>7.5</b>	<b>16.8</b>	<b>10.9</b>
<i>Memorandum item:</i>												
1990 - old estimate (1)	2.9	8.6	5.1	6.2	15.6	9.8	13.6	31.8	19.7	7.3	17.1	11.0
<b>Participation rates</b>												
1990 - Jan. ....	56.2	33.4	44.5	55.3	32.5	43.6	52.1	25.6	38.6	54.5	30.4	42.2
Apr. ....	56.1	33.0	44.2	55.2	32.9	43.8	52.4	25.2	38.5	54.6	30.1	42.0
July ....	57.3	34.7	45.6	55.9	32.5	43.8	52.6	25.7	38.9	55.3	31.0	42.8
Oct. ....	57.0	34.5	45.4	55.4	32.7	43.7	52.3	25.7	38.7	54.9	31.0	42.6
<b>Average</b> .....	<b>56.7</b>	<b>33.9</b>	<b>44.9</b>	<b>55.5</b>	<b>32.7</b>	<b>43.7</b>	<b>52.4</b>	<b>25.6</b>	<b>38.7</b>	<b>54.8</b>	<b>30.6</b>	<b>42.4</b>
1991 - Jan. ....	56.3	33.9	44.7	55.5	32.6	43.7	52.1	25.2	38.4	54.6	30.5	42.2
Apr. ....	56.6	34.0	44.9	55.2	32.9	43.7	52.0	25.4	38.5	54.6	30.7	42.3
July ....	57.4	34.3	45.5	55.4	33.1	43.9	52.5	25.5	38.7	55.2	30.8	42.7
Oct. ....	56.9	34.1	45.2	55.3	33.5	44.1	52.3	25.1	38.7	55.1	30.7	42.6
<b>Average</b> .....	<b>56.8</b>	<b>34.1</b>	<b>45.1</b>	<b>55.4</b>	<b>33.0</b>	<b>44.0</b>	<b>52.2</b>	<b>25.3</b>	<b>38.6</b>	<b>54.9</b>	<b>30.7</b>	<b>42.5</b>
<i>Memorandum item:</i>												
1990 - old estimate (1)	56.1	33.5	44.4	54.6	32.1	43.0	52.3	25.5	38.6	54.4	30.3	42.0

(1) The old estimate remains the official figure for 1990.

Gross per capita wages in the private sector, which had accelerated sharply in the first half of 1991 as a result of wage settlements, continued to rise in the second half. The increase probably exceeded 8 per cent on an annual average basis, around 1 point more than in 1990. In December the twelve-month increase in minimum contractual wages in industry excluding construction was still running at 10.2 per cent; very large increases were agreed in construction (12.4 per

cent) and agriculture (13.9 per cent). None of the negotiations on public sector labour agreements for the 1991-93 period have yet progressed beyond the preliminary stage.

Negotiations on labour costs were opened in the second half of the year between employers, trade unions and the Government. The talks, which should lead to reform of the system of collective bargaining and an overhaul of the mechanisms for adjusting

wages to the cost of living in order to avoid the inflationary distortions caused by the automatic indexation used until last year, have not yet produced concrete results. The Government had proposed modifying the *scala mobile* in order to curb the rise in costs and prices as early as 1992; cost-of-living adjustments would be made once a year on the basis of the target inflation rate, with further compensation being paid subsequently if the actual rate were more than half a percentage point above the target. The other features of the present system would remain unchanged, apart from the adjustments required to reduce the average compensation for inflation from 50 to about 40 per cent.

An interim agreement reached in December noted the distance still separating the parties and adjourned the negotiations until June 1992, when it is possible that a new mechanism for automatically adjusting salaries to the rise in prices may be defined. In the meanwhile, it was agreed not to renew Law 191 of 13 July 1990, which extended the *scala mobile* arrangements until 31 December 1991; the effects should begin to make themselves felt in May.

To assist those on low incomes, the preliminary agreement also provided for the planned 0.9 point increase in employees' social security contributions

to be replaced by a rise in personal income tax for all but the first two tax brackets. The Government also increased the relief from certain social security contributions for manufacturing companies from 0.75 to 1 point and undertook to hold the rise in utility charges and administered prices to 3.5 per cent in 1992. In accordance with the intentions expressed in the Finance Law, it has been agreed that per capita wages in the public sector will not be increased by more than the target inflation rates of 4.5 per cent in 1992 and 4.0 per cent in 1993. The Government recently drafted a bill to reform employment contracts in the public sector and to redefine the legal status of public employees.

### Costs and prices

The average inflation rate, as measured by the consumer price index, was 6.4 per cent in 1991, almost unchanged from 6.5 per cent in 1990. The inflationary pressures were entirely domestic in origin, since the GDP price deflator is estimated to have risen more than the consumer price index, while import prices fell slightly, thanks to the stability of the lira within the ERM.

Table 4

Unit variable costs and final output prices in manufacturing  
(percentage changes on year-earlier period)

	1990	1991 (1)	1990		1991 (1)	
			H1	H2	H1	H2
<b>Input prices</b> .....	<b>3.9</b>	<b>5.9</b>	<b>3.1</b>	<b>4.6</b>	<b>6.8</b>	<b>5.1</b>
Domestic .....	8.7	9.5	7.8	9.6	10.9	8.1
<i>of which: energy</i> .....	18.4	8.5	18.2	18.5	14.9	2.7
<i>services</i> .....	8.5	9.4	7.7	9.4	10.3	8.5
<i>agricultural products</i> .....	2.7	10.4	1.0	4.4	10.7	10.1
Foreign .....	-4.1	-0.6	-4.4	-3.8	-0.5	-0.7
<i>of which: energy</i> .....	9.6	-3.4	0.0	18.9	10.2	-14.5
<b>Unit labour costs</b> .....	<b>7.3</b>	<b>7.8</b>	<b>7.5</b>	<b>7.1</b>	<b>8.3</b>	<b>7.3</b>
<b>Unit variable costs</b> .....	<b>5.6</b>	<b>6.8</b>	<b>5.3</b>	<b>5.9</b>	<b>7.5</b>	<b>6.2</b>
<b>Output prices</b> .....	<b>2.5</b>	<b>2.8</b>	<b>2.8</b>	<b>2.3</b>	<b>2.9</b>	<b>2.7</b>
<i>of which: energy</i> .....	2.8	3.0	3.1	2.4	2.9	3.0

(1) Partly estimated.

## Costs and prices in manufacturing industry

Figure 1 shows the dynamics of output prices and unit variable costs in manufacturing industry over the last two decades.<sup>1</sup> Output prices rose rapidly and were volatile in the seventies, began to moderate in 1981 and slowed to an annual rate of increase of 2.4 per cent in 1986 and 1987. The disinflation of the eighties can be divided into three phases. From 1981 to 1983, following the second oil shock and in parallel with the pronounced appreciation of the dollar and the period of weak economic activity, output prices rose more slowly than unit variable costs. This tendency was reversed in the five years between 1984 and 1988, owing in part to effects of the countershock on the prices of energy products from 1986 onwards; the differential between the rise in output prices and unit variable costs exceeded 2 percentage points that year, as cost savings were not entirely passed through to prices. By contrast, in the three years from 1989 to 1991 the competitive pressure that the stability of the lira and the deterioration in demand exerted on manufacturing firms caused the differential to turn increasingly negative: it widened from 1 to 3 percentage points between 1989 and 1990 and is estimated to have widened further in 1991.

Figure 1

Final output prices and unit variable costs  
(average annual percentage changes)

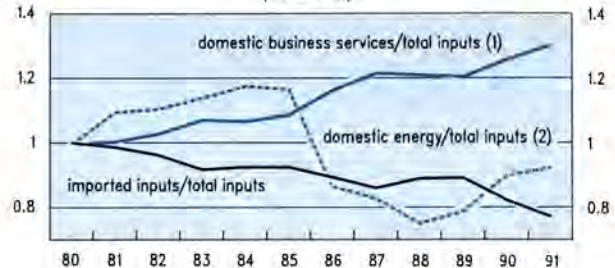


Source: Based on Istat data.

The structure of manufacturing firms' costs altered considerably in the period under review, reflecting changes in the mix of production factors (see the table) and especially in their relative prices. During the eighties a large disparity opened up between the prices of domestic and imported inputs; the former rose at an average annual rate of 9.1 per cent and the latter at one of 5.1 per cent between 1980 and 1991. Domestic input prices were pushed up particularly by the increase in the cost of business services, which rose by around 30 per cent more than the average of all input prices in the eleven years considered (Figure 2). The prices of

Figure 2

Relative prices of selected intermediate inputs  
(1980=1)



Source: Based on Istat data.

(1) Ratio of the price index of domestic business services to that of total intermediate inputs. - (2) Ratio of the price index of domestically produced energy products to that of total intermediate inputs.

Weighting of unit variable costs and output prices (1)  
(percentages)

	1975	1980	1985
<b>Input prices</b> .....	<b>48.5</b>	<b>54.7</b>	<b>49.2</b>
Domestic .....	30.7	31.3	28.6
of which: energy .....	8.3	5.6	3.5
services .....	13.4	17.8	18.3
Imported .....	17.8	23.4	20.6
<b>Unit labour costs</b> .....	<b>51.5</b>	<b>45.3</b>	<b>50.8</b>
Unit variable costs .....	100.0	100.0	100.0
<b>Output prices of goods for domestic market</b> .....	<b>48.5</b>	<b>54.7</b>	<b>49.2</b>
<b>Output prices of goods for export</b> ..	<b>51.5</b>	<b>45.3</b>	<b>50.8</b>
Total output prices .....	100.0	100.0	100.0

Source: Based on Istat data.

(1) Weighting derived from the sectoral input-output tables at 1980 prices.

domestically produced energy inputs (oil products, electricity) increased less than the average, although they began to accelerate in 1989. Over the period as a whole, unit labour costs rose at an average annual rate of 7.7 per cent, in line with the increase in total input prices; over the last two years they increased more rapidly than the latter (7.6 per cent, compared with 4.8 per cent).

<sup>1</sup> For further information, see the article on Revision of the index of output prices and of the real exchange rate series of the lira.

In the first half of the year the twelve-month rate of consumer price inflation continued to reflect the earlier rise in energy prices and the acceleration in labour costs due to wage settlements. The conclusion of the Gulf crisis began to have beneficial effects on the prices of imported raw materials in the summer. The twelve-month increase in the cost of living came down, albeit unevenly, from 6.9 per cent in June to 6 per cent in December. In January of this year it rose again temporarily to 6.1 per cent as a result of an increase of around 0.3 percentage points in regulated prices. According to initial estimates, it declined to 5.5 per cent in February.

In the other countries belonging to the exchange rate mechanism of the EMS consumer prices rose by an average of 3.3 per cent over the year, 0.3 points more than in 1990. The acceleration was due essentially to inflation in Germany, which accelerated from 2.7 per cent in 1990 to 3.5 per cent last year (4 per cent in the second half of 1991 compared with the second half of 1990). It was only this that reduced the average inflation differential between Italy and the other ERM countries from 3.5 to 3.1 points.

The cost of intermediate inputs in manufacturing industry rose by 5.9 per cent on an annual average basis (Table 4). The increase was entirely attributable to domestic input prices, which increased by 9.5 per cent overall; in particular, those of services and agricultural products are estimated to have risen by 9.4 and 10.4 per cent respectively. By contrast, the cost of imported inputs fell by 0.6 per cent, reflecting the easing of the prices of the main industrial raw materials and energy.

As mentioned above, the conclusion of most of the national labour contracts between the summer of 1990 and the summer of 1991 caused an acceleration in manufacturing industry's labour costs. The wage increases envisaged in many of these settlements did not assume a rapid and substantial slowdown in inflation. In addition, the one-off payments granted under many agreements as consideration for the delay in contract renewal magnified the initial impact on wages. Consequently, the annual average rise in unit labour costs is estimated at around 8 per cent, a figure that also reflects the stagnation in labour productivity due to the slackness of industrial activity. Total unit

variable costs are estimated to have increased by an average of nearly 7 per cent during the year. Output prices rose by less than half as much (see the insert on *Costs and prices in manufacturing industry*). The squeeze on companies' profit margins that had begun in 1989 intensified in the first half of the year before diminishing in the second as unit costs decelerated.

The consumer prices of non-food and non-energy products increased by around 2 percentage points more than industrial output prices, presumably as a result of a widening of gross retail margins. The overall rise in consumer prices was also due to the prices of food products, which rose at an annual rate of 6.6 per cent in the first eleven months of the year.

The prices of services not subject to public control were again the most dynamic component of consumer price inflation, accelerating from an annual rate of increase of 7.2 per cent in the first quarter to one of 8.2 per cent in the third. By contrast, the prices of regulated goods and services slowed down during the year; nonetheless, the average annual increase is likely to be around half a point higher than that of the index as a whole, offsetting part of the differential in the opposite direction that had been recorded in the recent past. The increases were fairly rapid in the first quarter, owing in part to the fiscal measures contained in the Finance Law for 1991; in particular, public utility charges (including those for energy) were 9 per cent higher in the first quarter of 1991 than in the corresponding period of the previous year.

### **The balance of payments on current account**

According to preliminary estimates, the current account of the balance of payments recorded a deficit of 23.5 trillion lire in 1991, equal to 1.7 per cent of GDP and 6.2 trillion more than in the previous year (Table 5). The trade account deteriorated only slightly. By contrast, the deficit on invisibles rose from 17.9 to 23.2 trillion lire; it has increased rapidly from the mid-eighties onwards, owing mainly to net interest payments associated with the growth in net external debt and high international interest rates.

Table 5

**Current account of the balance of payments on a transactions basis**  
(balances in billions of lire)

	1990			1991 (1)		
	H1	H2	Year	H1	H2	Year
<i>Memorandum item:</i>						
Goods ( <i>cif-fob</i> ) .....	-11,333	-2,856	-14,189	-11,593	-4,430	-16,023
Goods ( <i>fob-fob</i> ) .....	-3,708	4,271	563	-3,900	3,600	-300
Invisibles .....	-10,344	-7,562	-17,906	-10,900	-12,300	-23,200
Foreign travel .....	2,784	4,301	7,085	4,900	3,500	8,400
Investment income .....	-7,401	-8,600	-16,001	-9,400	-11,700	-21,100
Other services, income and transfers	-5,727	-3,263	-8,990	-6,400	-4,100	-10,500
<b>Total . . . .</b>	<b>-14,052</b>	<b>-3,291</b>	<b>-17,343</b>	<b>-14,800</b>	<b>-8,700</b>	<b>-23,500</b>

Source: For merchandise trade *cif-fob*, Istat.  
(1) Provisional or estimated.

Table 6

**Merchandise trade, *cif-fob*: values, prices, volumes**  
(seasonally adjusted data; percentage  
changes at an annual rate)

	1990	1991		
		H1	H2 (1)	Year (1)
<b>Exports:</b>				
Value .....	5.6	5.1	0.2	3.1
Price .....	2.1	4.0	1.2	3.2
Volume .....	3.5	1.1	-1.0	-0.1
<b>Imports:</b>				
Value .....	3.7	4.7	3.0	3.7
Price .....	-0.7	-2.4	-0.9	-0.4
Volume .....	4.5	7.3	3.9	4.0
Terms of trade .....	2.9	6.5	2.1	3.5
Export/import ratio ... (2)	-0.9	-5.0	-5.4	-3.7

Source: Istat.  
(1) Partly estimated. - (2) In volume terms.

The current account deteriorated as the year progressed. In the second half there was a deficit of 8.7 trillion lire, more than 5.4 trillion higher than the figure for the same period of 1990. The increase was almost entirely due to a worsening of the deficit on invisible items, and also partly to a reduction in the trade surplus. In the first half of the year, by contrast, the trade deficit had been almost the same as in 1990 and the larger surplus on foreign travel had balanced the increase in net interest payments on the foreign debt, so that the invisibles deficit had remained at about the same level as a year earlier.

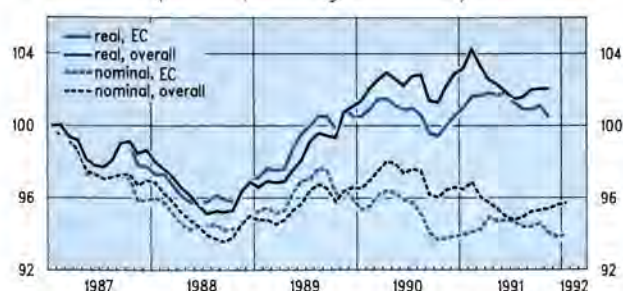
Italian exports were seriously affected by the lack of a recovery in world economic activity. It is estimated that world demand, represented by industrial countries' exports in volume terms, was only 1.7 per cent higher in the first eight months of last year by comparison with the corresponding period of 1990. According to preliminary estimates, Italian exports contracted by 0.1 per cent in volume during the year as a whole (Table 6). The decline was limited by strong demand from Germany, at least in the first half of the year. Exports to the German market, which now account for more than 21 per cent of total Italian exports, are estimated to have increased by not less



than 10 per cent in volume in the course of the year. In the second half the decrease in the total volume of exports probably accelerated to an annual rate of around 1 per cent owing to the decline in German domestic demand and the delayed effect of the loss of price competitiveness in the first part of the year (Figure 15).

Figure 15

**Effective exchange rates of the lira (1)**  
(indices, January 1987=100)



(1) Real exchange rates are based on the wholesale prices of manufactures. A rise in the index indicates an appreciation of the lira (loss of competitiveness). Real effective exchange rates vis-à-vis the EC relate only to ERM currencies; those of Greece and Portugal are therefore excluded.

At the beginning of 1991 the competitiveness of manufactures in terms of producer prices was 3.2 per

cent lower in relation to the last realignment of EMS central rates in January 1987 and 8.5 per cent below the peak of mid-1988, but it recovered by more than a percentage point between January and November of last year (Figure 15; see also the article on the revision of the producer price index). The lira depreciated by an annual average of 0.8 per cent in nominal terms vis-à-vis the other ERM currencies, but in January 1992 it returned to the level of a year earlier. It declined by 13 per cent against the dollar between January and August and subsequently appreciated by more than 10 per cent between then and January 1992. The average overall loss of competitiveness over the first eleven months of 1991 was very small (0.2 per cent), thanks partly to a more modest rise in Italian relative prices than in 1990 (Table 7).

Export unit values are estimated to have increased by around 3.2 per cent. The rise was more pronounced in the first half of the year (an annual rate of 4 per cent). There was practically no disparity between the increase in the export prices of manufactures and that in the prices of industrial goods for the domestic market, indicating that competitive pressure from foreign competitors was uniform on all markets.

Table 7

**Relative prices and nominal and real exchange rates of the lira**  
(January-November; percentage changes on same period of previous year)

	Real exchange rate of the lira (1) (2)		Relative prices in Italy (1)		Nominal exchange rate of the lira (2)	
	1990	1991	1990	1991	1990	1991
EC (3) .....	1.6	0.7	2.7	1.5	-1.1	-0.9
Belgium-Luxembourg .....	1.3	3.3	4.3	4.6	-2.9	-1.3
France .....	0.5	1.7	2.9	1.6	-2.3	0.1
Germany .....	1.3	0.7	2.9	1.6	-1.6	-0.9
Netherlands .....	3.4	2.0	5.2	2.9	-1.7	-0.9
United Kingdom .....	4.9	-4.9	-1.4	-2.0	6.4	-2.9
Spain .....	0.8	0.4	2.2	2.0	-1.3	-1.6
Canada .....	17.6	-0.7	4.3	4.5	12.8	-4.9
Japan .....	24.8	-8.4	2.8	1.8	21.4	-10.0
United States .....	15.5	-0.5	0.8	2.7	14.6	-3.1
Switzerland .....	0.1	2.8	2.8	3.3	-2.5	-0.5
<b>Total (4) . . . . .</b>	<b>4.0</b>	<b>0.2</b>	<b>2.4</b>	<b>1.8</b>	<b>1.6</b>	<b>-1.6</b>

Sources: Based on OECD, IMF and Istat data.

(1) Producer prices of manufactures. - (2) A minus sign indicates a devaluation of the lira (gain in competitiveness for the real exchange rate). - (3) Excluding Greece and Portugal; in other words, the aggregate comprises the countries belonging to the ERM. - (4) The total also includes Austria and Sweden.

Table 8

Italian merchandise trade *cif-fob* by country and area

	Exports				Imports				Balance	
	Absolute values		Percentage changes	Percentage of total 1991	Absolute values		Percentage changes	Percentage of total 1991	Absolute values	
	1990	1991			1990	1991			1990	1991
<b>OECD</b> .....	<b>162,985</b>	<b>166,338</b>	<b>2.1</b>	<b>79.3</b>	<b>166,099</b>	<b>172,911</b>	<b>4.1</b>	<b>76.6</b>	<b>-3,114</b>	<b>-6,573</b>
<b>EC</b> .....	118,503	123,685	4.4	59.0	125,035	130,328	4.2	57.7	-6,532	-6,643
Belgium-Luxembourg	6,934	7,130	2.8	3.4	11,084	11,009	-0.7	4.9	-4,150	-3,879
Denmark .....	1,556	1,628	4.6	0.8	2,178	2,228	2.3	1.0	-622	-600
France .....	33,320	31,848	-4.4	15.2	30,980	31,988	3.3	14.2	2,340	-140
Germany (1) .....	38,707	44,017	13.7	21.0	46,203	47,224	2.2	20.9	-7,496	-3,207
Greece .....	3,678	3,832	4.2	1.8	1,974	1,876	-5.0	0.8	1,704	1,956
Ireland .....	577	693	20.1	0.3	1,467	1,477	0.7	0.6	-890	-784
Netherlands .....	6,344	6,616	4.3	3.2	12,483	12,976	3.9	5.7	-6,139	-6,360
Portugal .....	2,925	3,236	10.6	1.5	766	826	7.8	0.4	2,159	2,410
United Kingdom .....	14,402	13,973	-3.0	6.7	11,373	12,836	12.9	5.7	3,029	1,137
Spain .....	10,060	10,712	6.5	5.1	6,527	7,888	20.9	3.5	3,533	2,824
Switzerland .....	9,206	8,810	-4.3	4.2	9,926	10,004	0.8	4.4	-720	-1,194
Other European countries (2) .	11,716	11,725	0.1	5.6	11,832	11,441	-3.3	5.1	-116	284
Other OECD (3) .....	23,560	22,118	-6.1	10.5	19,306	21,138	9.5	9.4	4,254	980
<i>of which: Canada</i> .....	<i>1,805</i>	<i>1,716</i>	<i>-4.9</i>	<i>0.8</i>	<i>1,739</i>	<i>1,734</i>	<i>-0.3</i>	<i>0.8</i>	<i>66</i>	<i>-18</i>
<i>Japan</i> .....	<i>4,768</i>	<i>4,600</i>	<i>-3.5</i>	<i>2.2</i>	<i>5,067</i>	<i>5,525</i>	<i>9.0</i>	<i>2.4</i>	<i>-299</i>	<i>-925</i>
<i>United States</i> .....	<i>15,516</i>	<i>14,445</i>	<i>-6.9</i>	<i>6.9</i>	<i>11,100</i>	<i>12,618</i>	<i>13.7</i>	<i>5.6</i>	<i>4,416</i>	<i>1,827</i>
<b>Eastern European countries (4)</b>	<b>6,050</b>	<b>6,030</b>	<b>-0.3</b>	<b>2.9</b>	<b>8,140</b>	<b>8,748</b>	<b>7.5</b>	<b>3.9</b>	<b>-2,090</b>	<b>-2,718</b>
<i>of which: ex USSR</i> .....	<i>3,184</i>	<i>2,986</i>	<i>-6.2</i>	<i>1.4</i>	<i>4,938</i>	<i>5,590</i>	<i>13.2</i>	<i>2.5</i>	<i>-1,754</i>	<i>-2,604</i>
<b>OPEC countries (5) .....</b>	<b>8,320</b>	<b>9,975</b>	<b>19.9</b>	<b>4.8</b>	<b>15,352</b>	<b>16,129</b>	<b>5.1</b>	<b>7.1</b>	<b>-7,032</b>	<b>-6,154</b>
<b>Other</b> .....	<b>26,160</b>	<b>27,404</b>	<b>4.8</b>	<b>13.0</b>	<b>28,113</b>	<b>27,982</b>	<b>-0.5</b>	<b>12.4</b>	<b>-1,953</b>	<b>-578</b>
<i>of which: China</i> .....	<i>1,168</i>	<i>1,562</i>	<i>33.7</i>	<i>0.7</i>	<i>2,193</i>	<i>2,823</i>	<i>28.7</i>	<i>1.3</i>	<i>-1,025</i>	<i>-1,261</i>
<b>Total</b> .....	<b>203,515</b>	<b>209,747</b>	<b>3.1</b>	<b>100.0</b>	<b>217,704</b>	<b>225,770</b>	<b>3.7</b>	<b>100.0</b>	<b>-14,189</b>	<b>-16,023</b>

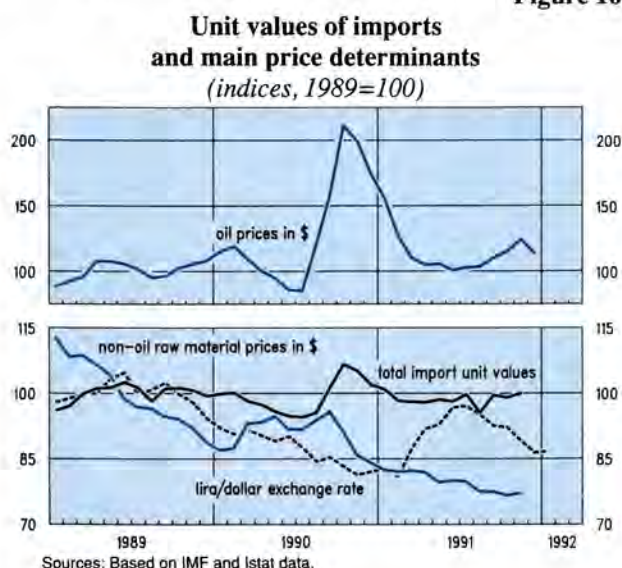
Source: Based on Istat data.

(1) From October 1990 includes data for the former GDR. - (2) Austria, Finland, Iceland, Norway, Sweden and Turkey. - (3) Australia, Canada, Japan, New Zealand and the United States. - (4) Albania, Bulgaria, Czechoslovakia, Poland, Romania, Hungary, the former USSR and, until September 1990, the former GDR. - (5) Algeria, Saudi Arabia, United Arab Emirates, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar and Venezuela.

The volume of imports grew more slowly in the second half of the year than in the first, but the slowdown did not fully reflect the weakening of domestic demand. The increase for the year as a whole was 4 per cent; imports of agricultural products grew particularly rapidly (by 14.1 per cent in the first ten months of 1991), whereas those of manufactures as a whole increased at the same rate as overall imports, with faster growth only in textiles and clothing (11.4 per cent), food (8.3 per cent) and transport equipment (7.9 per cent). Imports of energy and other primary products increased by less than the average.

The terms of trade continued to improve in the second half of the year owing to the fall in the prices of non-energy raw materials and, in the last few months, the depreciation of the dollar; nevertheless, the gain was not as rapid in the first half, when the improvement had been at an annual rate of 6.5 per cent in relation to the second half of 1990 (Figure 16). After rising sharply to more than \$34 per barrel in the fourth quarter of 1990, the *cif* price of imported crude fell to \$18 in June but firmed again to \$20 at the end of 1991. On an annual average basis, the terms of trade improved by 3.5 per cent.

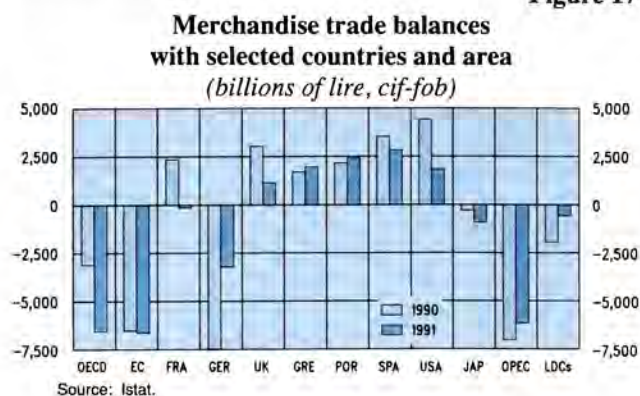
Figure 16



The trade deficit vis-à-vis European Community countries was roughly the same as in 1990 (Table 8 and Figure 17). The reduction of almost 4.3 trillion lire in the deficit vis-à-vis Germany offset the deterioration in the balances vis-à-vis France, Spain

and the United Kingdom. The sharp contraction in UK domestic demand outweighed the improvement in Italy's bilateral competitiveness in relation to the United Kingdom, reducing the surplus to less than 1.2 trillion lire. The surplus vis-à-vis the United States also declined, reflecting the downturn in economic activity and the real depreciation of the dollar in the second half of the year. The trade deficit with the Eastern European countries increased as a result of higher imports from Bulgaria, Czechoslovakia, Hungary and the former Soviet Union. The deterioration vis-à-vis the latter was exacerbated by a fall of 6.2 per cent in Italian exports due to the increased risk inherent in the deferred payment terms usually requested by purchasers in that country.

Figure 17



The worsening of the overall trade balance was the result of a reduction of around 2.5 trillion lire in the surplus on non-energy products in the second half of 1991; the energy deficit remained unchanged (Table 9). Whereas the balance on metal products and machinery and on ferrous and non-ferrous ores and minerals improved, trade in agricultural products and transport equipment deteriorated. The surplus on textiles, leather products and clothing, a sector in which Italy enjoys a comparative advantage, declined by about 900 billion lire.

According to provisional and estimated data, there was a deficit of 12.3 trillion lire on invisibles in the second half of the year, about 4.7 trillion more than in the same period of 1990. In the first six months of 1991, by contrast, these items had shown little change over the year. The deficit for 1991 as a whole is expected to be around 23.2 trillion lire, almost as much as the entire current account deficit.

Table 9

**Merchandise trade by product group**  
(cif-fob; billions of lire)

	1990			1991		
	H1	H2	Year	H1	H2	Year
Agricultural, forestry and fishery products .....	-4,907	-4,048	-8,955	-5,320	-4,640	-9,960
Fuel and power products .....	-10,083	-12,769	-22,852	-11,230	-10,945	-22,175
Ferrous and non-ferrous ores and metals .....	-6,211	-5,010	-11,221	-5,674	-4,827	-10,501
Non-metallic minerals and mineral products ...	2,147	2,139	4,286	2,057	2,220	4,277
Chemical products .....	-6,618	-4,941	-11,559	-7,001	-4,856	-11,857
Metal products and machinery .....	8,238	11,410	19,648	9,272	11,067	20,339
Transport equipment .....	-2,233	-1,980	-4,213	-2,773	-3,892	-6,665
Food, beverages and tobacco products .....	-4,283	-4,349	-8,632	-4,449	-4,496	-8,945
Textiles, leather products and clothing .....	10,439	12,909	23,348	10,508	11,900	22,408
Other .....	2,178	3,783	5,961	3,017	4,039	7,056
<b>Total . . . .</b>	<b>-11,333</b>	<b>-2,856</b>	<b>-14,189</b>	<b>-11,593</b>	<b>-4,430</b>	<b>-16,023</b>

Source: Istat.

In the second half of the year the deficit on investment income was 3.1 trillion lire higher than in the corresponding period of the previous year owing to the growth in external debt. According to preliminary estimates, net foreign debt (with the central bank's gold reserves being counted among assets) exceeded 130 trillion lire at the end of the year. During 1991 as a whole net outflows of investment income rose to more than 21 trillion, compared with 16 trillion a year earlier. The increase in gross flows (21 per cent in the case of receipts and 26 per cent in that of payments) was due primarily to the growth in the stock of debt. The rise in the implicit interest rate on liabilities (the ratio of outflows of investment income to the average stock of gross external liabilities was almost 0.6 percentage points higher than in 1990) partly reflected the increase in German interest rates, as a substantial proportion of financial liabilities is denominated in Deutschemark. The fall in US interest rates, on the other hand, reduced the inflow of investment income, owing to the relatively high percentage of financial assets expressed in dollars.

Figure 18

**International competitiveness  
of Italian tourist services (1)**  
(indices, 1980=100)



Sources: Based on OECD, IMF and Istat data.

(1) An increase indicates a loss of competitiveness. Data for the two final months are partly estimated.

The surplus on foreign travel began to contract in the second half of the eighties, but stabilized in 1991, especially in the first half of the year, when it was 2.1 trillion lire more than in the same period of 1990, despite the decline in world tourist demand. In the second half, which includes the months of greatest tourist demand, the surplus decreased slightly,

notwithstanding shifts in tourist flows due to the crisis in Yugoslavia. The decline in the number of foreign visitors to Italy in the first ten months of 1991 by comparison with the corresponding period of the previous year reflected the delayed effects of the loss of competitiveness between the autumn of 1990 and the spring of last year (Figure 18). Nevertheless, the increase in gross foreign exchange receipts despite the fall in the number of non-residents' overnight stays may indicate a rise in real per capita expenditure.

### Capital movements and the exchange rate of the lira

The strong expansion in gross capital inflows and outflows in the wake of the liberalization of capital movements continued throughout 1991. There were substantial net inflows during the year, but not on the exceptional scale recorded in 1990 after the adoption

of the narrow EMS fluctuation band for the lira. They were insufficient to offset the widening current account deficit, so that the official reserves decreased by about 8.6 trillion lire (Table 10). At the end of 1991 the Bank of Italy's reserves exceeded 94 trillion lire, of which 29 trillion were in gold, 52 trillion in ecus and other convertible currencies, and over 10 trillion in foreign long-term securities.

Two years after the lifting of exchange controls, the pattern of capital movements remains favourable: the balance was positive throughout both years, despite a steady narrowing of the differential between lira interest rates and those for other leading currencies.

The reduction in the interest rate differential vis-à-vis the Deutschmark following the raising of German rates from mid-August onwards contributed to a slowdown in net capital inflows, especially loans, in which net repayments were recorded in the second half of 1991.

**Table 10**

	Net capital movements (billions of lire)					
	1990			1991 (1)		
	H1	H2	Year	H1	H2	Year
Foreign investment in Italy .....	15,571	15,009	30,580	15,500	10,800	26,300
Italian investment abroad .....	-12,378	-19,832	-32,210	-23,800	-13,200	-37,000
<i>of which: portfolio</i> .....	-9,190	-14,127	-23,317	-21,300	-10,400	-31,700
Foreign loans .....	24,561	11,610	36,171	19,000	-4,900	14,100
Italian loans .....	-2,906	-1,849	-4,755	-3,000	-3,300	-6,300
Trade credits, other items and errors and omissions .....	-4,144	-16,114	-20,258	-6,700	-14,400	-21,100
Non-bank capital flows and errors and omissions .....	20,704	-11,176	9,528	1,000	-25,000	-24,000
Bank capital flows (2) .....	14,714	8,259	22,973	19,400	19,500	38,900
<b>Total . . . .</b>	<b>35,418</b>	<b>-2,917</b>	<b>32,501</b>	<b>20,400</b>	<b>-5,500</b>	<b>14,900</b>
<i>Memorandum item:</i>						
Change in official reserves (3)	-21,366	6,208	-15,158	-5,600	14,200	8,600

(1) Provisional or partly estimated. - (2) Via resident banking institutions. - (3) Net of exchange-rate adjustments and the revaluation of gold. A minus sign indicates an increase in reserves.

The lira stayed near the upper margin of the narrow EMS band between March and October. It showed signs of weakening at the beginning of November, when the appreciation of the Deutschemark against the dollar owing to an easing of US monetary policy led to tension within the EMS. In the second half of the month the lira fell below the mid-point of the band for the first time in the year, and then fluctuated around that level. It came under strong pressure in the first ten days of December as a result of the depreciation of the dollar against the Deutschemark. In the second half of the month, the increase in official German rates and the simultaneous reduction in US rates weakened the dollar still further. In Italy the exchange rate pressures were countered by increasing the discount rate and making repeated market interventions to support the lira. In December alone, outflows of reserves amounted to over 7.7 trillion lire. In January the lira returned towards the centre of the EMS fluctuation band without any assistance from exchange market intervention.

Resident banks generated net inflows of 19.5 trillion lire in the second half of 1991. They had reduced their net debtor position in the first four months of the year, but the removal of the reserve requirement on their net foreign currency fund-raising in May led to a reversal of the trend and gave rise to massive inflows of capital; between May and July the banks' net foreign debtor position rose by 23 trillion lire. At the same time there was a slowdown in the growth of the foreign liabilities of special credit institutions, which had never been subject to this particular reserve requirement. Net inflows generated by the Italian banking system totaled 39 trillion lire in the year as a whole, against 23 trillion in 1990. The net foreign indebtedness of authorized intermediaries stood at nearly 151 trillion lire at the end of December, with special credit institutions accounting for 70 trillion and banks for 81 trillion. In the last two months of 1991 banks' net fund-raising abroad was entirely in foreign currencies; by contrast, there was an outflow of lire that produced a net creditor position in lire for the first time since September 1990.

Movements of investment capital led to a net outflow of 10.7 trillion lire, 9 trillion more than in 1990. There was nonetheless an improvement of 5.9

trillion lire between the first and second halves of last year. Net Italian investment abroad totaled 37 trillion lire in 1991, against 32.2 trillion in 1990. A slowdown occurred in the second half of the year; net portfolio investment, in particular, was 11 trillion lire lower than in the first half. This contraction, at a time when German interest rates were rising, demonstrates the credibility of Italy's exchange rate policy and may also indicate that portfolio adjustment by residents in response to the liberalization of capital movements is now well advanced. Current account deposits by residents with non-resident banks also generated modest, albeit increasing gross outflows.

Foreign investment in Italy, for which no breakdown into direct and portfolio investment is yet available, grew more slowly in the second half, except for a strong inflow of nearly 6 trillion lire in September, when the launch of futures contracts for Italian Treasury bonds on the Paris Matif and London Liffe exchanges attracted foreign investors to Italian government paper and the announcement that non-residents would be reimbursed for tax credits on government securities increased the expected yields. Gross inflows of foreign capital came to 31 trillion lire in September, 50 per cent more than in August. For the year as a whole net inward investment amounted to 26.3 trillion lire, 4.2 trillion less than in 1990.

The exceptionally large net inflow of loans recorded in 1990 (more than 31.4 trillion lire, of which 6.3 trillion was due to issues by the Republic of Italy) was not repeated last year; the inflow for the whole of 1991 came to only 7.8 trillion. Until April inflows exceeded 26.3 trillion lire, 4.9 trillion of which was in connection with issues by the Republic of Italy compared with 3.4 trillion lire during the same period of 1990. Subsequently, however, there were net outflows of 12.2 trillion lire; the reversal was due largely to the reduction in the claims of Italian banks' foreign branches on residents, which are recorded under loans in the balance of payments. Following the removal of the reserve requirement on their foreign currency fund-raising, the parent banks took over the foreign currency fund-raising and lending to residents that had previously been carried out by their foreign branches. Between the end of May and the end of November, lending to residents by the foreign branches of Italian banks contracted by over 10

trillion lire. In recent months the continuing decline in such lending has been offset by the strength of lira loans, which continue to react promptly to changes in the differential between domestic interest rates and Euro lira interbank rates.

Italian lending gave rise to outflows of more than 6.3 trillion lire in 1991, compared with 4.8 trillion in 1990. The public sector component of Italian loans

continued to contract during the year, in tandem with a growth in private lending in absolute terms.

The new system for collecting foreign exchange data introduced last December has made it possible to estimate foreign financial operations not transacted via resident banks. Net outflows during the year were modest, totaling little more than 4.6 trillion lire, two thirds of which occurred in the first half of the year.

## Public finances

The 1991 state sector borrowing requirement amounted to 152.2 trillion lire, net of settlements of past debts (Table 11). This was over 20 trillion lire more than the objective the Government had fixed in the September 1990 Forecasting and Planning Report and confirmed in the May 1991 Economic and Financial Planning Document. The primary borrowing requirement amounted to around 7 trillion lire, exceeding the targets laid down in the aforementioned documents by respectively 15 and 19 trillion lire.

After decreasing steadily from the peak of 13.6 per cent reached in 1985, the ratio of the state sector borrowing requirement to GDP remained unchanged at 10.7 per cent. The ratio of the public debt to GDP rose by 3.3 percentage points, compared with a rise of 3.1 points in 1990. The borrowing requirement was boosted by the 14 per cent increase in interest payments net of the withholding tax on income from government securities, which was in line with the growth in the public debt. The ratio of the primary deficit to GDP continued to fall, reaching 0.5 per cent, compared with 2.3 per cent in 1989 and 1.1 per cent in 1990. When the deficit is calculated on the basis of

interest payments net of the withholding tax, the decline is less pronounced, with the ratio falling from 2.8 per cent in 1989 to 1.8 per cent in 1990 and to 1.3 per cent last year.

The two main indicators chosen for the purpose of assessing the convergence of member countries' fiscal policies with a view to their participation in Economic and Monetary Union moved in opposite directions. The provisional figure for general government net borrowing showed a small decrease as a ratio to GDP, falling from 10.6 per cent in 1990 to 10.2 per cent. On the other hand, the ratio of general government debt to GDP rose from 98.2 to 101.8 per cent, an increase of 3.6 percentage points, compared with one of 2.6 points in 1990.

As in the preceding years, the results were due to an increase in the ratio of fiscal revenue to GDP, which rose by around one percentage point. They appear precarious in view of the greater recourse to measures of a temporary nature, estimated to have contributed 15 trillion lire, and the inadequate progress made in implementing structural reforms, notably in the field of pensions.

**Table 11**

### State sector balances (billions of lire)

	1990			1991		
	H1	H2	Year	H1	H2	Year
Borrowing requirement, net of settlements of past debts as a % of GDP .....	47,658	92,773	140,431 (10.7)	58,260	93,899	152,159 (10.7)
Settlements made in cash .....	145	104	249	6	68	74
Settlements made in securities .....	—	4,581	4,581	—	—	—
Total borrowing requirement as a % of GDP .....	47,803	97,458	145,261 (11.1)	58,266	93,967	152,233 (10.7)



The failure to achieve the objectives was due both to the economy having performed worse than expected, thereby adding about 20 trillion to the borrowing requirement compared with the 180 trillion forecast in the Forecasting and Planning Report for 1991, and to the budget measures having yielded about 25 trillion less than envisaged.

Tax revenues were affected by the slowdown in the growth of economic activity that was already apparent in the last part of 1990. The fact that it continued, with GDP growth falling about 1 percentage point short of that recorded in 1990 and 1.5 points short of the forecast in the September 1990 Forecasting and Planning Report, caused a further worsening of the public finance balances. The total borrowing requirement net of interest payments is estimated to have risen as a result by about 1 per cent of GDP compared with the objective laid down in the Forecasting and Planning Report. Furthermore, on the assumption of unchanged real interest rates at issue, the difference between the actual and target inflation rates of around 1.5 percentage points is estimated to have resulted in additional interest payments equal to about 0.5 per cent of GDP.

To an even greater extent than in the preceding years, fiscal policy was dominated by the need to curb the overshoots that emerged during the year. The Finance Bill and the accompanying measures drafted in September 1990 were intended to reduce the borrowing requirement on a current programmes basis by 48 trillion lire to 132 trillion. The annual budget was supplemented by additional measures in May and September.

The May package was designed to offset an overshoot estimated at 14.2 trillion lire in the Treasury Minister's March quarterly report to Parliament on the borrowing requirement. The overshoot primarily reflected the poor outturn of the tax revenues for 1990 and higher-than-expected interest rates. The increase in forecast interest payments from 140.1 to 143.8 trillion lire was compensated by a more ambitious objective for the primary balance – a surplus of 11.8 trillion lire, as against one of 8.1 trillion.

The likelihood of a larger overshoot led in September to the adoption of a second package of measures amounting to 10.5 trillion lire. At the same time the objective for the borrowing requirement was raised from 132 to 141 trillion, with virtually no change in the forecast for interest payments. On this occasion the overshoot was attributable to the ineffectiveness of some of the original budget measures and to the falling off of the income tax receipts from firms and the self-employed. The new objective for the borrowing requirement was confirmed in the convergence plan that the Government submitted to the European Community in October.

There was a further deterioration in the public finances in the last part of the year, with the result that the borrowing requirement exceeded the September forecast by around 11 trillion lire. This was due entirely to the poor performance of the measures that were supposed to produce their effects in the last quarter (the introduction of an additional VAT instalment in December and the early payment of the ten-year imputed capital gains tax on corporate property, a slowdown in the payment of VAT refunds and steps to collect prior-year taxes), the amendments Parliament made to the proposed changes in the system of income tax instalments and the failure to sell the interest of the Deposits and Loans Fund in Istituto Mobiliare Italiano (IMI).

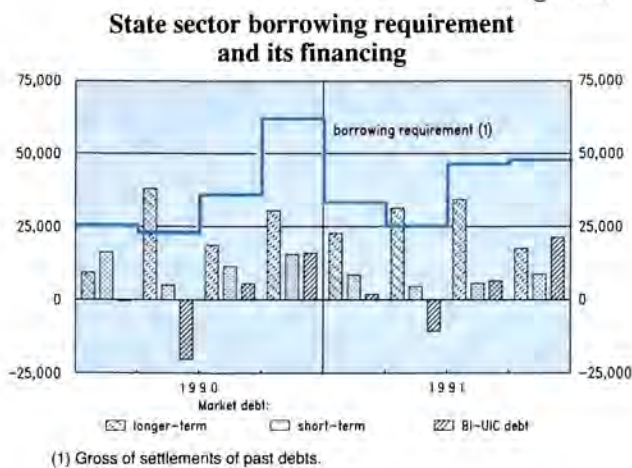
The measures contained in the budget and the two packages adopted during the year were officially forecast to reduce the borrowing requirement by a total of 73 trillion lire, but more than one third of this effect failed to materialize. About 10 trillion of the shortfall was attributable to measures that Parliament did not approve or the Government did not implement, while 15 trillion was due to taxpayers not behaving as expected. The adjustment that was made was nonetheless substantial, corresponding to over 3 per cent of GDP.

The ratio of the debt of the state sector to GDP, which had risen from 96.1 to 99.2 per cent in 1990, rose to 102.5 per cent at the end of last year (for the more comprehensive public sector the corresponding figure was 104.5 per cent). The fact that the increase was larger even though the borrowing requirement

was unchanged in relation to GDP was due to the slowdown in GDP growth. In absolute terms the state sector debt amounted to 1,454 trillion lire.

As in the preceding years, the borrowing requirement in the first half of the year was relatively small (Table 11 and Figure 19). Sales of medium and long-term securities in the primary market increased further and covered 61.5 per cent of the state sector's requirements, compared with 53.6 per cent in 1990 and 38.2 per cent in 1989. By contrast, the share of foreign borrowing fell from 10.2 to 4 per cent and that of short-term securities from 23.6 to 10 per cent.

Figure 19



The average maturity of the debt, which had stopped declining in 1990, benefited from the policy of boosting issues of medium and long-term securities and lengthened from two years and six months to two years and ten months. The share of Post Office funds in the financing of the state sector dropped from 8.8 to 7.7 per cent, primarily owing to a fall in current account deposits of about 1.2 trillion lire.

### The main items of the public accounts

According to the provisional statement of general government income, net borrowing decreased by 0.4 percentage points in relation to GDP. The difference compared with the state sector borrowing requirement, which remained unchanged in relation to GDP, was due to health expenditure on an accruals basis (as included in the general government

accounts) having increased less than the disbursements made by the National Health Fund. The sharp rise in the latter reflected the aim of preventing further off-budget debt from being run up by local health units. The phenomenon was curbed but not eliminated, since in January of this year these bodies were authorized to borrow 5.6 trillion lire to meet liabilities incurred in 1991.

The reduction in the ratio of net borrowing to GDP was due to the increase of nearly 1 percentage point in the ratio of total revenue to GDP, to which the sale of the interest of the Deposits and Loans Fund in Crediop contributed 0.15 points. The effect of the increase in revenue on net borrowing was partly offset by debt interest and other expenditure having risen by respectively 0.5 and 0.1 points in relation to GDP. The rise in the ratio of other expenditure was the result of a 0.5 point rise in that of current expenditure net of debt interest, which was primarily attributable to the increase in wages and salaries, and an offsetting fall in that of capital expenditure, which also decreased in absolute terms.

Debt interest increased by 14.7 per cent to 145 trillion lire. Net of the withholding tax on income from government securities, the increase was about 1 percentage point less. The growth in net interest payments reflected that in the average stock of debt (13.5 per cent). There was also a small increase in issue rates; specifically, the average net rate on Treasury bills rose from 10.7 to 10.8 per cent. The interest charge for the year was increased by about 0.8 trillion following the re-opening in the second half of the year of the May issue of Treasury bonds with coupons maturing in December, while it was decreased by about 2 trillion lire owing to the reduction in the issues of Treasury bills, the interest on which is included in the accounts at issue.

The rate of increase in spending on wages and salaries slowed from the 15.3 per cent peak that had been recorded in 1990, when the wage agreements for the three years 1988-90 were implemented, but remained high at 10.7 per cent. The rate was boosted by the increases in the social security contributions payable by local authorities and health units and the sharp rise in the imputed social contributions of central government. Total earnings are estimated to

have risen by around 10 per cent, largely owing to cost-of-living increases and the residual effects of the 1988-90 wage agreements, some of which provided for increases to be fully implemented at the end of 1990. As in the preceding years, legislation aimed at providing incentives and promoting the reorganization of staff also contributed to the growth in this item. General government employment is estimated to have increased by around 0.5 per cent.

Spending on social services rose by 8.9 per cent and the rise in pensions is expected to have been on the same order, in part owing to the measures adopted to offset distortions related to the year in which pensions became payable. Specifically, Law 59 of 27 February 1991 provided for INPS pensions above the minimum and the pensions of central and local government employees to be revalued gradually according to a formula based on the year they became payable. For the second consecutive year the mechanism for adjusting pensions at the beginning of the year on the basis of real earnings was not triggered, since the relevant index again remained unchanged in the reference period. Pensions were increased by respectively 2.6 and 2.3 per cent in May and September, in line with the target rate of inflation. In order to make good the large gap between the cost-of-living increases disbursed in 1990 and those due on the basis of the actual rate of inflation, pensions were raised by 2.7 per cent at the beginning of the year and back payments made amounting to nearly 1.2 per cent of the annual total. Spending on social security was also boosted by the biennial revision of the annuities paid by the National Industrial Accidents Insurance Institute, which resulted in most of them being raised by 17.9 per cent from 1 July, and by the increase in disbursements to the unemployed and to workers receiving benefits from the Wage Supplementation Fund. On the other hand, the eligibility criteria for disability pensions were tightened and some of the exemptions from payment of health service contributions eliminated. In addition, the limits on health service cost-sharing were raised.

Spending on intermediate consumption increased by 9.1 per cent, reflecting the costs incurred as a result of the Gulf war in the fields of defence and public

order; it was kept down, instead, by the cuts in budget allocations introduced in the Finance Law for 1991.

The 0.6 per cent reduction in expenditure on capital account, as against an increase of 16.6 per cent in 1990, was due to the measures adopted in the 1991 budget: loans to local authorities from the Deposits and Loans Fund were capped and the share of state-controlled enterprises' borrowings to be redeemed by the government was reduced. In addition, spending on capital account had been boosted in 1990 by the settlement of municipal transport companies' debts.

The ratio of fiscal revenue to GDP rose by around 1 percentage point to 40.5 per cent (Table 12). This increase, of which over half was due to the growth in tax revenues, was 1 point less than had been forecast in the Economic and Financial Planning Document submitted to Parliament in May 1990.

Central government tax revenues (excluding tax collection commissions, amounts accruing to the EC and accounting transactions with the autonomous regions) increased by 10.1 per cent to 350.26 trillion lire. This was 16 trillion less than forecast in the September 1990 Forecasting and Planning Report. The shortfall was due to an almost equal extent to the sluggishness of economic activity and the ineffectiveness of some of the measures contained in the budget. The stagnation of incomes from entrepreneurial activities and self-employment in 1990 and 1991 resulted in a 9 trillion shortfall in the yield of self-assessed direct taxes. The negative effect of the cyclical slowdown on indirect taxes was more than offset by the higher-than-expected rate of inflation, which also caused the income tax deducted at source from wages and salaries to exceed the forecast value.

A large number of companies decided not to take advantage of the possibility offered in the budget of revaluing their assets and unlocking tax-exempt reserves, so that the yield from this measure was over 7 trillion lire less than officially forecast. The results of the income tax paid by the self-employed were poor and do not appear to have been influenced by the higher coefficients introduced in the budget for assessing their taxable incomes. Finally, the introduction of a VAT instalment in December for

some categories of taxpayer produced 2 trillion less than expected. In turn there was a shortfall of over 7 trillion lire in the yield of the mid-year measures adopted in May and September.

**Table 12**  
**General government income statement**  
(billions of lire; % changes)

	1990	1991	1990	1991
			1989	1990
<b>EXPENDITURE</b>				
Wages and salaries . . .	164,759	182,400	15.3	10.7
Intermediate consumption . . . . .	63,904	69,750	8.4	9.1
Social services . . . . .	235,312	256,200	12.1	8.9
Production subsidies	29,066	32,000	-0.7	10.1
Debt interest . . . . .	126,375	145,000	18.2	14.7
Other . . . . .	21,732	24,950	-6.6	14.8
<b>Total current expenditure . . . . .</b>	<b>641,148</b>	<b>710,300</b>	<b>12.3</b>	<b>10.8</b>
<i>as a % of GDP . . . . .</i>	<i>49.1</i>	<i>50.1</i>	—	—
Investment . . . . .	45,737	47,500	9.0	3.9
Investment grants . . . . .	17,933	18,300	16.3	2.0
Other capital expenditure	4,035	1,500	466.7	-62.8
Total capital expenditure	67,705	67,300	16.6	-0.6
<b>Total expenditure . . . . .</b>	<b>708,853</b>	<b>777,600</b>	<b>12.7</b>	<b>9.7</b>
<i>as a % of GDP . . . . .</i>	<i>54.2</i>	<i>54.8</i>	—	—
<b>REVENUE</b>				
Direct taxes . . . . .	190,721	208,000	10.0	9.1
Indirect taxes . . . . .	138,880	156,500	12.2	12.7
Social security contributions . . . . .	189,467	210,500	13.2	11.1
Other . . . . .	48,494	53,200	12.4	9.7
Total current revenue . . . . .	<b>567,562</b>	<b>628,200</b>	<b>11.8</b>	<b>10.7</b>
Capital revenue . . . . .	2,394	4,900	27.3	104.7
<b>Total revenue . . . . .</b>	<b>569,956</b>	<b>633,100</b>	<b>11.8</b>	<b>11.1</b>
<i>as a % of GDP . . . . .</i>	<i>43.6</i>	<i>44.6</i>	—	—
<b>Net borrowing . . . . .</b>	<b>138,897</b>	<b>144,500</b>	<b>16.2</b>	<b>4.0</b>
<i>as a % of GDP . . . . .</i>	<i>10.6</i>	<i>10.2</i>	—	—
Borrowing net of debt interest . . . . .	12,522	-500	-0.8	-104.0
<i>as a % of GDP . . . . .</i>	<i>1.0</i>	<i>. .</i>	—	—
Total fiscal revenue (1)	519,068	575,000	11.7	10.8
<i>as a % of GDP . . . . .</i>	<i>39.7</i>	<i>40.5</i>	—	—
Deficit on current account . . . . .	73,586	82,100	16.2	11.6
<i>as a % of GDP . . . . .</i>	<i>5.6</i>	<i>5.8</i>	—	—

Source: Isco.

(1) Direct and indirect taxes and social security contributions.

As in 1990, indirect tax receipts grew by 12.7 per cent, compared with an increase of 9.1 per cent for direct tax receipts. Central government revenues benefited from a substantial 15.7 per cent rise in taxes and duties on business as a result of the December VAT instalment and the early payment of the ten-year imputed capital gains tax on corporate property provided for in the budget. Excluding these effects and the 1989 taxes collected in 1990, indirect tax receipts increased by 9.7 per cent. Domestic VAT revenue rose by 11.2 per cent, outpacing the growth in nominal consumption. VAT collected in customs recorded a rapid rise of 7.5 per cent, which was about twice the rate of increase in imports. This result was largely due to the measure adopted in May shortening the time allowed for payment and designed to offset the measure adopted at the beginning of the year lengthening the time allowed for paying levies on mineral oils. Excluding the effects of the latter measure, excise taxes on oil products recorded an increase of 13.7 per cent that was attributable to the higher rates introduced in 1990 and in the first half of last year.

The limited growth in direct taxes (9.1 per cent) was due to the 2.1 per cent decline compared with 1990 in the self-assessed payments made in May and November. The other direct taxes increased by 12.2 per cent, boosted by the 13.2 per cent rise in the tax deducted at source from the incomes of employees and the self-employed.

The continued weakness of the economy led to a fall in the instalments paid at the end of November. The ratio of the total instalments paid by companies to the income tax they paid in the previous year decreased by around 3.5 percentage points. On the other hand, the fall of 13 percentage points in the local income tax instalments of individuals was entirely due to the exemption of the income of small businesses in accordance with a ruling of the Constitutional Court. The fall more than offset the increase resulting from the measure introduced in September raising the instalment from 95 to 98 per cent of the liability for the previous year. This measure was fully reflected instead in the income tax instalments of individuals, which rose by 8.9 per cent compared with the previous year.

Receipts of social security contributions rose by 10.5 per cent, or around 2 percentage points more than the base, thanks to the success of the condonation scheme provided for in September 1990 and to various rate increases. The latter bore mainly on employees and the self-employed. With effect from 1 January a contribution of 0.9 per cent (of which one third payable by employees) was introduced to finance the extraordinary benefits disbursed by the Wage Supplementation Fund. The start of the year also saw the introduction of a 0.9 per cent contribution on pensions over 18 million lire to provide funds for the National Health Service and the third of the increases in public sector employees' contributions provided for in

1989. The increases in contributions provided for by Decree Law 151/1991 took effect on 1 May, raising those of employees and the self-employed by respectively 0.25 and 1 per cent. Revenue was also boosted by the introduction of a minimum health service contribution for the self-employed and by the revision of the methods for determining the premiums to be paid to the National Industrial Accidents Insurance Institute. These measures more than offset the diminution in revenue caused by the permanent transfer to the budget from 1 January of part of the contributions payable by employers in manufacturing industry (1.2 percentage points for employers in the Centre-North and 2.1 points for those in the South).

## The money and financial markets

### Monetary policy

Monetary policy continued to focus successfully on the priority objective of keeping the lira within the narrow EMS fluctuation band. When inflation showed signs of subsiding and conditions in the financial and foreign exchange markets improved, the monetary authorities permitted a small reduction in interest rates. The increasing disparities in monetary conditions in the leading industrial countries in the final part of the year put pressure on the lira, making it necessary to raise short-term interest rates; this had only a minimal impact on long-term yields, thanks to the credibility of exchange rate policy. On an average annual basis, real interest rates and exchange rates were little changed compared with 1990 (Figure 20).

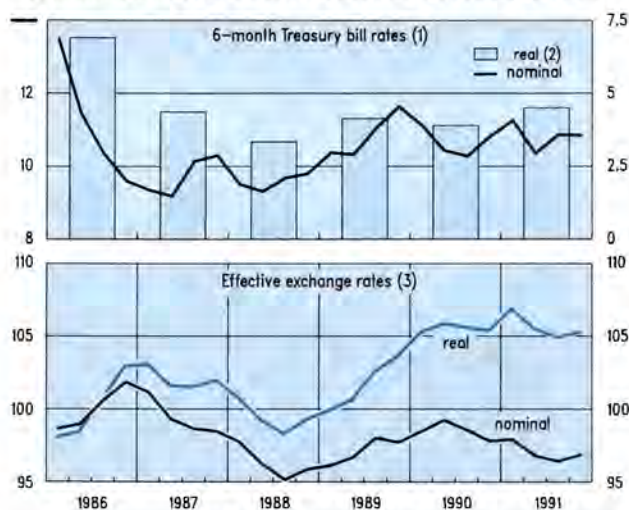
The cyclical weakness of the economy led to a slowdown of 2.4 percentage points in the growth of total finance to the non-state sector. Total credit decelerated less sharply owing to the expansionary effect of the larger-than-planned increase in the public sector borrowing requirement. Total financial assets also grew at a brisk pace, nearly as fast as in 1990, but the share of the more liquid components of this aggregate diminished further. The money supply expanded by one point less than in 1990, despite an acceleration in the final months of the year that caused it to overshoot the target.

The rise in domestic interest rates, which began in early June owing to the worsening of the public finances and expectations of an increase in German rates, came to a halt in August, when the change in Germany's official interest rates proved smaller than expected. During this period the lira remained in the upper part of the EMS fluctuation band. The decline in the twelve-month rate of consumer price inflation by 0.7 percentage points between June and September and the fact that money supply growth remained

within the target range created the conditions for a limited reduction in domestic interest rates.

Figure 20

### Nominal and real interest rates and exchange rates



(1) In percentages. – (2) Right-hand scale. Annual averages of start-of-month net yields deflated by the effective change in consumer prices over the six months following the observation period on an annual basis. Data for 1991 are partly estimated. – (3) Indices of the effective exchange rate of the lira vis-à-vis the currencies of Italy's 14 leading trading partners, 1986=100. The real exchange rate is based on the producer prices of manufacturers. A rise in the indices reflects an appreciation of the lira and a loss of competitiveness for the real exchange rate.

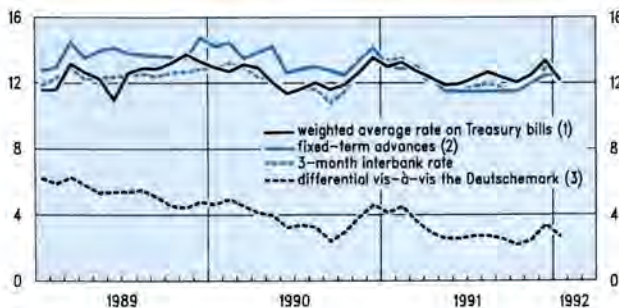
From the end of August to the beginning of November, interbank and 3-month Treasury bill rates fell by around half a point and issue yields on 10-year Treasury bonds by 0.7 points. As long-term rates abroad also declined, there was only a marginal narrowing of the yield differential on longer maturities vis-à-vis the Deutschemark and the French franc. For short-term maturities, with rates going up in Germany but coming down in France, the differential vis-à-vis the Deutschemark decreased to 2 points (Figure 21), while that vis-à-vis the franc remained basically unchanged.

In early November the decision by the US Federal Reserve to cut the discount rate in order to stimulate a recovery in domestic demand caused the Deutschemark to appreciate against the dollar; the lira

consequently slipped towards the lower half of the fluctuation band. The Bank of Italy did not offset the tightening of liquidity caused by the outflows of foreign exchange; by limiting the supply of temporary financing, it induced a rise in money market rates. On 26 November the Bank raised the cost of bank refinancing by increasing the premium on fixed-term advances over the discount rate from zero to half a point. The restrictive effect of this measure spread from the interbank market to the loan market, interrupting the slight decline in bank lending rates that had been under way since September; it was also transmitted to the market for government securities, where the average Treasury bill tender rate rose by 0.4 points in one month. By contrast, deposit rates remained stable.

Figure 21

#### Short-term interest rates and the differential vis-à-vis the Deutschemark



(1) Weighted average of simple pre-tax tender yields. - (2) Weighted average of effective rates until April 1991; subsequently, end-of-period data. - (3) Difference between the Italian 3-month interbank rate and the corresponding German rate.

At the beginning of December, expectations that the differential between the Deutschemark and the dollar would widen were strengthened by the contrasting stances of the German and American monetary authorities, the former seeking to curb an incipient acceleration in inflation and the latter to foster a revival in domestic demand. This produced a renewed appreciation of the Deutschemark against the dollar, and a further consequent weakening of the lira. The pressure on the lira, the pause in the slowdown of inflation in November and an acceleration in the growth of bank deposits made it necessary to raise money market rates again. The tightening of conditions on the interbank market rapidly pushed up short-term rates, so that by mid-December the short-term differential vis-à-vis

the Deutschemark was back above 3 per cent (see the insert on *Bank of Italy intervention in the money market*). In the second half of the month, the increase in the discount rate in Germany and the further reduction in the corresponding rate in the United States generated renewed exchange pressures, as neither change had been fully discounted by the market, so that most of the European countries found it necessary to raise their official rates. With heavy intervention sales taking place on the foreign exchange markets, Italy had to follow suit, a step it had been able to avoid when German official rates were raised in February and August.

The action to support the exchange rate scotched expectations of a depreciation of the lira and, as in the other leading European countries, made it possible at the turn of the year to bring money market rates back down to the levels that had obtained before the increases in official rates. In February the average net tender yield on Treasury bills was one point lower than it had been in December and close to its October level; the rise in short-term interest rates in December had virtually no effect on 10-year Treasury bond yields, which dropped to 10.8 per cent, the lowest level since these securities were first issued.

Monetary base grew by 11.2 trillion lire in 1991, 2.5 trillion less than in 1990 (Table 13). There was a distinct change in the pattern of monetary base creation. A net outflow of foreign exchange was recorded for the first time since 1985, resulting in the destruction of 8.6 trillion lire of monetary base. Direct central bank financing of the Treasury, consisting of drawings on the Treasury's overdraft facility with the Bank of Italy and the central bank's net purchases of government securities at issue, was also negative. The amount of monetary base destroyed through this channel rose from 1.4 trillion lire in 1990 to 9.4 trillion last year owing to the large volume of government securities taken up by the market. The elimination of direct monetary financing of the Treasury, prescribed both by the Government's proposed reform of the Treasury overdraft facility and by the rules for membership of Economic and Monetary Union, has already been largely achieved over the last two years (see the insert on *Monetary financing of the Treasury*). Open market operations created 27 trillion lire of monetary base (9.5 trillion

by way of outright operations) and refinancing of banks contributed 2.7 trillion. Refinancing occurred throughout the year; the banking system was therefore continuously in a net debtor position vis-à-vis the central bank, ranging from a minimum of 3.5 trillion in January to a maximum of 22.8 trillion in December.

Table 13

**Monetary base**  
(changes in billions of lire) (1)

	1990		1991 (2)	
	Oct.-Dec.	Year (3)	Oct.-Dec.	Year
<b>Sources</b>				
Foreign sector . . . . .	-8,347	15,454	-13,205	-8,649
Treasury . . . . .	942	-1,383	469	-9,404
<i>Borrowing requirement</i>	<i>61,823</i>	<i>145,262</i>	<i>47,688</i>	<i>152,233</i>
<i>(excluding settlements of past debts) . . . . .</i>	<i>(57,205)</i>	<i>(140,431)</i>	<i>(47,649)</i>	<i>(152,159)</i>
<i>Outstanding securities excluding BI</i>	<i>-47,914</i>	<i>-114,598</i>	<i>-35,247</i>	<i>-137,407</i>
<i>Other financing (4)</i>	<i>-12,967</i>	<i>-32,047</i>	<i>-11,972</i>	<i>-24,228</i>
Open market . . . . .	15,042	2,393	19,397	26,998
Refinancing of banks . . . . .	2,631	1,260	6,447	2,716
Other sectors . . . . .	450	-4,048	2,312	-500
<b>Total . . . . .</b>	<b>10,718</b>	<b>13,675</b>	<b>15,420</b>	<b>11,161</b>
<b>Uses</b>				
Currency in circulation . . . . .	5,713	1,780	7,515	7,164
Bank reserves . . . . .	5,005	11,895	7,906	3,997
Deposits with BI . . . . .	2,725	10,745	6,463	3,646
<i>Memorandum item: compulsory reserves (5)</i>	<i>4,684</i>	<i>13,026</i>	<i>5,934</i>	<i>3,424</i>
<i>of which: against net foreign currency deposits . . . . .</i>	<i>-286</i>	<i>908</i>	<i>-</i>	<i>-2,661</i>
Other items (6)	2,280	1,150	1,443	351

(1) Based on end-of-period data. Rounding may cause discrepancies in the totals. - (2) Provisional. - (3) The data reflect the abnormal expansion of monetary base resulting from strikes in the banking sector at the end of 1989. - (4) Includes PO deposits, foreign loans and other items. - (5) From October 1990 onwards, average reserve requirement; until May 1991 includes the compulsory reserve on net foreign currency deposits. - (6) Vault cash and undrawn margin of ordinary advances.

Monetary base, calculated as the average of the daily data in the reserve maintenance period from mid-month to mid-month, grew by 9.4 per cent in the year to December 1991, compared with 10.1 per cent in 1990 (Table 14). The rate of growth in bank reserves, adjusted for changes in the compulsory reserve ratio, fell from 9.5 per cent in 1990 to 8.3 per cent last year.

Table 14

**Monetary variables (1)**

	1990 Dec.	1991 (2) Dec.
Bank reserves (3) . . . . .	9.5	8.3
Monetary base (3) . . . . .	10.1	9.4
Bank deposits . . . . .	9.2	8.5
Money supply (M2) . . . . .	9.9	8.9

(1) Percentage changes on year-earlier period. Bank reserves and monetary base calculated as averages of daily data for the mid-month to mid-month maintenance period, bank deposits and the money supply as calendar month averages. - (2) Provisional. - (3) Corrected for the change in the compulsory reserve ratio.

Based on average monthly data, the annual rate of growth in the M2 money supply was 8.9 per cent, one point lower than in 1990 and nearly a point above the upper limit of the target range. The rate stayed in the middle of the target range until September, but an acceleration of around 2 percentage points in the final quarter caused it to overshoot in December (Figure 22). The acceleration, which mainly involved bank current accounts, appears to have been due only in part to the modest reduction in interest rates in September and October and the expansionary effect of the public sector deficit; it was also attributable to the banks' efforts to boost fund-raising in order to finance the continuing strong growth in lending and replenish their securities portfolios. The growth in deposits was largest for banks whose securities portfolios were smallest in relation to total assets at the start of the period. Given the uncertain outlook for interest rates and the public finances, the effect of the banks' action was reinforced by non-banks' increased preference for investments that were both liquid and diversified according to issuer. This enabled banks to minimize the increase in deposit rates.



### Bank of Italy intervention in the money market

Throughout October the lira remained close to the upper limit of the EMS fluctuation band (see the figure), and slightly above its central rate against the Deutschmark. The Bank of Italy allowed the sizable disbursements by the Treasury to create liquidity, thereby sustaining the fall in money market rates that had begun in September and causing them to dip below the discount rate. With abundant liquidity available, the banking system did not need to turn to the central bank for refinancing. The decline of 0.3 points in the 3-month interbank rate in Italy (to 11.4 per cent) and a rise of around 0.2 points in the corresponding rate in Germany caused the differential to narrow from 2.5 points in September to around 2 points at the end of October, the smallest since the lira's entry into the narrow fluctuation band. Over the same period, the differential between Italian and French short-term rates narrowed by barely 0.1 points, to 2.2 percentage points. The stability of the lira motivated expectations of further reductions in interest rates, which buoyed the demand for medium and long-term government paper, allowing the borrowing requirement to be financed largely with fixed rate issues offering diminishing yields. The tender rate on 7-year Treasury bonds net of tax was 10.8 per cent at the end of October, around 0.4 points lower than a month earlier.

The abrupt weakening of the dollar in late October and early November put increasing pressure on the Deutschmark to rise against the other main EMS currencies. The lira depreciated, falling below the centre of the fluctuation band in mid-November. The Bank of Italy responded by intervening on the foreign exchange market and restricting the supply of securities repurchase agreements; the rates on the latter went up by nearly 2 points in the second half of November to more than 12 per cent. Interbank rates, which had been stable in the first half of November, reacted promptly to the signal of tighter monetary conditions: in the second half of the month the overnight rate rose by 1.2 points and the 3-month rate by

around 1 point, whereas interbank rates increased by an average of 0.5 points in France and remained stable in Germany. The rise in interbank rates was reflected in the net tender rates on 3-month Treasury bills, which increased to 11.2 per cent in the final auction of the month, 0.8 points higher than at the end of October. Banks' recourse to ordinary advances was virtually nil in the first half of November but increased substantially in the second to an average of 1.5 trillion lire, owing to the development of a positive spread between very short-term rates and the discount rate. To reinforce its monetary action, the Bank of Italy increased the surcharge on fixed-term advances to 0.5 per cent on 26 November, the first time it has exercised its newly acquired powers to vary the spread. The increase in short-term rates only had a limited impact on medium and long-term yields on the secondary market for government securities, which rose by between 0.2 and 0.3 points.

The renewed depreciation of the dollar against the Deutschmark at the beginning of December revived tensions within the EMS. The amount of temporary financing provided by the Bank of Italy did not entirely offset the restrictive effects of the substantial outflows of foreign exchange (7.7 trillion lire in December) and the seasonal increase in the demand for currency. This accentuated the monetary tightening and prompted the banks to seek a substantial volume of fixed-term advances. The banking system's temporary indebtedness to the Bank of Italy grew to an average of 21 trillion lire for the month. The 3-month interbank rate went up to an average of 12.8 per cent for the first half of the month, and the differential vis-à-vis German short-term interest rates rose to over 3 percentage points. Foreign exchange pressures, accentuated by the partly unanticipated increase of 0.5 points in official rates in Germany and the almost simultaneous reduction of 1 point in those in the United States, prompted the Italian monetary authorities to increase the official discount rate by half a point to 12 per cent with effect from 23 December. The impact effect

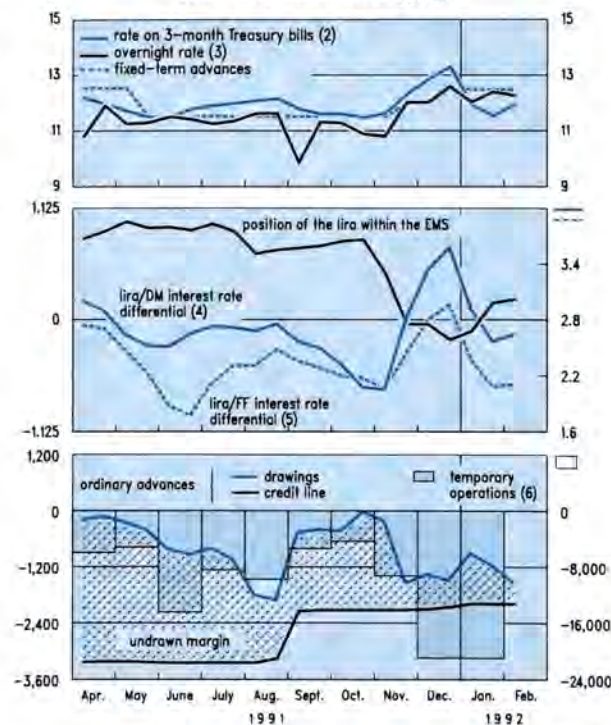
of these measures was a further rise of almost 0.5 points in Italian interbank rates, compared with a similar increase in France and one of 0.2 points in Germany. The net tender rate on 3-month Treasury bills reached its peak for the year at the end of December (12.1 per cent), rising by 0.4 points from mid-month and by 0.9 points from the end of November. By contrast, yields on long-dated paper remained stable.

The lira returned towards the centre of the EMS fluctuation band at the beginning of January of this year and rose above it in the second half of the month, partly assisted by the revival of the dollar. The easing of exchange rate pressures allowed interest rates to come down. As in France and Germany, the fall in the 3-month interbank rate entirely canceled out the increases of late November and December, bringing it roughly into line with the new discount rate; interest rate differentials narrowed to around 2.5 percentage points vis-à-vis the Deutschmark and 2.1 points vis-à-vis the French franc at the end of the month. The easing of monetary conditions was reflected in the banks' recourse to ordinary advances, which diminished to around 50 per cent of the volume available. Yields on fixed interest securities, which had not fluctuated as markedly as those on short-term securities in the two preceding months, fell by about 0.3 points, in line with the reductions recorded in France and Germany over the same period. At the end of January 10-year Treasury bonds were allocated at a net issue yield of 10.8 per cent, compared with 11.1 per cent a month earlier. On 30 January Parliament enacted legislation empowering the Bank of Italy to vary the official discount rate and the rate on advances. The following day, the Government issued a Decree Law abolishing withholding tax on interest on interbank deposits as from 1 January 1992.

The decline in interest rates came to a halt in February. Money market rates settled slightly above the

discount rate, while those on medium and long-term paper remained at the level recorded at the end of January. Despite a relatively limited borrowing requirement, the Treasury made massive net placements of securities on the market. The banking system's temporary indebtedness to the Bank of Italy grew further, to an average of nearly 35 trillion lire. Difficulties in financing the system arose on several occasions, owing to the banks' limited holdings of securities eligible for use in repurchase agreements with the central bank.

Money market rates, the position of the lira within the EMS and central bank financing (1)



(1) Except for 3-month Treasury bills and temporary operations, 15-day averages of daily figures. — (2) Simple gross interest rates at auction. — (3) Weighted average of bid-asked prices. — (4) The difference between the Italian 3-month interbank rate and the equivalent German rate. — (5) The difference between the Italian 3-month interbank rate and the equivalent French rate. — (6) Net position of the banking system vis-à-vis the central bank in respect of temporary operations.

Figure 22



During the year as a whole, sustained demand for medium and long-term securities helped further to reduce the share of the more liquid types of financial assets. The part represented by M2 fell by more than 2 points to 46.8 per cent, while that of short-term securities only diminished marginally to 15.4 per cent.

Total finance to the non-state sector grew by 15 per cent, compared with 17.4 per cent in 1990. The abolition of the reserve requirement on banks' net foreign currency positions caused a shift towards domestic sources of credit. This resulted in a steep decline in the rate of growth of foreign finance to the non-state sector and only a marginal slowdown in that of domestic finance, which only fell from 15.4 to 15.2 per cent, 5 points higher than forecast at the beginning of the year (Table 15).

Table 15

**Financial flows**  
(percentage changes)

	1989	1990	1991
<b>Total credit</b> .....	<b>15.9</b>	<b>14.6</b>	<b>13.3</b>
Domestic finance to the non-state sector ..	18.5	15.4	15.2
from: Banks .....	22.0	17.2	16.4
Special credit institutions ..	15.7	16.0	12.9
Bonds .....	-1.4	-10.5	14.4
Domestic finance to the state sector ...	13.1	11.7	12.2
Foreign finance .....	34.0	46.4	12.3
<b>Financial assets</b> (1) .....	<b>14.1</b>	<b>12.2</b>	<b>12.1</b> (2)
Domestic assets .....	13.9	11.9	12.1(2)

(1) Financial assets of the non-state sector, excluding direct holdings of shares.  
- (2) Twelve months to November.

The slowdown in the growth of domestic credit provided by the banking system – by 0.8 percentage points in the case of bank loans and 3.1 points in that of lending by special credit institutions – was largely offset by a resumption of net bond issues, attributable mainly to state holding companies. The expansionary effect of the public sector borrowing requirement limited the slowdown in total credit, which grew at an annual rate of 13.3 per cent last year, compared with 14.6 per cent in 1990.

### The activity of credit intermediaries

On the basis of average monthly data, the acceleration in bank deposit-taking in the last quarter of 1991 was reflected in a rise in the twelve-month growth rate to 8.5 per cent in December, compared with 6.8 per cent in September.

Current accounts were the fastest-growing component of bank deposits, while the relative importance of savings deposits continued to decline. Despite a slowdown in the last part of the year, certificates of deposit provided 56.1 per cent of banks' net fund-raising in 1991 and represented 20.6 per cent of total bank deposits, a gain of 3 points on the year. By contrast, the share of savings deposits contracted by a further 4 points to 21.7 per cent.

Banks' repurchase agreements with customers, which were exempted from the reserve requirement from May onwards, continued to expand strongly in the final months of the year. The number of banks reporting such operations has more than doubled since the exemption date, and the amounts involved rose from 20.5 trillion lire in June to 53.4 trillion at the end of November.

Households were the counterparties to three quarters of the repos outstanding in September. The operations mainly involved Treasury credit certificates, the instrument most widely represented in banks' portfolios. In the last few months more use has been made of Treasury bonds, reflecting banks' investment in fixed interest government securities.

A smaller increase, equal to 8.5 trillion lire between July and November, was recorded in banks' foreign currency fund-raising abroad to finance lira loans; this too has been exempt from the reserve

requirement since May. The slowdown in the deposits of Italian banks' foreign branches that had begun in April continued over the same period. Net fund-raising by issuing Eurolira CDs remained broadly unchanged.

The growth in deposits enabled the banks to resume investing in securities, reversing the decline that had been under way since 1983 in the ratio of their securities portfolios to their total lira lending; the ratio rose from a low of 24.8 per cent in July to 28 per cent in December. Excluding temporary operations with the Bank of Italy, in the last quarter of the year banks invested 39.3 trillion lire in government securities, compared with 22 trillion in the same period of 1990; their net purchases consisted mainly of fixed interest securities. The difference between the banks' and the public's attitudes towards investment in government securities in the final part of the year reflected different needs, mentioned earlier with reference to money supply growth. For banks, investment in long-dated fixed interest securities is not an impediment to flexible asset management, thanks to repurchase agreements with

customers. The scope for hedging interest rate risks, which is already possible on futures markets abroad, will be widened by the launch of a domestic market in Italian bond futures.

Bank lending continued to grow at a sustained pace, despite the slowdown recorded in the first half of the year. Loans granted by domestic and foreign branches together increased by 13.2 per cent on the year, compared with 19.9 per cent in 1990. There was a more pronounced slowdown in credit to the categories of borrower most seriously affected by the difficult economic situation, such as manufacturing industry, producer households and leasing and factoring companies. The effects of the decrease in the flows of credit to manufacturing firms may have been partly offset by the appreciable growth in lending to holding companies, whose role in rationalizing industrial groups' recourse to external finance is particularly important at a time of diminished self-financing. The expansion in lending to consumer households and firms providing market services was again large in relation to their contributions to GDP and value added (Table 16).

**Loans outstanding to companies and households (1)**  
(stocks in billions of lire and percentage changes)

**Table 16**

	Banks				Special credit institutions			
	Stocks at end:		Percentage changes in the 12 months to:		Stocks at end:		Percentage changes in the 12 months to:	
	June 91	Nov. 91	June 91	Nov. 91	June 91	Nov. 91	June 91	Nov. 91
General government .....	14,831	14,952	27.1	67.6	37,298	39,184	21.7	21.2
Financial and insurance companies .....	80,491	86,393	31.2	25.2	47,868	48,465	12.9	12.7
<i>holding companies</i> .....	22,013	25,126	60.3	69.5	9,811	9,283	28.5	17.5
<i>state holding companies</i> .....	11,508	12,570	33.4	-2.7	12,408	13,107	25.3	34.9
<i>leasing</i> .....	13,795	14,958	12.9	20.1	13,037	13,376	12.1	8.2
<i>factoring</i> .....	12,554	12,184	11.3	0.4	3,613	2,983	23.7	-1.0
<i>consumer credit</i> .....	5,277	4,876	34.8	9.8	3,832	4,029	7.9	9.7
Non-financial companies and producer households .....	340,256	351,205	14.8	13.8	156,932	163,826	12.6	12.3
<i>manufacturing</i> .....	151,744	151,459	10.9	8.4	54,687	55,860	8.6	7.6
<i>market services</i> .....	127,005	134,751	18.7	19.8	61,235	65,691	18.6	18.3
Consumer households .....	17,989	19,870	33.0	35.1	11,658	12,750	35.3	31.3
<b>Total ...</b>	<b>453,567</b>	<b>472,420</b>	<b>18.5</b>	<b>17.7</b>	<b>253,756</b>	<b>264,225</b>	<b>14.8</b>	<b>14.4</b>

Source: Central Credit Register.

(1) Not including bad debts and debtor positions smaller than 80 million lire.

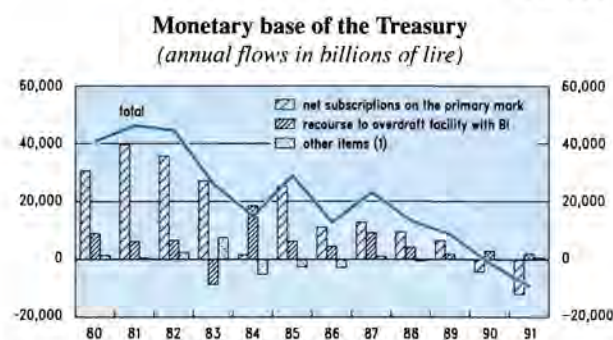
### Monetary financing of the Treasury

The amendments to the Treaty of Rome adopted by the European Council in Maastricht on 9 and 10 December 1991 prohibit national governments from resorting to direct monetary financing of their deficits. In particular, the European Central Bank and national central banks may not grant overdraft facilities or any other type of credit facility to central government, regional or local authorities, public bodies of member states or Community institutions or bodies, or make direct purchases of debt instruments issued by these entities. The member states' central banks will have to comply with these rules from the start of the second phase of Economic and Monetary Union, which is scheduled to begin on 1 January 1994. The provisions reflect the need to ensure that the conduct of monetary policy will not be impeded by objectives other than the preservation of monetary stability or be exposed to built-in mechanisms that could undermine its independence.

In the Bank of Italy's statistics, monetary base creation through the "Treasury" channel is currently defined as the sum of all forms of direct central bank financing of the Treasury. This comprises the use of the Treasury's overdraft facility with the Bank of Italy, the Bank's purchases of government securities at issue, and other minor items; it does not include the central bank's open market operations in government securities, which are an instrument of monetary policy. During the seventies monetary base creation via the Treasury increased steadily in relation to the total annual flow of monetary base, peaking at a ratio of around 5 to 1 in 1981. It then diminished constantly, and in the last two years the "Treasury" channel has given rise to net monetary base destruction (Figure 1). The reversal was due primarily to the decline in the central bank's purchases of government

securities at issue, which fell progressively following the "divorce" between the Treasury and the Bank of Italy in 1981 and have been smaller than its redemptions in each of the last two years.

Figure 1



(1) State notes and coin, sundry services on behalf of central government and other minor items. The figure for 1983 also includes an extraordinary advance of 8 trillion lire to the Treasury.

The pattern of the Bank of Italy's outright operations on the open market is the mirror image of its purchases on the primary market (Figure 2). The amount of monetary base destroyed through this channel decreased progressively after 1981, giving way to monetary base creation in 1990.

The reduction in the central bank's purchases of government paper at issue was made possible by developments that have expanded demand on the primary market in recent years. These include changes in issue techniques (abolition of the floor price in Treasury bill auctions, introduction of the auction method for medium and long-term securities), which have made yields more

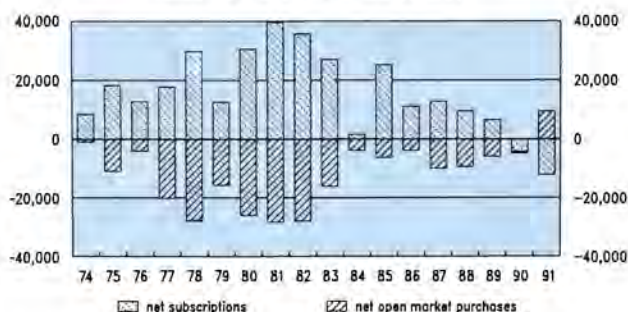
The slowdown in credit concerned both lira and foreign currency lending; the annual rate of growth in lira lending fell from 20.3 per cent in 1990 to 14.3 per cent and that in foreign currency loans from 17.5 to 6.5 per cent. In addition, banks continued to transfer their foreign currency claims on residents from their foreign branches to their domestic network

in view of the abolition of the reserve requirement on their net foreign currency positions; late in the year a similar shift also occurred in lira lending, following the elimination of the differential between the minimum domestic rate and the Eurolira rate. The result was a large increase in the banking system's net foreign debtor position, which in the last quarter rose

responsive to market conditions, and the creation of the screen-based secondary market. In addition, the liberalization of capital movements and the adherence of the lira to the narrow EMS band have strengthened confidence in the medium-term prospects for the currency, fueling demand for Italian securities, especially from foreign investors. Demand for medium and long-term securities has also been boosted by the introduction of futures contracts on Italian bonds in London and Paris.

Figure 2

**BI-UIC outright operations in government securities**  
(annual flows in billions of lire)



The de facto elimination of monetary financing of the Treasury is part of the process designed to give the central bank greater independence in pursuing monetary stability, which began with the "divorce". The Government bill to reform the Treasury's current account with the central bank and the measure adopted in February of this year. Empowering the Governor of the Bank of Italy to vary the discount rate in accordance with the needs of liquidity control are directed towards the same objective.

The elimination of monetary financing of the borrowing requirement has brought Italy into line with the other main EC countries, as shown in the accompanying table, which reconstructs monetary base creation via the Treasury in several countries on the basis of the definition used in Italy. Apart from Italy, Spain is the only country where the central bank intervenes on the primary market in government securities, while in both Spain and France the Treasury has a current account with the central bank. During the eighties direct monetary financing of the Treasury was higher in Italy than elsewhere; Spain was the only other country where monetary base creation via the Treasury was significant at the beginning of the period examined. By contrast, in the last three years direct monetary financing has been insignificant in relation to GDP both in Italy and in the other countries considered.

**Direct financing of the Treasury**  
**via monetary base creation (1)**  
(percentage of GDP)

	Italy	France	Germany	United Kingdom	Spain
1982-85 . . . . .	4.5	-	-0.2	0.2	1.6
1986-88 . . . . .	1.7	-0.1	-	0.2	-0.8
1989-91 . . . . .	-0.1	-0.1	0.1	0.1	0.2

Source: Based on national data, partly estimated for 1991.

(1) Direct central bank credit, purchases of securities at issue where permitted, and issues of state notes and coin.

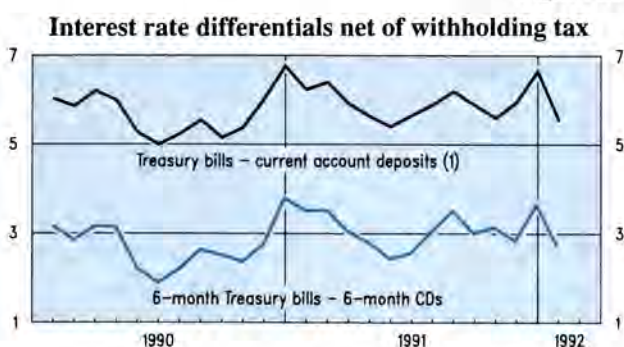
to around 11 per cent of total funds, comprising deposits and net foreign indebtedness, compared with less than 5 per cent in 1987.

As bank deposit rates were broadly stable over the summer, the differential between Treasury bill yields and deposit rates narrowed, although it remained wider than the minimum recorded in May. The

differential vis-à-vis current account rates narrowed by 60 basis points between August and October, while that vis-à-vis 6-month CDs diminished by 36 points. In December the tightening of conditions on the money market caused the differentials to widen again to 6.7 and 4.1 percentage points respectively, close to the maximums for the year (Figure 23).

Lending rates, which are more sensitive to fluctuations in short-term rates, came down slightly between August and November, before rising by around 35 basis points at the end of December. The differential between the average bank lending rate and Treasury bill yields widened by 1.14 percentage points between August and November, then narrowed by 0.47 points in December.

Figure 23



(1) Weighted average tender rate of 3, 6 and 12-month Treasury bills.

The growth of CDs as a share of deposits and the movements in bank rates as a result of the reduction in official rates in May helped to narrow the average spread between lira lending and deposit rates in the first nine months to 7.4 percentage points, compared with 7.7 points in the same period of 1990. Net interest income from credit intermediation in lire rose by about 10 per cent, less than the previous year. The modest growth in income from securities trading and other services reduced the growth in banks' gross income to 6 per cent, as against an increase of almost double that in the same period of 1990.

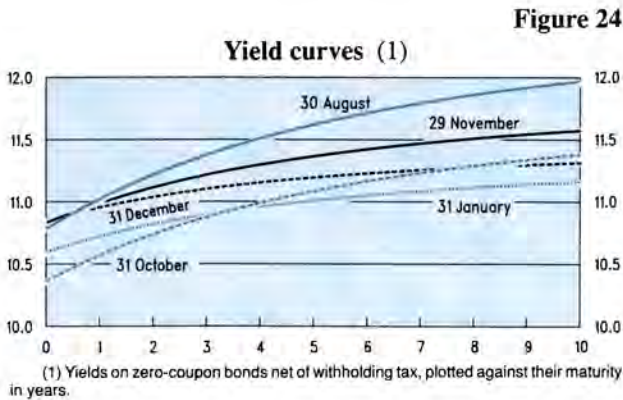
Swiftly rising staff costs, which increased by 12 per cent, left the banking system's net income substantially unchanged from 1990 but smaller in relation to total resources. The banks' results were also affected by bad and doubtful debts; as the business downturn deepened, debt provisions again began to increase more rapidly than assets, so that in December they were equal to 6.3 per cent of total lending, compared with 6.1 per cent a year earlier. Nonetheless, as a result of capital increases, in part effected under Law 218/1990, the ratio of bad debts to capital and reserves came down by nearly 2 percentage points, to 26 per cent.

The weakening of economic activity had an impact on the growth of lending by the special credit institutions, which increased by 13.4 per cent last year, as against 16.3 per cent in 1990. The slowdown was attributable almost entirely to industrial credit institutions, the ones most directly affected by real economic activity, and was reflected in the slower growth in foreign currency lending and the repayment of short-term loans; debt restructuring by firms shifting to longer maturities sustained the demand for medium and long-term industrial credit, which grew by 15 per cent over the year. Lending by real estate credit institutions, consisting mainly of mortgage lending to households, increased by 18 per cent.

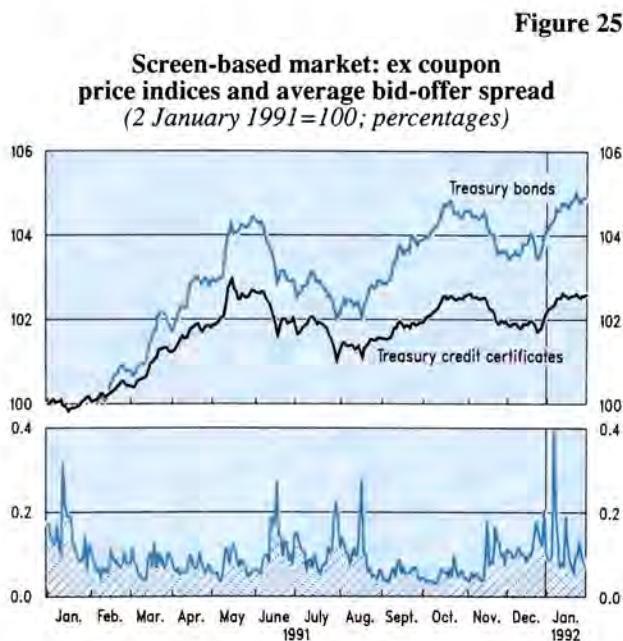
On the liabilities side, the pattern of fund-raising shifted in parallel with the contraction in short-term lending by the largest special credit institutions and special sections. The contribution of CDs to net funding fell to 18.1 per cent, compared with 30.3 per cent in 1990, while that of bond issues, whose total almost equaled that of the two previous years combined, rose from 15.7 to 35.5 per cent. Interest rate indexation and the propensity of non-bank operators to diversify their portfolios according to issuer made it easier to place new issues outside the banking sector.

### The financial market

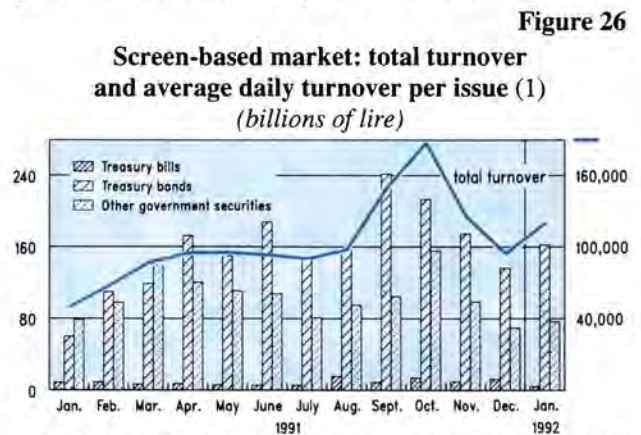
Changeable conditions on the money market did not prevent a lowering of the yields on long-dated fixed rate government securities. Issue yields on 10-year paper fell by around 0.4 points between August and December, in contrast with a rise of around half a point in the average tender rates on Treasury bills. This led to a pronounced flattening of the yield curve on the secondary market (Figure 24), since long-term yields were more strongly affected by the reductions in short-term rates than by the subsequent increases. As a result, issue yields on 10-year Treasury bonds remained broadly unchanged in the last two months of the year, whereas tender rates on 3-month Treasury bills rose by 2 points. Movements in yields on Treasury credit certificates were closer to those in Treasury bill rates, owing to the indexation mechanism; the rise in the price of Treasury credit certificates was smaller than that of Treasury bonds (Figure 25).



Reduced uncertainty, reflected in a relatively small bid-ask spread, the opportunities for arbitrage offered by the start of trading in Treasury bond futures, and increased activity by foreign operators stimulated trading on the screen-based market for government securities, which reached a peak turnover of 187 trillion lire in October (Figure 26). Subsequently, tension on the foreign exchange market and uncertainties as to the future direction of interest rates caused bid-ask spreads to widen and brought turnover back down to its August level. The volume of Italian bond futures traded on Liffe in London also declined; the turnover in December was 57.1 per cent lower than two months earlier.



Net issues of government securities rose by nearly 13 trillion lire in 1991 to a total of 128.1 trillion (Table 17). The composition of net issues shifted strongly in favour of Treasury bonds, which accounted for 67 per cent of net sales last year, compared with net redemptions in 1990. The proportion of net issues consisting of Treasury credit certificates and Treasury bills declined sharply, from 47 to 7 and from 39 to 11 per cent respectively. The share of Treasury option certificates diminished by a smaller margin, from 23 to 18 per cent. There were net redemptions of ecu-denominated securities. The growing importance of net issues of medium and long-term paper (which were equal to 76 per cent of the public sector borrowing requirement last year, compared with 51 per cent in 1990) permitted the average life of the public debt to be lengthened to 2 years and 10 months, compared with 2 years and 6 months at the end of 1990. The average residual maturity of Treasury bonds in issue increased from 2 years and 9 months to 3 years and 7 months.



(1) Total turnover (right-hand scale) is monthly. Average daily turnover (left-hand scale) is obtained for each category of security by dividing the corresponding turnover by the number of listed issues. - (2) Treasury credit certificates, option certificates and ecu certificates.

Net purchases of new issues by the market offset a contraction of 12 trillion lire in the amount taken up by the Bank of Italy. The decline in subscriptions by non-banks in the final part of the year, amidst uncertainty as to the future behaviour of rates, reduced the growth in non-banks' portfolios to 120.2 trillion lire in the first eleven months of the year, compared with 126.2 trillion in the same period of 1990. As a result, the amount subscribed outside the banking system was smaller than total net market purchases for the first time since 1987.



Table 17

**Government securities**  
(billions of lire)

	Bills (1)	Ecu bills	Credit certificates	Bonds	Option certificates	Ecu credit certificates	Other	Total
<b>Gross issues</b>								
1987 .....	316,110	2,311	55,480	19,020	—	2,231	10,605	405,757
1988 .....	409,411	7,289	27,350	75,383	594	11,167	697	531,891
1989 .....	498,553	11,313	21,300	41,100	15,620	9,025	634	597,545
1990 .....	559,196	6,109	75,538	74,460	27,161	8,017	4,582	755,063
1991 .....	602,421	4,989	99,000	93,000	23,000	3,680	—	826,090
<b>Net issues (1)</b>								
1987 .....	25,171	2,311	35,267	13,538	—	2,231	6,674	85,192
1988 .....	36,275	5,738	-7,848	59,781	564	11,167	-1,032	104,645
1989 .....	39,778	3,264	20,916	27,006	15,336	7,434	-2,968	110,766
1990 .....	44,641	-4,072	54,214	-13,347	26,678	7,262	-114	115,262
1991 .....	13,894	-2,254	9,268	85,774	22,923	1,775	-3,296	128,084

(1) Issue discounts are not accounted for in net issues.

The equity market fell back after the surge connected with the conclusion of the Gulf war, with share prices declining by 2.2 per cent over the year and turnover by 38.4 per cent. The performance of Italian share prices was comparable only with that of shares on the Tokyo exchange and was markedly worse than in other leading stock markets, where prices stabilized at the level they had reached in the first part of the year. The market was depressed by the outlook for corporate profits, which were affected by the lack of an upturn in the business cycle and, in the case of firms with large real estate holdings, by the tax measures requiring buildings to be revalued. The decline in turnover reflected both the adverse impact of the same factors responsible for the fall in share prices and the failure to solve the structural problems of the share market. In the second half of the year, the sharp drop in prices and turnover exacerbated the capital weakness of a number of intermediaries, leading to seven cases of insolvency between August and December. These created procedural difficulties

that forced a delay in the settlement of the August and November accounts.

Implementation of the stock market reforms began in November with the start of continuous screen-based trading in five shares, increased to ten in mid-January. The reforms will be completed in 1992 with the gradual extension of the new trading methods, the rationalization of securities settlement procedures and the entry into force of the laws reforming securities investment activity, the most recent of which is the law on public offerings of securities adopted at the beginning of February. Turnover in the initial five securities admitted to continuous trading grew rapidly; it represented 11.4 per cent of total turnover in December and 14.3 per cent in January, compared with 7.7 per cent in the two months preceding the start of continuous screen-based trading.

As the decline in share prices made it less attractive for companies to raise funds on the stock

exchange, gross share issues by listed companies fell to 5.8 trillion lire, 5 trillion less than in 1990. Six banks and insurance companies accounted for 52.5 per cent of all issues by listed companies during the year.

Net fund-raising by Italian investment funds continued to grow, with net subscriptions of 5.2 trillion lire in 1991, compared with 800 billion in 1990. Investors again showed a preference for bond-based funds, whose net subscriptions of 9.6 trillion more than offset the net redemptions of 4.4 trillion recorded by mixed and share-based funds. This tendency, which had emerged in 1990, was reinforced by the strong growth of sweep accounts, which represented 44 per cent of bond-based funds' overall net subscriptions last year, and by the pronounced downturn in the Italian share market in the last two years.

The growth of bond-based investment funds and the contraction of mixed and share-based funds tilted the composition of their combined portfolios markedly towards government securities (59 per cent of their total assets, a gain of 7 points) and away from Italian shares (16 per cent, a drop of 8 points). By contrast, the proportion of foreign shares rose to 10

per cent in connection with an expansion from 12 to 16 per cent in the proportion of foreign investments represented in fund portfolios.

Figure 27

**Securities market: indices of capitalization**  
(31 December 1988=100)



The funds earned an average net yield of 9.9 per cent in 1991 (Figure 27). This resulted from an average net yield of 11.6 per cent for bond-based funds, 7.2 per cent for mixed funds and 7.4 per cent for share-based funds. The dispersion of yields was narrower than in 1990, ranging from -6.1 to 25 per cent. The average net yields on Treasury credit certificates and Treasury bonds were 14.1 and 15.8 per cent respectively over the same period.

## Short-term prospects

### The international economy

The industrial economies as a group grew at a very modest annual rate of about 1 per cent in 1991. This slowdown differs from those of the seventies and eighties, which were marked by greater cyclical uniformity among the major economies and by contraction in output. The OECD predicts that the disparity between the countries where economic activities diminished in 1991 (the United States, the United Kingdom and Canada) and those still achieving substantial growth (Germany and Japan)

will become less pronounced in 1992 and that growth rates will average just over 2 per cent (Table 18).

Repeated announcements of an imminent US recovery that would prove a tonic for the entire world economy were not borne out by the economic data last year, engendering disappointment and increasing the cautiousness of consumers and investors. The slowdown in Japan and Germany in the second half of the year caused surprise and concern. Cyclical developments, economic policy and the outlook for 1992 are now being assessed more cautiously in these countries.

Table 18

Forecasts of the main macroeconomic variables in OECD countries  
(percentage changes on previous year)

	1991	1992 (1)	1993 (1)		1991	1992 (1)	1993 (1)
<b>GDP (2)</b>				<b>Current balances (4)</b>			
United States .....	-0.5	2.2	3.8	United States .....	-4.1	-55.8	-60.6
Japan .....	4.5	2.4	3.5	Japan .....	69.8	81.8	80.4
EC .....	1.4	2.1	2.7	EC .....	-56.0	-53.0	-57.0
Germany .....	3.2	1.8	2.5	Germany (5) .....	-20.6	-14.1	-12.1
<b>Total OECD countries .....</b>	<b>1.1</b>	<b>2.2</b>	<b>3.3</b>	<b>Total OECD countries .....</b>	<b>-15.1</b>	<b>-48.0</b>	<b>-57.4</b>
<b>Consumer prices (3)</b>				<b>Unemployment rate (6)</b>			
United States .....	4.0	3.6	3.5	United States .....	6.7	6.7	6.1
Japan .....	2.7	2.0	2.1	Japan .....	2.2	2.3	2.3
EC .....	4.6	4.2	3.9	EC .....	8.9	9.3	9.3
Germany .....	3.4	4.0	4.0	Germany .....	4.6	5.0	5.1
<b>Total OECD countries .....</b>	<b>4.5</b>	<b>3.8</b>	<b>3.6</b>	<b>Total OECD countries .....</b>	<b>7.1</b>	<b>7.4</b>	<b>7.1</b>
<b>GDP deflator</b>				<b>Exports (2)</b>			
United States .....	3.8	3.0	2.3	<b>Total OECD countries .....</b>	<b>2.5</b>	<b>5.3</b>	<b>7.1</b>
Japan .....	2.2	2.1	1.9	<b>Imports (2)</b>			
EC .....	5.1	4.5	4.0	<b>Total OECD countries .....</b>	<b>3.1</b>	<b>5.6</b>	<b>6.9</b>
Germany .....	4.4	4.5	3.9				
<b>Total OECD countries .....</b>	<b>4.2</b>	<b>3.7</b>	<b>3.3</b>				

Source: *OECD Economic Outlook*.

(1) Forecasts. Based on an assumed average oil price of \$19 per barrel in the second half of 1991 and remaining constant in real terms thereafter. - (2) At constant prices. - (3) Private consumption deflator. - (4) Billions of dollars. - (5) Includes the transactions of the former German Democratic Republic. - (6) Level.

The data released week by week provide conflicting indications about the state of the US economy. Industrial production contracted in January for the third consecutive month, decreasing by 0.9 per cent, partly in response to weak retail sales at the end of the year; sales recovered in January, however. In the labour market, a continuing decline in employment has been accompanied by fluctuations in the recourse to unemployment benefits. Recent rises in share prices and the appreciation of the dollar suggest that the financial and foreign exchange markets incline towards a more optimistic reading of the economic data.

The US Administration has stepped in to boost economic activity by introducing budget measures that include tax concessions for corporations, first-time home buyers and middle-income earners, as well as increased expenditure on social programmes and public works. This fiscal policy, which would increase the federal deficit from 4.8 to 6.8 per cent of GDP in the 1992 fiscal year, is combined with an expansionary monetary stance, which was accentuated in the second half of 1991. Real short-term interest rates approached zero and the decline was eventually reflected in the cost of variable rate loans, especially mortgages. The growth in the monetary aggregates accelerated slightly in the fourth quarter but remained near the bottom of the target range. However, the decline in nominal short-term rates halted between January and February, while long-term rates rose by half a percentage point, further steepening the yield curve. This confirms the difficulty of using interest rates to transmit expansionary impulses to a heavily indebted economy in which households, firms and banks are all seeking to consolidate their financial situation.

Nonetheless, the current orientation of US economic policy is consistent with the forecast made by the OECD in December that activity would pick up in the second half of 1992, though less strongly than in previous cyclical recoveries. On the demand side, the recovery should be led by investment, especially in housing construction, and exports. Consumer price inflation is expected to stabilize at about its current level.

The latest data from Japan confirm that the economy is slowing down following the rapid growth

sustained until the middle of last year. Industrial output is contracting, stocks are increasing, and orders are declining, especially those for capital goods. The official discount rate has been lowered three times since the summer, but by less than the reduction in the US rate. Since the turn of the year money market rates have decreased more rapidly than in the United States, but the narrowing of the interest rate differential in favour of yen-denominated assets has not prevented a further strengthening of the yen. Despite the appreciation of the last two years, the real exchange rate is still no higher than it was before the decline of 1989-90; moreover, the trade surplus has begun to grow again, especially vis-à-vis the United States. As in the latter country, expansionary monetary stimuli have been slow to make their impact felt because of the unresponsiveness of the credit market, where both corporate credit demand and the supply of bank credit have contracted. Private consumption and corporate investment may generate an acceleration in economic activity this year. There is likely to be less stimulus from fiscal policy, which is aimed at reducing the public debt in the medium term.

In Germany too, the latest figures provide further evidence of a slowdown in economic activity. The twelve-month rate of consumer price inflation slowed from 4.2 per cent in December to 4 per cent in January but remained more than a point higher than in the first half of 1991. The tightness of the labour market in the western part of the country has led to an acceleration in wage increases. The Bundesbank's targets for the growth in the money supply this year are consistent with halving the inflation rate, and the restrictiveness of monetary policy is reflected in the steep negative slope of the yield curve.

With monetary policy directed to curbing inflation, the federal budget offers little scope for sustaining economic growth in the western regions, burdened as it is with the cost of integrating the eastern regions into the national economy. The federal budget deficit and those of the western Länder should decline as a result of expenditure cuts and increases in revenue due to the higher tax rates enacted last year. The prospects for the growth of the German economy as a whole are uncertain, owing to the risk of wage increases that are incompatible with the policy scenario and the difficulty of forecasting the level of

economic activity in the new Länder. The privatization of the economy in these regions is nevertheless proceeding apace, and the beneficial effects on employment and output are already perceptible.

The OECD forecasts that German GDP will not grow by more than 2 per cent this year, while in France and the United Kingdom growth is likely to be only marginally faster, although higher than last year.

### **The Italian economy**

The sluggish performance of the economy over the past two years or more may have bottomed out, but economic activity will not pick up significantly until the world economy recovers. The trade deficit limits the scope for stimulating a revival chiefly by encouraging domestic demand. The recovery promises to be slow; external stimuli are neither strong nor certain, and the Italian economy may have difficulty responding, given its unresolved problems with regard to costs and prices, the quality of public services and the state of the public finances. Economic policymakers must take urgent and sustained action to tackle these problems in their entirety.

At present, the cyclical indicators are sending conflicting signals. The data on industrial production in the closing months of last year and the estimates for January and February based on electricity consumption do not suggest that a recovery in activity able to develop into a sustained expansion is yet under way. Nor is much comfort to be derived from the latest business surveys, conducted in December; reports of a certain increase in orders, especially for consumer and intermediate goods, contrast with pessimism about the durability of the rise, even in the short term. Firms with more than 200 employees are conspicuous for the greater variability in their responses concerning demand and output and for their assessment that stocks of finished products are still higher than normal; they nonetheless reported a slight recovery in export orders.

Progress in reducing inflation from the peak rates recorded last summer has proved slow and irregular. The twelve-month rate of increase in the cost of living was still above 6 per cent in January; not until February was there a substantial deceleration, to

about 5.5 per cent, slightly lower than on the eve of the Gulf crisis.

As the cyclical difficulties are interwoven with structural problems, there is only limited scope for countercyclical macroeconomic policies.

Fiscal policy this year will also be burdened by last year's unsatisfactory results, namely a borrowing requirement 20 trillion lire above the target, one-off corrective measures amounting to 15 trillion, and inadequate measures to curb the structural growth in spending. Moreover, the cyclical slowdown and the above-target rate of inflation that marked 1991 will continue to inflate the budget deficit this year via smaller tax payments by businesses, higher debt-servicing costs, increased compensation for fiscal drag and the revaluation of pensions.

The Government estimated that the proposed 1992 budget measures would result in a state sector borrowing requirement of 127.8 trillion lire, a reduction of 57.3 trillion compared with the figure on a current programmes basis. The size of the correction in relation to GDP would be comparable to that achieved last year, around 3.5 per cent. The overall scale of the correction proposed by the Government was not appreciably changed during the parliamentary passage of the Finance Law (see the insert).

The factors tending to increase the borrowing requirement are stronger than had been envisaged when the budget was drawn up, undermining the possibility of keeping it within the limit of 127.8 trillion lire. The two main reasons for this are that the initial conditions have worsened, given the partial failures of 1991, and that the macroeconomic outlook appears to be less favourable than had been assumed in last September's Forecasting and Planning Report.

The last issue of the Bulletin expressed doubts about the efficacy of various parts of the budget and about its composition, given the prevalence of provisions to raise revenue rather than cut expenditure and the growing recourse to one-off measures. These misgivings have not been dispelled. There is an urgent need for supplementary measures to be enacted promptly so that the quantitative target can be met this year. The new Parliament will have to introduce structural measures to complement those of a temporary nature.

Achieving the target for the 1992 borrowing requirement is essential if the multi-year convergence programme that the Government submitted to the European Community's multilateral surveillance procedure last year is to be realized. The programme affirmed the commitment to meet the objective in nominal terms, regardless of the macroeconomic situation. The Council of Economic and Finance Ministers of the EC considered its implementation to be the minimum requirement for an advance on the road to convergence, the timetable and criteria for which were fixed definitively with the signing of the Treaty on European Union in Maastricht on 7 February.

Defeating inflation is the essential requirement for convergence. The persistence of the domestic sources of inflation in 1991 shows that long-term efforts are needed. Public action to stimulate competition, especially in the services sector, must be accompanied by an increasingly widespread recognition by service providers of the need for individual behaviour to be compatible with the equilibrium of the economy as a whole. The central and local authorities can help to moderate the rise in prices through the control they exercise over public utility charges and regulated prices and by closely monitoring unregulated prices. In the very short term, however, the stimulus for a change in the behaviour of costs and prices must come primarily from a correction of the trend in nominal incomes. The Government's immediate task is to honour the pledge it made to the country – in the Finance Bill submitted to Parliament, which endorsed it – to exercise restraint in public sector labour contracts and not allow wage increases in 1992 and 1993 to exceed the target inflation rates of 4.5 and 4 per cent respectively.

In industry, in the absence of a rise in the *scala mobile* in May and with the return of productivity growth to its long-term rate, the conditions already exist for unit labour costs to rise by less than 4 per cent in 1992, nearly in line with the average forecast for the OECD countries, whereas in 1991 they increased by almost twice the OECD average. The negotiations on the structure of labour costs and bargaining procedures in the private sector, which were adjourned in December, must lead to an agreement on

wage moderation that does not establish forms of real wage protection that themselves propagate inflation, such as the old *scala mobile* mechanism of indexation to past price increases; moreover, it must not provide compensation for external shocks or increases in indirect taxation. This will make it possible to continue to reduce the rate of increase in labour costs towards a level compatible with maintaining the international competitiveness of Italian firms. From the current year onwards it will defuse inflationary expectations and avert behaviour based on such expectations. A reform of social contributions aimed at meeting the expenses that are improperly borne by employers and employees out of fiscal revenues will also help slow down the rise in labour costs.

The stability of the lira within the narrow fluctuation band of the EMS remains indispensable to curbing the rise in domestic prices. The monetary and exchange rate policy of the Bank of Italy is directed at complying with this constraint; the level of nominal interest rates must ensure exchange rate stability at all times. The target set in September for the growth in M2 envisages a maximum expansion of 7 per cent in 1992. As well as being compatible with exchange rate stability, the target was based on the assumption that the borrowing requirement will not overshoot the ceiling, that budgetary policy will remain effective throughout the year and that slower growth in nominal incomes will help to bring inflation down to the target rate. The growth in the money supply will be measured using the new aggregates on the basis of quarterly rather than monthly averages, in order to attenuate the effects of year-end volatility.

The monetary target may become difficult to achieve if the public sector borrowing requirement is larger than planned. Such an overshoot would result in an increase in financial assets that would affect the demand for money in the short term. Another potential difficulty could arise if the banks, which need to increase the liquidity of their assets, sought to expand their portfolios of government securities by continuing to step up fund-raising. Increased liquidity preference on the part of savers in view of the uncertain outlook for the economy could facilitate such a strategy. However, an increase in the share of government securities in banks' portfolios should be

### The implementing provisions of the 1992 budget

According to the official estimates, the budget for 1992 approved by Parliament (in Law 412 of 30.12.1991, Law 413 of 30.12.1991, Law 415 of 31.12.1991 and various decrees and other measures) should reduce the public sector borrowing requirement by 59.8 trillion lire, compared with the 61.8 trillion originally envisaged by the Government (see Economic Bulletin no. 12). Specifically, social contributions are now expected to decrease by 1.8 trillion lire, compared with the original forecast of a 3.7 trillion increase. This reduction in revenue has been partly offset, primarily through measures to increase tax revenues.

#### Revenue

**Taxes.** – The Finance Law introduces a 1 percentage point increase in the personal income tax rates for all brackets except the first in the three years 1992-94 (for incomes above 14.4 million lire this year). Taxpayers are required to take account of this change when calculating their instalment payments, so that the increase will also apply to non-employee incomes this year.

Law 413 makes it compulsory for firms to revalue the buildings they own, including those they use in their business activities, and any building land included in their balance sheets. The resulting capital gains will be taxed at a rate of 16 per cent in lieu of income tax. The resulting liability can be settled in three instalments to be paid by the end of 1993. The revaluation will be recognized for depreciation purposes in the financial year following that in which it is effected.

Unrealized gains arising in connection with contributions of capital made after 1992 under Law 218/1990 on the restructuring and replenishment of the capital of public law banks (the "Amato Law") will no longer be totally exempt from tax but will enjoy an 85 per cent reduction in the rate. This measure was originally set to come into effect at the beginning of 1991.

Law 413 also provides incentives for persons to regularize their positions with respect to both direct taxes (personal, corporate and local income taxes) and indirect taxes (VAT, registry fees, inheritance and gift taxes, property registration tax and tax on imputed property income). Minimum payments have been fixed for each type of tax. The condonation scheme is forecast to yield 10 trillion lire and the Finance Law subordinates around 2 trillion lire of capital grants to firms in the South of Italy to the receipt of excess amounts.

Other provisions are designed to broaden the tax base and reduce tax avoidance and evasion. They include a reduction in banking secrecy, the revision of the indicators used for the inductive assessment of taxable income, the abolition of the conventional system of assessing taxes for the self-employed and very small businesses, modification of the eligibility criteria for keeping simplified accounts, changes in the deductions allowed for income tax purposes, the inclusion in taxable personal income of capital gains arising from the sale of building land and the introduction of a tax in lieu of personal income tax on amounts received in the event of such land being expropriated, the linking to the personal income tax procedures

#### Effect of the budget on the cash flow of the public sector (1)

<b>Increase in revenue</b> .....	<b>22,550</b>
Tax revenue .....	23,500 (2)
Finance Law (Law 415 of 31.12.1991) .....	2,900
Increase in IRPEF rates and instalments .....	2,900
Law 413 of 30.12.1991 .....	19,460
condonation scheme .....	10,000
revaluation corporate property .....	6,800
exclusion of buildings of sole traders .....	800 (3)
other measures .....	1,860
Law 412 of 30.12.1991 .....	600
increase in VAT rate on drugs .....	200
surtax on betting .....	400
Min. Decree 18.12.1991 (increase in betting tax) ...	150
Min. Decree 28.11.1991 (increase in tobacco duties)	400
Social security contributions .....	-1,800
Finance Law (Law 415 of 31.12.1991) .....	50
increase min contributions artisans and tradesmen	500
reduction in farmers' contributions .....	-450
DL 14 of 21.1.1992 (reduction relief South of Italy) .	150
Other measures (reduction health contributions) ...	-2,000
Other revenue .....	850
Law 412 of 30.12.1991 (endowment funds) .....	850
<b>Privatizations</b> (Law 35 of 29.1.1992) .....	<b>15,000</b>
<b>Decrease in expenditure</b> .....	<b>22,250</b>
Finance Law (Law 415 of 31.12.1991) .....	12,900
cap on public sector wages and salaries .....	6,200
reduction in transfers to enterprises .....	2,200 (4)
capital grants South of Italy .....	2,000
reduction in transfers to non-state-sector entities .	1,850 (5)
reduction in Regional Fund .....	900
deferral revision pensions of state managers ....	500
increase in current allocations to special funds and	
measures to support the economy .....	-750 (6)
Law 412 of 30.12.1991 .....	4,070
health services .....	3,500
restrictions on hirings .....	500
other measures .....	70
Law 413 of 30.12.1991 (property register) .....	-100
Other measures .....	1,180
limits on purchases of goods and services .....	1,300
cap on lending by the Deposits and Loans Fund .	930
State Railways high speed network .....	-1,050
Reduction in interest payments .....	4,200
<b>TOTAL</b> .....	<b>59,800</b>

(1) Official estimates. – (2) The budget includes other measures whose net effect is virtually nil (including the increase in the rate applicable to income earned on CDs and bank time deposits with a maturity of less than twelve months and the reduction in the yield of direct taxes as a result of the capping of wages and salaries in the public sector. – (3) The total yield is officially estimated to be 3 trillion lire. About 2.2 trillion of this amount is to replace part of the 6.9 trillion of revenue included in the calculation of the borrowing requirement on a current programmes basis in connection with the measures provided for in Art. 12 of Law 408/1990 and not yet implemented. – (4) Concerns primarily Mediocredito centrale and the redemption of loans to ENI and ENEL. – (5) Concerns reductions on capital account in the National Health Fund, in transfer payments to public enterprises and for the post-earthquake reconstruction of municipalities in Basilicata and Campania. – (6) See Tables A and Da annexed to the Finance Law.

of the declaration, payment and assessment of health service contributions, and the introduction of simplified procedures for the refunding of tax credits and the collection of overdue taxes. In addition, sole traders may remove from their accounts the buildings they own and use for their activities by 30 April 1992 by paying a lump sum in lieu of income tax and VAT.

Provision has also been made for the continuation of some forms of tax relief for the publishing industry, changes in VAT for some food products, rules for the settlement of cases involving waybills, invoices and fiscal receipts, the extension until 31 December 1993 of the measure requiring buildings used as dwellings by farmers and registered as rural property to be registered as urban property and the extension until 31 December 1992 of the powers delegated to the Government to issue provisions regarding exemptions and relief.

Law 412 introduced a fixed levy of 100 lire on individual regulated bets in addition to the increase of 100 lire in the levy on betting slips introduced by Ministerial Decree on 18.12.1991. It also raised the VAT rate on over-the-counter drugs and on those not included in the list of National Health Service medicines.

Tobacco duties were raised by Ministerial Decree on 28 November 1991.

**Social contributions.** – The planned 0.9 per cent increase in the pension contribution rates for employees and the self-employed was dropped as part of the December 1991 agreement on labour costs between the Government, employers and the unions. The agreement also provided for a larger reduction in employers' health service contributions than had originally been envisaged, thereby raising the cost to the government of this measure from 1.15 to 2 trillion lire. The health service and pension contributions payable by farmers have been substantially reduced and the planned increase in their National Industrial Accidents Insurance Institute premiums was not implemented. On the other hand, the minimum contributions payable by artisans and tradesmen were increased. Lastly, the reduction in the social contribution relief granted to firms in the South of Italy was much smaller than had originally been proposed (around 150 billion lire, compared with the 1.5 trillion indicated in the Forecasting and Planning Report).

**Non-tax revenue.** – Law 412 laid down that the entities to which the state has contributed endowment funds should pay interest to the Treasury at a rate to be fixed annually in the Finance Law. For 1992 the return that ENI and ENEL are to pay was fixed at 4.5 per cent of their endowment funds at 31 December 1990.

**Disposals.** – Law 35 of 29.1.1992 authorized the transformation into limited companies of state holding companies, public economic entities and autonomous government agencies as well as the sale of the shares issued in the process. The Minister of Finance, acting in accordance with guidelines established by the Council of Ministers, is authorized to engage consortia of banks and other economic operators to identify, within six months of the law coming into force, the assets of the state that lend themselves to privatization. Disposals may also be in the form of

contributions of capital to companies with public and private capital. The foregoing consortia and companies are required to advance an amount not less than half the expected proceeds of privatizations to the state. IMI, Istituto Mobiliare Italiano, is also authorized to grant the state advances up to 3 trillion lire.

#### Expenditure

**Wages and salaries.** – The cap on the growth in public employees' earnings as a result of wage agreements and automatic increases has been maintained at the target rate of inflation. The curb on hiring by central government has also been confirmed, together with the measures providing for pay increases for the armed forces and the police.

**Health services.** – The measures regarding health services are contained in Law 412 and should reduce expenditure by around 3.5 trillion lire, which falls about 0.5 trillion short of the saving originally envisaged. Specifically, the share of the cost of prescribed medicines borne by users of the National Health Service has been raised from 40 to 50 per cent, rather than 60 per cent as originally proposed, a limit on users contribution to the cost of diagnostic services has been reintroduced and fixed at 70,000 lire, a fixed charge of 3,000 lire has been introduced for services other than the provision of drugs and hospitalization, the contribution of users to the cost of physiotherapy and thermal treatment is now the same as for diagnostic services (a 50 per cent charge and a ceiling of 70,000 lire), the prices of some categories of drugs have been reduced, the share of the gross price of drugs accruing to the National Health Service has been fixed at 2.5 per cent.

**Social security.** – The changes made by Parliament to the measures proposed by the Government have attenuated their restrictive impact. The annuities paid by the National Industrial Accidents Insurance Institute are to be revised every year instead of every two years, the application of the income limits used for social pensions to civil disability pensions has been restricted to cases of partial disability. The incompatibility between civil disability benefits and the war and disability pensions paid by INPS has been restricted to cases of partial disability and will apply only to persons becoming eligible after 1.1.1992, and a number of minor measures regarding the pensions of persons resident abroad were not implemented. Conversely, the decision to defer the payment of the recalculated pension arrears owed to retired senior civil servants was confirmed.

**Other expenditure.** – The budget adjustment was also diminished by Parliament not approving the reduction in transfer payments to developing countries, the allocation of 100 billion lire for the modernization of the property register and increases in some allocations to the special current account Fund and measures to support the economy included in the capital account. On the other hand, Parliament approved the planned reductions in transfer payments to firms, regions and other entities outside the state sector. The other budget measures comprised administrative provisions designed to curb spending on goods and services as well as lending by the Deposits and Loans Fund and the decision to start the construction of high speed railway lines.



achieved primarily by curbing the expansion of credit, which is still growing faster than output.

The macroeconomic outlook for 1992 is depressed by the legacy of last year's sluggish economic activity, coupled with stubborn inflation and a growing external deficit owing to debt servicing. Cyclical developments do not yet provide grounds for optimism. Nevertheless, the prospects do permit economic policy to be directed to redressing the public finances and fostering convergence without suffering prolonged stagnation, taking advantage of the lowering of inflation towards the European average.

Budgetary and incomes policies along these lines are bound to dampen consumption, in particular public consumption. At the same time, however, they can help trigger a new investment cycle by strengthening confidence in the restoration of economic equilibrium; this would improve the composition of domestic demand. Output could be stimulated by a recovery in exports. The extent of the acceleration in GDP growth with respect to 1991 will depend on the strength and timing of the global recovery, which Italy must exploit by increasing exports. The uncertainties in both the domestic and international spheres widen the margin of forecasting error. In any case, Italian growth is unlikely to approach the OECD average, owing to the

unavoidable restrictiveness of fiscal policy and the ever greater stringency of the external constraint.

The latest forecasts by international institutions indicate modest increases in the world prices of both raw materials and the manufactured exports of the industrial countries. Last year's substantial improvement in Italy's terms of trade may therefore be maintained but only if the dollar does not appreciate significantly from the exchange rate of just above 1,200 lire registered in mid-February. The balance-of-payments deficit on current account, which is endogenously fueled by payments of interest on the foreign debt, would nonetheless continue to widen, both in absolute terms and in relation to GDP.

On the same assumptions concerning world prices and the exchange rate of the dollar, inflation would decline. However, recent experience has confirmed that progress in this sphere depends above all on internal demand and costs. Only if the necessary correction of incomes growth and budgetary trends is accomplished will the rate of inflation decline to 4.5 per cent, at least by the end of the year, thanks in part to improved expectations. Disinflation will make a substantial contribution to reducing the public sector borrowing requirement; it is a prerequisite for a resumption of growth in a climate of stability.

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*Based on information available at 25 February.*

# Articles

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## Recent trade agreements concluded by the EC with EFTA and certain countries in Central and Eastern Europe

### 1. Introduction

The EC recently concluded two important agreements with neighbouring countries, thereby extending economic integration in continental Europe. The first agreement, reached with EFTA, commits the Community and the six EFTA countries to create a European Economic Area.<sup>1</sup> The second agreement – the Association Agreement between the EC and Czechoslovakia, Poland and Hungary – is designed to develop political, economic and financial cooperation between the signatories and to create a free trade area.<sup>2</sup>

The two agreements are part of a more general trend towards regional trade integration that has been under way in the world economy for a number of years. The most important precedents are: the decision of the EC to complete the single market by the end of 1992; the US-Canada Free Trade Agreement, which has been in force since 1989 and which may be extended to include Mexico; the agreement to strengthen economic and commercial relations between Australia and New Zealand (ANZCERTA), which was amended in 1988; the treaty concluded last year between Uruguay, Paraguay, Argentina and Brazil to create a regional common market (Mercosur); and the recent agreement on the creation of a free trade area comprising the member states of ASEAN (the Philippines, Indonesia, Malaysia, Singapore, Thailand and Brunei).

In parallel with these regional developments, bilateral agreements have also been taking shape,

mostly involving the United States and Japan. Negotiations have been taking place between these two countries since 1985 to increase access to the Japanese market for electronic products, telecommunications and car components (the so-called market-oriented sector specific talks); in March 1990 an agreement was initialed covering procedures for contracts relating to satellites and supercomputers, and in June 1991 a new agreement was concluded governing trade in semiconductors.

The dual trends towards regionalism and bilateralism reflect the need of many countries to make their economies more open to foreign trade; according to a GATT estimate, at least 45 countries have relaxed trade restrictions since 1986. At the same time, however, the growing use of regional or bilateral agreements indicates the difficulties encountered in fitting liberalization into the classical multilateral context, as demonstrated by the slow progress of negotiations in the Uruguay Round between the 107 member countries of GATT. The deadline for the conclusion of these important trade talks, which began in September 1986 and range over fifteen trade sectors, has now been postponed further until April 1992.

The stalling of the multilateral negotiations has coincided with an increase in trade tensions; in the second half of the eighties an unprecedented number of disputes were submitted to arbitration by GATT, especially in the agricultural sector. OECD countries increased their use of non-tariff barriers, mainly in the form of voluntary export restraints and production subsidies. The International Monetary Fund estimates that the percentage of industrial

manufactures subject to non-tariff restrictions rose from 14 to around 19 per cent during the eighties; total transfers to the agricultural sector rose by 12 per cent in 1990 to stand at \$300 billion, equal to 2 per cent of the aggregate output of the OECD.

With the world economy facing the prospect of stagnation in output and a worsening of current account imbalances, there remains the risk of a dangerous relapse into protectionism. The successful conclusion of the Uruguay Round would give new impetus to multilateral liberalization, making it possible to ease trade tensions and sustain world economic growth.

## **2. The EC-EFTA Agreement on the creation of a European Economic Area**

The aim of the Agreement is to promote a strengthening of economic and trade relations among the contracting parties in accordance with uniform rules of competition with a view to creating a homogeneous economic area.<sup>3</sup> For that purpose, it provides not only for the free movement of goods, services, capital and persons but also for the creation of a system free of distortions in internal competition and for closer cooperation in fields such as research and development, environmental protection, education and social policy. The nineteen countries involved will form a free trade area, not a customs union, as tariff and non-tariff barriers within the area will be abolished but there will be no common external tariffs; the EFTA members will retain their own systems of tariffs and quotas, which on average are more liberal than those of the EC.<sup>4</sup>

The Agreement will create the largest free trade area in the world, with 360 million consumers and almost half of total world trade. The two blocs are already highly integrated on the trade front. The EC is by far the largest market for EFTA, taking 67 per cent of EFTA's out-of-area exports in 1990. Similarly, EFTA is the most important trading partner of the EC, accounting for 27 per cent of the Community's external exports. EFTA, whose intra-area exports make up only 13.5 per cent of member countries' total exports, is significantly more open to the outside world than the EC, whose intra-area exports account

for 61 per cent of the total. Intra-regional trade could be even more dominant within the European Economic Area; in 1990 it already represented around 70 per cent of member countries' total trade.

Customs duties and quotas on trade in industrial manufactures have already been abolished, and the remaining non-tariff barriers will be removed; in particular, technical standards and certification procedures will be harmonized. However, goods will continue to be subject to health and security checks at the EC-EFTA border. The Agreement provides for the free movement of services, through both trade and freedom of establishment. The sectors most affected in this respect are financial services (with the extension of the principle of home country control to the entire European Economic Area and the introduction of single authorization) and telecommunications and transport. Persons will be permitted to move freely within the nineteen countries, and will be able to live and work where they please and to enjoy full recognition of their professional qualifications.<sup>5</sup> All restrictions on direct investment will be abolished and the principle of national treatment will be applied to all firms operating in the area.

In the field of industrial policy, Community regulations on mergers, public procurement and state aid to enterprises will be extended throughout the area.<sup>6</sup> Nevertheless, the energy, coal, steel, fishing and agri-food industries will continue to be exempt from the competition rules and to be subject to a separate, regulated regime; moreover, the EFTA countries will not be required to adopt the Community's Common Agricultural Policy.

The dynamic gains resulting from the dismantling of borders will be significantly greater for the EFTA countries. As their domestic markets are smaller and more highly concentrated than the average of the EC countries, they will benefit from greater economies of scale, but will have to cope with proportionately stronger competitive pressures. They will also reap specific advantages; for example, they will not be excluded from the direct foreign investment, especially from the United States and Japan, that has been stimulated by the prospect of the completion of the single market, and domestic firms will be able to compete for public sector contracts

within the EC, particularly in telecommunications and electronics. The benefits for the European Community, apart from general economic advantages, derive from the opportunity it provides to reduce certain protectionist aspects of the single market by "opening up" to countries with more liberal trade regimes. At the political level, the Agreement may enable the Community to ease the pressure from those countries that are applying for early membership of the EC, such as Austria.

### 3. The Association Agreement between the EC and Czechoslovakia, Poland and Hungary

The Agreement covers important aspects of economic and political relations between the contracting parties and constitutes a first step towards the future integration of these three Eastern European countries into the European Economic Community. The preamble recognizes that the ultimate objective of the three countries is accession to the European Economic Community and that the Agreement should be regarded as a preparatory stage in the achievement of that objective. The Agreement aims to liberalize trade in goods and services and to increase the mobility of factors of production among

the contracting parties by measures in favour of emigrant workers and the freedom of establishment of foreign firms, the protection of investments and the gradual liberalization of trade and capital movements.

A free trade area is to be established for almost all goods except agricultural products within a maximum of ten years and in conformity with the provisions of the GATT.

When the Agreement comes into force, the EC will abolish customs duties and quantitative restrictions on imports of non-agricultural raw materials and manufactures<sup>7</sup> and quantitative restrictions on imports of agricultural raw materials and food products; the duties on the latter group of products will be reduced over a three-year period, but not abolished.

As a general rule, the Eastern European countries will abolish quantitative restrictions on non-agricultural raw materials and manufactures as soon as the Agreement comes into force;<sup>8</sup> duties will be removed gradually over a period of not more than nine years. Only some of the quantitative restrictions on imports of agricultural raw materials and food products will be removed, and the rates of duty will be gradually reduced.

**Composition of exports to and imports from the EC, by type (1)**  
(percentage shares in 1989)

**Table 1**

	Poland		Czechoslovakia		Hungary	
	Exports	Imports	Exports	Imports	Exports	Imports
<b>Raw materials</b> .....	<b>43.3</b>	<b>21.5</b>	<b>28.8</b>	<b>13.5</b>	<b>38.1</b>	<b>6.7</b>
Food .....	20.4	18.5	8.7	7.2	26.7	3.3
Non-energy .....	11.0	2.4	12.5	6.0	8.4	3.1
Energy .....	11.9	0.6	7.6	0.3	3.0	0.3
<b>Manufactures</b> .....	<b>56.7</b>	<b>78.5</b>	<b>71.2</b>	<b>86.5</b>	<b>61.9</b>	<b>93.3</b>
Textiles .....	11.9	9.7	12.6	5.0	17.6	11.8
Iron and steel .....	5.3	4.4	12.5	1.5	4.9	3.6
Chemicals .....	6.7	16.5	11.6	21.0	10.0	19.5
Machinery and vehicles .....	11.8	33.4	13.9	42.9	12.6	39.3

Source: OECD.

(1) Exports *cif*, imports *fab*.

The Agreement is an important step towards the economic integration of these three Eastern European countries, first and foremost because the EC is their most important trading partner within the OECD. In 1989 around 70 per cent of the trade of Czechoslovakia and Poland with industrial countries and 62 per cent of Hungary's was with the EC. Moreover, the Agreement provides for the immediate elimination of the Community's non-tariff barriers, which in the eighties applied to around 40 per cent of Community imports from these countries.<sup>9</sup> Finally, the Agreement lays down that Community duties on all manufactured goods and some agricultural products will be abolished within a relatively short space of time; the period stipulated is not longer than six years and generally shorter than that allowed to the three Eastern European countries to do likewise.

The complete liberalization of Community imports will immediately affect the chemical, engineering and motor vehicle industries, which together accounted for 23, 19 and 26 per cent of the exports of Hungary, Poland and Czechoslovakia respectively in 1989 (Table 1). Within three years customs duties on a further 30-40 per cent of the three countries' non-agricultural exports (iron, steel and other metals, textiles and clothing) and on a proportion of their agricultural exports will be reduced by around 60 per cent. Hence, between 50 and 60 per cent of the three countries' merchandise exports to the EC should be liberalized in the first three years.

Table 2

**Revealed comparative advantages  
vis-à-vis the OECD (1)**

	Poland	Czecho- slovakia	Hungary
<b>Raw materials</b> .....	<b>2.5</b>	<b>1.8</b>	<b>2.2</b>
Food .....	2.3	1.1	2.9
Non-energy .....	2.0	2.4	1.6
Energy .....	3.4	2.4	1.5
<b>Manufactures</b> .....	<b>0.7</b>	<b>0.8</b>	<b>0.7</b>
Textiles and clothing .....	2.0	2.3	2.8
Iron and steel .....	1.5	3.4	1.6
Chemicals .....	0.7	1.1	1.1
Machinery and vehicles ..	0.3	0.3	0.3

Source: OECD.

(1) Revealed comparative advantages are calculated as a ratio between the sector's share in the country's total exports to the OECD and the same sector's share of total exports within the OECD.

The indices of the three countries' revealed comparative advantages (RCA) in international trade provide a further basis for assessing the Agreement (Table 2). They show that the planned liberalization will be slower in sectors in which the three enjoy the greatest comparative advantage, namely agriculture (Hungary and Poland), textiles and clothing and non-energy raw materials (all three) and iron and steel (Czechoslovakia). For their part, the three have sought to protect their "traditional" manufacturing sectors (textiles, wood and paper products, footwear) and those with a high input of raw materials (iron and steel, coal and oil products, chemicals), in which their most competitive industries are currently concentrated. However, they have reduced protectionist barriers against imports of capital goods, machinery and industrial vehicles, in which all three are at a strong disadvantage.<sup>10</sup>

1 The members of the European Free Trade Association (EFTA) are Austria, Finland, Iceland, Liechtenstein, Norway, Sweden and Switzerland. Following ratification by national parliaments and the European Parliament, the Agreement will come into force on 1 January 1993, at the same time as the single market within the European Community. The signing of the Agreement should have taken place before the end of 1991, but was delayed owing to the negative opinion expressed by the European Court of Justice, which was concerned about the compatibility of certain provisions with the Community's system of law.

2 The part of the Agreement relating to trade came into force on 1 January 1992, but the remaining provisions will be implemented after ratification by the European Parliament and the parliaments of the three countries concerned.

3 Under the Agreement, the EFTA countries will adopt around 1,400 Community Laws and Directives.

4 According to some estimates, the EC's average external tariff on manufactured goods is 4 per cent, compared with 2-3 per cent in the case of EFTA.

5 Switzerland, which at present imposes severe restrictions on immigration, has been granted a five-year moratorium.

6 It should not be difficult for EFTA countries to comply with these regulations, as they tend to provide smaller subsidies to firms than the EC. In the period from 1986 to 1988 subsidies to manufacturing industries averaged 1.8 per cent of the sector's gross product, compared with 4.1 per cent in the Community.

7 Wide-ranging exceptions apply in the fields of textiles and clothing, coal and steel, rubber and plastics, skins, leather and footwear, and motor vehicles.

8 Exceptions are made for the textile and clothing sector.

9 As this figure is based on imports already subject to quotas, it underestimates the effective extent to which imports are covered by non-tariff barriers. These are defined as measures whose primary objective is to reduce imports (quotas, licences, minimum prices, variable duties), disregarding other measures (health requirements, technical standards, domestic production subsidies) for which in principle this is a secondary objective.

10 An examination of sectoral trade balances confirms the indications provided by the RCA index on comparative advantages according to sector. The three countries' surpluses are concentrated in industries producing raw materials, textiles and iron and steel, while the largest deficit is in machinery and transport equipment.

### Revision of the index of output prices and of the real exchange rate series for the lira

The method of calculating the index of output prices for the enlarged manufacturing sector (comprising manufactured goods, coal and oil products) has recently been revised. However, the criteria for the construction of the index remain broadly unchanged.

Figure 1

Old and new series for the output prices of manufactures in Italy (1987=100)

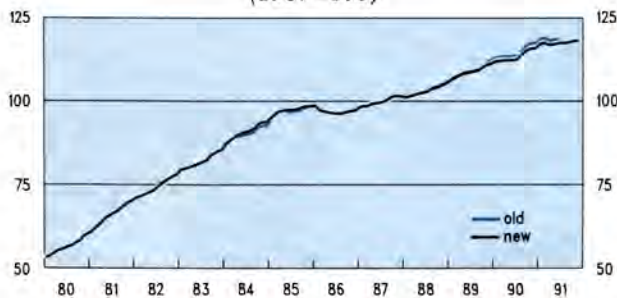
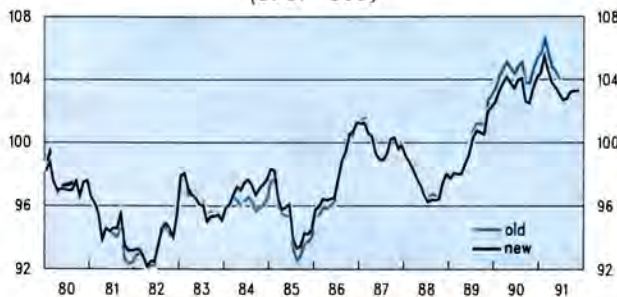


Figure 2

Old and new series for the effective overall real exchange rate of the lira (1987=100)



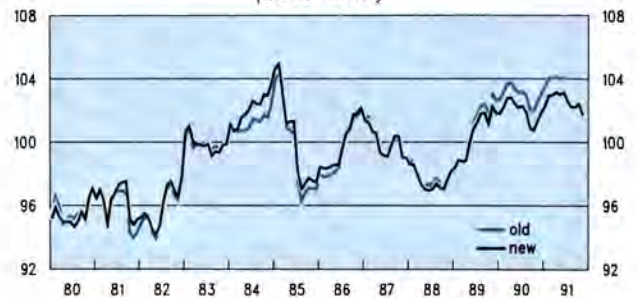
The main changes consist in:

- updating the weights by using the new input-output tables for 1985 and 1988. The new

weights at constant 1980 prices have made it possible to recalculate the output price indices for each branch of industry (by summing the “component” indices for the prices of intermediate sales, final domestic sales and exports) and for each macro-sector. The new weighting increases the relative importance of the mechanical engineering and chemical sectors and progressively reduces that of the food sector;

Figure 3

Old and new series for the effective real exchange rate of the lira within the ERM (1987=100)



- revising the output price index for the branch “oil and oil products”; this had previously been obtained by aggregating five indices for gasoline, kerosene, gas oil, fuel oil and lubricating oil (which in turn had been calculated by aggregating the component wholesale price indices), but Istat ceased to publish these indices at the beginning of 1990. The first four items have therefore been replaced for the entire period by indices based on ENI data; for lubricating oil, the consumer price (from Istat data) has been used. Finally, it has been possible to add a sixth component item, natural

gas, constructed from the producer price published by Istat.

These adjustments do not lead to significant differences between the new and old series of output prices (Figure 1). The two indices show very similar trends during the eighties; in the last two years the new series has been around 1 percentage point lower on average.

As a result, the indices of real effective exchange rates for the lira based on the producer prices of manufactures have also been revised. The new indices show that in the last two years the lira has been about 1 percentage point lower than on the old basis vis-à-vis both Italy's main trading partners (Figure 2) and the member countries of the Exchange Rate Mechanism of the EMS (Figure 3).

## Speeches

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### Lending of last resort

*Address by the Governor, Carlo A. Ciampi,  
to the Università Cattolica del Sacro Cuore and the  
Associazione per lo Sviluppo degli Studi di Banca e Borsa*

*Milan, 21 February 1992*

It is difficult to imagine how a modern economy, based on credit from financial intermediaries and the use of bank money to pay for goods and services, could function without a lender of last resort. The market relies on the existence of such an entity to counter instability, which is a threat to all potential growth.

Since the last century, this notion has formed the basis of the theoretical analysis of credit, demonstrating clearly what was already implicit in market practices.

The assumptions made in the nineteenth century, which have been confirmed in practice and in the literature, were that in complex and integrated economies the fragility of the credit system could be both a cause and a consequence of the fluctuations to which such economies are exposed. From these assumptions it follows that the central bank can justifiably grant credit to individual credit institutions in order to prevent illiquidity from developing into insolvency and to safeguard the stability of the banking and financial system as a whole.

The maintenance of stability in financial markets is a public good.<sup>1</sup> Stability does not mean that the structure is immutable, that the market cannot select efficient banking operators and weed out the inefficient. However, selection must take place

without damaging the relationship of trust between banks' customers and the banking system as a whole.

One of the arts of central banking lies in the ability to graduate lending of last resort discretionally, without undermining confidence in the credit system but allowing the market to carry out selection. In exercising this skill, the central bank combines various aspects of its functions with regard to monetary policy, banking supervision and the payment system.

#### 1. The debate about the lender of last resort

The basic conception of the role of the lender of last resort is linked to the thinking of two non-academic economists, Thornton and Bagehot, who highlighted the risks of instability in a credit-based economy and indicated that one of the tasks of the central banker was to prevent crises. However, the security offered by lending of last resort must not encourage imprudent behaviour by prompting banks to take on excessive risk in the confident expectation that they will automatically be protected against bankruptcy: "The relief [granted by the central bank] should neither be so prompt and liberal as to exempt those who misconduct their



business from all the natural consequences of their fault, nor so scanty and slow as deeply to involve the general interests".<sup>2</sup> A central bank that makes efficient use of information and is independent of the executive branch must avoid shoring up badly run, ailing banks. The best way to avoid encouraging high-risk behaviour and to prevent bankruptcies from dragging down sound banks is to lend at a penalty rate (the term employed by Bagehot) and to accept, as security for the loan, only assets that are considered adequate.

The critics of this approach have questioned the discretionary function of the central bank as lender of last resort. They have reaffirmed their complete confidence in the ability of the market itself to bring about the maximum achievable efficiency. In their view, the central bank should adhere to fixed rules and rigid criteria; the lender of last resort should intervene only in times of panic to avoid the conversion of deposits into currency, and then only by means of open market operations applicable to all intermediaries;<sup>3</sup> "pseudo-crises" due to the economic cycle, which do not have a permanent effect on the stock of reserves, should not be financed.<sup>4</sup> They hold that in advanced money and financial markets the central bank is more likely to make mistakes if it is called upon to act in the heat of the moment.

Such arguments are not conclusive, however, in markets that are not fully efficient, in which information is incomplete and its distribution uneven. Banks are better informed than the depositors on whose behalf they lend, but they have less information than their debtors when deciding which loan applications to approve. The disadvantage increases in times of crisis, when it becomes more difficult to assess the creditworthiness of debtors and to distinguish between prudent and imprudent borrowers. Illiquid banks reduce their lending and raise the cost of credit, increasing the probability that finance will be provided for projects and businessmen offering a higher expected return, but also a higher risk. In oligopolistic markets and compartmentalized payment systems, whenever prices do not convey all the information available, the central bank is called upon to prevent the microeconomic behaviour of banks from exacerbating and spreading the crisis.

## **2. Development and role of the refinancing of the banking system by the Bank of Italy**

In quantitative terms, central bank lending to individual banks was for a long time the main instrument for regulating the liquidity of the economy and the growth of the money supply in Italy. The last fifteen years have seen a steady increase in the use of open market operations, and especially temporary transactions in government securities, as a means of influencing bank reserves. In 1991 the daily average volume of open market operations was more than double that of direct refinancing, although the latter continues to occupy a prominent place in the implementation of monetary policy.

The changes that have taken place in Italy have strong similarities with developments in other European countries. Until two years ago refinancing still accounted for 40 per cent of central bank credit to the banking system in France, whereas today it represents no more than 11 per cent. Only in Germany is refinancing still on a substantial scale; though declining, it remains almost as large as the volume of open market operations.

In Italy the change in emphasis has gone hand in hand with advances in the capital markets. There was a particularly urgent need for the markets to develop in Italy, where the financial system was more bank-oriented than in other countries.

Moreover, the relative importance of the three channels for monetary base creation was very different by comparison with other European countries. Monetary base creation on behalf of the Treasury via its overdraft facility with the Bank of Italy and central bank purchases of government securities at issue steadily increased in the seventies; the ratio between this component and total monetary base creation rose from little more than 1:1 in 1970-71 to 5:1 ten years later. Although significant additional monetary base creation did not occur via the other two channels – the external sector and direct refinancing of banks – substantial amounts of monetary base had to be sterilized. As it was technically impossible to absorb a sufficient volume by means of outright sales of government securities,

it was necessary to resort to repurchase agreements on the open market, which were introduced at the end of 1979. The “divorce” between the Treasury and the Bank of Italy in July 1981, in other words the removal of the obligation for the Bank of Italy to purchase Treasury bills remaining unsold at auction, began the process of adjusting the balance between the various channels for the creation of monetary base. The structural development of the financial markets and the widespread investment of savings in government securities helped in this regard. Direct monetary base creation via the Treasury steadily decreased in both absolute and relative terms, to the point that it was slightly negative in 1990 and 1991.

Despite these changes, claims on the Treasury in the balance sheet of the Bank of Italy are still equivalent to more than 12 per cent of gross domestic product; they derive in almost equal proportions from the existence of the Treasury overdraft facility and the central bank’s holdings of government securities. Combined with a considerable volume of official reserves, the total assets of the Bank of Italy are therefore higher in relation to GDP than those of the central banks of the other major Community countries: more than 20 per cent, compared with 13 per cent in Germany and France and 10 per cent in the United Kingdom. The scale of the Bank of Italy’s claims on the Treasury is reflected, on the liabilities side, in the high percentage of banks’ compulsory reserves. This confirms the link that came to be established over the years between the size of the Treasury overdraft facility and the burden of compulsory reserves borne by Italian banks, which is considerably higher than in other European banking systems. The Bill recently approved by the Government to reform the overdraft facility therefore has dual significance: it will complete the monetary framework in accordance with the rules of the embryonic European System of Central Banks and it will create the conditions for increasing the competitiveness of the Italian banking sector in the single European market.

The measure, which will not be debated until the new parliament convenes, has two interconnected purposes: first, to prevent the overdraft facility from acting as a permanent channel for financing the state

sector borrowing requirement, and secondly to bring the facility into line with the requirements agreed within the EC for transition to the second phase of European Monetary Union, which prohibit any direct monetary financing of budget deficits.

The reform is the culmination of a ten-year process in which monetary financing of the Treasury has been gradually reduced and eventually eliminated. This has been helped both by the decrease in financing via the overdraft facility as a result of an easing of the factors that led to an increase in the credit line each year, and by the steady reduction in purchases of government securities at issue by the Bank of Italy. The innovations introduced in the mechanisms for issuing government securities and the development of the secondary market have played a decisive part in this respect.

Although open market operations are now an essential tool for controlling the money supply on account of the size of the market to which they transmit monetary policy impulses as well as the technical characteristics of the operations themselves, the direct refinancing of individual banks still has an important place in monetary policy. The distinctions between the two instruments lie in the identity of the agent initiating the operation (the central bank in open market operations, the individual credit institution in refinancing operations) and in the way in which the interest rate is determined. The competitive auction technique used for securities repurchase agreements means that market conditions influence the interest rate more directly, whereas refinancing is granted at official rates.

The central bank’s responsibility for the operation of the payment and securities trading system is closely associated with its control of the money supply. Important advances have been made in this area in recent years, with the active cooperation of the banks, other operators and institutions such as the postal system and the securities depository Monte Titoli; other developments that are under way or planned will further enhance the efficiency and functionality of monetary and financial transactions, thereby bringing a significant improvement in the service banks provide for their customers.

In the payment system, refinancing by the central bank performs the delicate task of facilitating the orderly execution of procedures for clearing customers' payments and settling interbank payments, both of which are entrusted to the Bank of Italy. The provision of liquidity facilities is designed to ensure that the system has the necessary funds to permit daily settlement. Here again, we come back to the classical notion of refinancing as an instrument of intervention by the central bank, as lender of last resort, in favour of banks that are solvent but lack the necessary liquidity.

### **3. The legal framework for refinancing and the reforms that have been made**

The regulations governing the operations of the Bank of Italy derive mainly from the Codified Law on the Banks of Issue (Royal Decree 204 of 28 April 1910). The Law specifies the requirements for operations in minute detail, based on extremely strict criteria. The severity of the legislation, which had its roots in the Italian banking crisis of the end of the nineteenth century, was not relaxed by the reforms of 1926 and 1936, which accorded the Bank of Italy the exclusive right to issue banknotes and gave it the status of the "bank of banks".

Until 30 January of this year the legislation provided for political involvement in the setting of interest rates on the basis of Royal Decree 2873 of 1 May 1866. A specific interest rate, determined by the Minister of the Treasury upon a proposal from the Governor of the Bank of Italy, was to be applied to each type of operation. Today, Law 82 of 7 February 1992 provides that "changes in the normal discount rate and in the rate of interest on ordinary and fixed-term advances from the Bank of Italy shall be made by the Governor of the Bank of Italy, in accordance with the need to control market liquidity, by measures of his own that shall be published in the Official Gazette of the Italian Republic".

The operational limitations on the two forms of financing – namely the discounting of rigidly defined types of negotiable instruments and advances backed

by appropriate collateral, which is also explicitly specified by law – remain unchanged. Moreover, discounts and ordinary advances may not be granted for periods of more than four months, while the limit for fixed-term advances has been set at 22 days by administrative order.

The decline in the rediscounting of commercial bills has been due largely to the high administrative cost of the complex procedure for verifying that the paper meets all the requirements particularly as regards the quality of the signatures of previous endorsers. These difficulties have led the banks to reduce the volume of finance granted to customers by means of discounting and to use more flexible forms of credit instead. Rediscounting is now confined to particular types of operation to support agriculture.

Advances take two distinct forms, depending on purpose. Ordinary advances, which are renewable credit lines for periods of up to four months that can be drawn down in the same way as an overdraft, increase the flexibility of banks' treasury management. For many years they compensated for structural deficiencies in the interbank and money markets. As these shortcomings have been progressively rectified, the Bank of Italy has encouraged banks to reduce their overall credit lines by charging a fee on the facility granted. As a result, credit lines decreased from the equivalent of 1 per cent of banks' total lending to customers in 1981 to 0.3 per cent ten years later. Fixed-term advances, which have been available since 1967 in place of deferred payment in the clearing houses, are used to provide sometimes large-scale finance, but for limited periods; they are granted on a discretionary basis at the request of individual banks to meet their temporary reserve needs, but the total volume of such finance is set in relation to the daily liquidity objective for the credit system as a whole.

The central bank must refrain from intervening in crises in individual banks suffering more than just a liquidity problem. At the same time, the lender of last resort must be able to act discretionally, flexibly and swiftly in order to prevent illiquidity from developing into insolvency. On several occasions I have drawn attention to the fact that rigidities in our legislation impede the intervention required to support banking

intermediaries with a liquidity crisis that own little by way of government securities.

The acceptable collateral for either ordinary or fixed-term advances consists of government or government-guaranteed securities; these are the only securities which can legally be pledged. The development of the secondary market, which has increased the liquidity of government paper, enables banks owning such securities to sell them in order to obtain liquid funds without having to turn to the Bank of Italy. This demonstrates even more clearly the limitations of legislation that does not permit solvent banks without holdings of government securities to mobilize other types of balance-sheet assets at the central bank. In order to overcome this constraint while maintaining the general principle that the Bank of Italy grants advances only against collateral, the law should be amended to widen the range of eligible securities or to delegate the specification of the range to secondary regulations.

Simply widening the range of securities acceptable as collateral for advances does not, however, appear to be sufficient to give lending of last resort the flexibility required by the exceptional circumstances in which it must sometimes be granted. The legislation on rediscounting must also be revised to allow solvent banks to mobilize not only bills but also other assets that satisfy the indispensable requirement for collateral in respect of finance from the central bank.

#### **4. The changes taking place in the money and financial markets**

Italy's participation in the process of European unification has given further impetus to the profound changes that have been taking place in the Italian financial system since the beginning of the eighties.

The remaining exchange controls have been removed. Legislation and the financial infrastructure have been updated. Screen-based markets have been created for trading in government securities and interbank deposits. In the payment system, steps have

been taken to improve the standard of services and to increase security and reliability.

The reform of the payment system has reinforced the link between the mechanisms for regulating the money supply and those governing its circulation. The most important measures have related to the interbank network, the linchpin of the payment system.

At the same time, the partial mobilization of compulsory reserves has given banks greater flexibility in the use of their resources, thus further reducing the need for ordinary advances from the Bank of Italy. The effectiveness of the payment system that has been constructed is evident from the sharp increase in clearing operations, from a daily average of 18 trillion lire in the last quarter of 1988 to one of 90 trillion in the corresponding period of 1991.

The use of screen-based technology for trading on the money market has created a versatile system that enables banks to re-allocate their reserves of monetary base rapidly and efficiently among themselves. The markets in government securities and interbank deposits have grown rapidly in parallel with one another. The average daily turnover of the government securities market rose from 250 billion lire in 1988 to 6.4 trillion in the last quarter of 1991, with peaks of around 10 trillion, while trading in interbank deposits increased from a daily average of 4 trillion lire in March 1990, the first month of operation, to one of 11.3 trillion last December.

The development of the financial markets has enhanced the liquidity of investments in securities and the ability of banks to raise funds on the interbank market. On the other hand, the shift in the composition of bank assets as a result of the rapid increase in the proportion of loans in recent years has reduced the system's liquid assets.

The integration between the financial markets and the settlement networks has increased the probability that a shortage of funds at one operator will show up directly in the daily clearing, preventing final settlement; the multilateral nature of clearing does not allow illiquid participants to defer meeting their obligations in the final phase of interbank settlement.

The emergence of liquidity shortages at the closure of the national clearing is usually caused by the difficulties bank treasurers may have in forecasting mismatches in the timing of receipts and payments. Central bank financing irons out these imbalances, and is not necessarily a sign of abnormal conditions in the banks that resort to the facility.

The charging of penalty rates on operations to cover shortfalls in the final phase of payments clearing has had beneficial effects on the normal settlement of interbank payments. Average daily shortfalls declined from 8.5 billion lire in the last quarter of 1990 to 6.1 billion in the corresponding quarter of 1991, and over the same period the number of cases almost halved.

As in other industrial countries, a Decree issued by the Minister of the Treasury in May 1991 limits participation in the clearing systems to credit institutions and certain government departments that meet the technical and financial requirements laid down and enforced by the Bank of Italy.

Plans for calculating limits for banks' bilateral and multilateral exposure on the screen-based interbank deposit market and in the clearing procedures are currently being considered. Limits would be set on the basis of a combination of self-evaluation of the banks' own risk category and supervision by the central bank. The procedure will make it possible to know each operator's exposure in real time, thus revealing any exceeding of the limits.

In the eighties the changeover to a monetary policy based entirely on the use of indirect methods of control, the increase in the importance of securities repurchase agreements and the development of deep and efficient money markets enabled the Bank of Italy to steer short-term interest rates swiftly towards levels consistent with exchange rate equilibrium within the EMS, particularly during the dismantling of exchange controls and the lira's entry to the narrow fluctuation band.

This de facto change has recently been accorded full and formal recognition. The first step in this direction was the Decree issued by the Minister of the Treasury last May empowering the Bank of Italy to vary the spread on fixed-term advances by up to 1.75

percentage points. The Bank thus became able to send the market more meaningful signals about its stance than were possible under the previous arrangements, in which the spread was determined automatically by a formula based on the frequency of banks' recourse to the facility. Parliament's recent approval of the measure giving the Bank of Italy responsibility for setting official interest rates set the seal on a long series of changes, which I have described only briefly.

## 5. After Maastricht

At Maastricht last December the European Council of Heads of State and Government amended the Treaty of Rome, giving fresh impetus to the construction of Europe. The second phase of Economic and Monetary Union will begin on 1 January 1994. National authorities will retain full responsibility for national monetary policies, but the creation of a European Monetary Institute, which will remain in existence until the establishment of the European System of Central Banks, will make it possible to increase monetary policy coordination in order to pursue the objective of price stability and facilitate the use of the ecu within the Community.

The final phase of EMU will begin between 1997 and 1999. Exchange rates will be irrevocably fixed. The European System of Central Banks will be set up; its institutional format is defined in the draft Statute, which was prepared by the Committee of Governors and became an integral part of the decisions taken in Maastricht. Within the System itself, responsibilities will be distributed between the European Central Bank and the central banks of member countries in accordance with two fundamental principles, namely the indivisibility of monetary policy decisions and subsidiarity in the implementation of those decisions.

The European Central Bank will be governed by a Governing Council and an Executive Board. The Governing Council will comprise the Governors of the national central banks as well as the members of the Executive Board; the Executive Board will consist of a President, a Vice-President and a maximum of four other members. The Council and the Board will take decisions on intermediate

monetary objectives, key interest rates and the level of liquidity in the Community as a whole by simple majority. In accordance with the principle of subsidiarity, the European Central Bank will replace national central banks in the implementation of monetary policy only in fields and activities in which they, in the integrated market, would encounter operational constraints that would prejudice the effectiveness of the stability measures the ESCB is committed to pursuing.

The broad lines of the path that will lead to the single currency have been marked out; it is now up to governments, central banks and economic agents to construct it. At the institutional level, Italy still has to implement the reform of the Treasury overdraft facility, a change that confirms and reinforces the anti-inflationary stance in keeping with the policy of exchange rate stability pursued by the Bank of Italy.

The action taken on the monetary and exchange rate fronts must be combined with rigorous budgetary and incomes policies and appropriate behaviour by businesses and wage negotiators if the Italian economy is to be able to participate in economic and monetary union and, as a full and active member, to reap the potential benefits it offers. The restoration of sound public finances, the defeat of inflation and the strengthening of the competitiveness of the entire economy are the essential tasks to be undertaken. I have addressed these issues on several occasions in the past.

At Community level, the Committee of Governors has not only sought to coordinate national monetary policies more closely but has also begun work on establishing the European Monetary Institute.

As early as 1 January 1993, however, the present operating framework in individual states will be radically changed by the entry into force of the Second Banking Coordination Directive, which will allow banks to operate freely in every country of the Community.

Under the arrangements that have been agreed for the division of banking supervisory tasks, the supervisory authorities of a bank's country of origin will continue to have sole responsibility for assessing

the financial health of the entire institution, including its foreign branches. Article 14 of the Second Directive departs from the general principle of "home country control" by making the supervisory authorities of the host country responsible for supervising the liquidity of foreign banks' branches.

As a result, the central bank of a member country may have to decide whether or not to meet the liquidity requirements of a branch of a foreign credit institution without having direct information on its solvency. Moreover, in an increasingly integrated environment banks may not need to have an office in the country in order to conduct business there. A foreign bank that was not formally established in our country could apply for membership of the payments clearing house, and hence for access to lending of last resort, without the Bank of Italy being able to exercise any form of control over the institution.

These problems can be resolved only through closer cooperation between supervisory authorities. Important progress has also been made in relations with Community countries where responsibility for banking supervision and that for lending of last resort are exercised by separate bodies.

In addition, the central banks are working to eliminate or at least reduce the systemic risks associated with payment systems. Member countries appear to be proceeding towards the same goal, even if the means of achieving it sometimes differ quite substantially. In the future European context, measures to control payment system risks must also be standardized and supplemented.

Finally, lending of last resort itself, an instrument that marks the division between monetary policy and supervisory activities and at the same time forms a link between the two, also needs to be harmonized. The general characteristics of lending of last resort should be regulated at Community level as soon as possible, leaving national authorities responsible for implementation. Of necessity, central bank support is the result of a process of assessment and negotiation, with a range of possible solutions that vary according to the circumstances. It would be inappropriate to lay down in advance a rigid set of conditions for obtaining finance. As I said at the beginning of my address, there is a risk of encouraging unconditional

reliance on such support and reducing the caution that market participants should exercise.

The discretionary nature of intervention must remain the principal factor to counter imprudent bank behaviour. As Kindleberger wrote, “The lender of last resort should exist, but his presence should be doubted. ... This is a neat trick: always come to the rescue, in order to prevent needless deflation, but always leave it uncertain whether rescue will arrive in time or at all, so as to instil caution in other speculators, banks, cities, or countries”.<sup>5</sup>

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- 1 R. Solow, “On the Lender of Last Resort”, in C.P. Kindleberger and J. Laffargue (eds.) *Financial Crises*, (Cambridge University Press, Cambridge 1982).
  - 2 H. Thornton, *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain* (Hatchard, London 1802), p. 186 (footnote).
  - 3 M. Friedman, *A Program for Monetary Stability* (Fordham University Press, New York 1959).
  - 4 A. Schwartz, “Real and Pseudo-Financial Crises”, in F. Capie and G. Wood (eds.), *Financial Crises and the World Banking System* (Macmillan, London 1986).
  - 5 C.P. Kindleberger, *Manias, Panics, and Crashes. A History of Financial Crises* (Macmillan, London 1978), p. 12.

## **Saving and investment in the world economy: the role of the capital markets and financial institutions**

*Opening Address by the Director General, Lamberto Dini,  
to the "Rocca Salimbeni Meetings" organized by Monte dei Paschi di Siena*

*Siena, 29 November 1991*

### **1. Introduction**

The theme that Monte dei Paschi has chosen as the subject of this meeting is highly relevant today for several reasons: it concerns the prospects for the development of the whole world economy; it leads us to examine not only the problems but also the potential benefits associated with the sudden emergence of new economic agents, systems of government, and economic and political relations between countries; and it prompts us to reflect on the appropriate economic policy responses in the industrial countries in general and in Italy in particular.

The pressure on the scarce resources of our planet is bound to increase as demand grows for economic change and social progress aimed at overcoming the historical backwardness of the developing countries, of those in Central and Eastern Europe, and even of large parts of the industrial countries themselves.

Up to now, emigration has acted as an indispensable adjustment mechanism for the differences in income between North and South and as a safety valve for the pressures population growth is creating in many developing regions. However, the scale of these flows is obviously limited by the capacity of host countries to absorb immigrants, as has already been amply demonstrated. The leading industrial countries have inevitably made their immigration policies more restrictive in the last few years. They are thus faced with the problem of creating mechanisms to replace the earlier inflows of labour with outflows of productive capital that will foster growth in other parts of the world.

This is the background, characterized by the urgency of the needs, for our discussion of the issues raised at this meeting: the adequacy of savings and the ability of the financial system to transform them into productive investment, overcoming the geopolitical divisions of the past and ensuring that the systemic risks likely to accompany the process do not get out of hand.

Monetary authorities and the international organizations have been grappling with these issues for some time now. They dominated the agenda of the annual meetings of the International Monetary Fund and the World Bank in Bangkok in October, and they have been addressed by the Committee of Deputies of the Group of Ten, of which I have the honour to be chairman. In my remarks I shall refer to the studies conducted by the Group of Ten and those carried out by the Bank of Italy in order to illustrate what I believe are the key questions from the point of view of the analysis and choice of appropriate economic policies.

### **2. Saving trends**

It is clear from an analysis of national accounts data that the saving rate diminished in the industrial countries during the eighties. The average ratio of gross national saving to GDP in the OECD countries was about three percentage points lower than in the sixties and seventies (Table 1). The saving rate fell in all the leading countries, with the largest falls occurring in some of those that had had the highest rates at the beginning of the decade, including Italy,



Germany and France. The differences between national saving rates have thus narrowed, probably as a result of the convergence of the age structure of countries' populations and of the development and efficiency of their financial systems.

Recent OECD studies confirm the existence of these trends on the basis of more economically significant definitions of saving. It is worth noting, for instance, that most expenditure on R&D and vocational training is excluded from both saving and investment in national accounts, as is spending on durable consumer goods. All three items increased during the eighties.

On the other hand, the definition of gross saving includes the amortization of capital goods, which from an economic standpoint corresponds to the consumption of resources. The far-reaching changes that have occurred in production techniques and company organization have considerably shortened the average economic life of capital goods, especially as regards EDP and information technology. Consequently, the share of amortization in total investment has increased. When corrections are made for all the factors I have just described, the fall in the saving rate during the eighties is found to have been even more pronounced than that revealed by national accounts data.

Table 1

**Saving in the leading industrial countries**  
(gross saving as a percentage of GDP/GNP)

	1960-69	1970-79	1980-89	1986	1987	1988	1989
<b>United States:</b>							
domestic .....	19.7	19.4	16.3	14.7	14.5	15.3	15.4
public .....	2.0	0.4	-2.0	-3.1	-2.1	-2.0	-1.6
private .....	17.7	19.1	18.3	17.8	16.6	17.3	17.0
<b>Japan:</b>							
domestic .....	34.5	35.3	31.7	31.9	32.4	33.7	34.0
public .....	6.2	4.8	4.9	4.7	6.3	7.4	8.3
private .....	28.3	30.5	26.9	27.2	26.1	26.2	25.6
<b>Germany:</b>							
domestic .....	27.3	24.3	22.4	23.7	23.3	24.2	25.8
public .....	6.2	3.9	2.0	2.4	1.8	1.4	3.7
private .....	21.1	20.5	20.3	21.3	21.6	22.8	22.1
<b>France:</b>							
domestic .....	26.2	25.8	20.4	20.2	20.0	20.9	21.5
public .....	....	3.7	1.4	0.6	1.4	1.7	2.0
private .....	....	22.2	19.1	19.5	18.6	19.2	19.5
<b>Italy:</b>							
domestic .....	28.1	25.9	21.9	21.6	20.9	20.9	20.1
public .....	2.1	-5.1	-6.4	-6.8	-6.2	-6.2	-5.6
private .....	26.0	31.1	28.4	28.4	27.2	27.1	25.7
<b>United Kingdom:</b>							
domestic .....	18.4	17.9	16.6	16.1	15.8	16.1	15.5
public .....	3.6	2.6	0.5	0.0	0.8	2.9	3.2
private .....	14.8	15.3	16.1	16.1	15.0	13.2	12.3
<b>Canada:</b>							
domestic .....	21.9	22.9	20.7	18.7	19.5	20.9	20.6
public .....	3.6	2.7	-1.5	-2.3	-1.3	-0.2	-0.7
private .....	18.3	20.1	22.2	21.0	20.8	21.0	21.3
<b>Total OECD .....</b>	<b>23.2</b>	<b>23.7</b>	<b>20.5</b>	<b>19.7</b>	<b>19.6</b>	<b>20.5</b>	<b>20.8</b>

Source: OECD, *National Accounts* (1991).

Table 2

**Private saving in the leading industrial countries**  
(gross saving as a percentage of GDP/GNP)

	1960-69	1970-79	1980-89
<b>United States:</b>			
Private .....	17.7	19.1	18.3
of which: households ...	9.2	10.7	9.5
enterprises ....	8.5	8.3	8.9
<b>Japan:</b>			
Private .....	28.3	30.5	26.9
of which: households (1) .	13.3	17.9	15.3
enterprises (1) .	14.9	12.3	11.2
<b>Germany:</b>			
Private .....	21.1	20.5	20.3
of which: households (1) .	6.9	8.7	7.9
enterprises (1) .	14.2	11.8	12.8
<b>France:</b>			
Private .....	....	22.2	19.1
of which: households (1) .	....	13.6	10.3
enterprises (1) .	....	8.5	8.5
<b>Italy:</b>			
Private .....	26.0	31.1	28.4
of which: households ...	....	24.5	21.1 (2)
enterprises ....	....	6.6	7.6 (2)
<b>United Kingdom:</b>			
Private .....	14.8	15.3	16.1
of which: households ...	5.4	6.1	6.0
enterprises ....	9.4	9.2	10.1
<b>Canada:</b>			
Private .....	18.3	20.1	22.2
of which: households ...	7.8	10.4	12.3
enterprises ....	10.5	9.7	9.9

Source: OECD, *National Accounts* (1991).

(1) Statistical discrepancies may cause private saving to differ from the sum of its components. - (2) Average 1980-88.

The analysis of the causes underlying these developments is the subject of a vast body of literature, and I am sure they will be addressed thoroughly and competently by speakers during

today's meeting. I nonetheless wish to draw your attention to one specific point, namely the role of the public sector. In nearly every country it has been largely responsible for the fall in the total saving ratio. On the basis of national accounts data, the decline in the average ratio of public saving to GDP between the sixties and the eighties (considering the averages of the two decades) was 8.5 percentage points in Italy, 5.1 points in Canada, around 4 points in Germany and the United States, 3.1 points in the United Kingdom and 1.3 points in Japan (Table 3). Private saving grew in relation to GDP in the seventies, but subsequently declined, roughly equaling the average of the sixties at the end of the decade.

For most of the industrial countries, adjusting the figures for the effects of inflation attenuates, but does not significantly modify, the underlying pattern: the fall in national saving ratios remains primarily attributable to the public sector. The adjustment results in substantial differences in some countries that had especially high rates of inflation and large public debt in the eighties. In Italy, private sector saving increased before adjustment, but declined when account is taken of the fact that a large part of the nominal interest received by households served to make good the inflation-induced erosion of the real value of the financial assets created to finance the growing public sector borrowing requirement.

In nearly all the industrial countries most of the decline in public sector saving occurred in the early years of the last decade, during the recessionary phase that followed the second oil shock. The situation subsequently improved, but not enough for the saving ratio to return to the levels of the sixties and seventies. There are, of course, grounds for arguing that less expansionary fiscal policies would have accentuated the fall in private saving. Factors such as the aging of the population, the increase in unemployment, which was especially pronounced in Europe, and the consequent fall in the labour force participation rate can normally be expected to reduce private saving. The fact that in many countries the state shouldered the burden of meeting the growing needs of old people, first-job seekers and unemployed workers probably helped to avoid a more pronounced decrease in private saving.

Such policies would make a major contribution towards achieving saving rates similar to those that in the sixties permitted the financing of GDP growth in the industrial countries at an average annual rate of more than 4 per cent. They would generate enormous benefits for the developing countries if even a small part of the additional savings were channeled to them in the form of loans or direct investment – after all, the industrial countries account for almost three quarters of world output and trade. Lastly, they would help to bring real interest rates down from their historically high level, which would reduce the interest burden weighing on whole countries, public sectors and some economic activities.

Over the last five years short-term real interest rates have averaged around 4 per cent in the leading industrial countries; in the sixties they were less than 2 per cent on average and in the seventies they were negative (Table 4). Several factors have undoubtedly contributed to this increase, including restrictive monetary policies aimed at countering persistent cost-push inflation, and some of the otherwise beneficial changes in the regulation and structure of financial markets. However, there is no getting away

from the decline in public saving, especially in view of the undue burdens it has placed on monetary policy in connection with cyclical management and the control of inflation.

These arguments carry considerable weight, but in my opinion they fail to explain the scale of the reduction in public saving. The substantial literature on so-called Ricardian equivalence has convincingly demonstrated that the relationship between public and private saving is highly complex and certainly cannot be reduced to one of mere substitution. If the new needs had been met in a way that preserved the financial equilibrium of the public sector, total saving would probably not have decreased to the same extent.

The positive lesson that can be drawn for the nineties is that implementing policies designed to reduce budget deficits on current account would cause the total saving rate to rise. Over and above cyclical considerations, such action would also have beneficial effects on the rate of capital accumulation, economic growth and the developed countries' ability to meet the needs of the other half of the world.

Table 3

**Changes in gross saving and investment between the 1960s and the 1980s**  
(in percentage points)

	Saving			Investment		
	Total	Private	Public	Total	Private	Public
United States .....	-3.4	0.6	-3.9	-1.0	0.1	-1.1
Japan .....	-2.8	-1.4	-1.3	-5.1	-6.0	0.9
Germany .....	-4.9	-0.8	-4.2	-5.9	-4.6	-1.4
France .....	-5.8	n.a.	n.a.	-4.4	n.a.	n.a.
Italy .....	-6.2	2.4	-8.5	-3.6	-4.1	0.5
United Kingdom .....	-1.8	1.3	-3.1	-1.5	0.8	-2.3
Canada .....	-1.2	3.9	-5.1	-2.0	-0.4	-1.6

Source: OECD, *National Accounts* (1991).

Table 4

## Real interest rates

	1960-64	1965-69	1970-74	1975-79	1980-84	1985-90
<i>short-term (1)</i>						
G-7 .....	1.7	1.7	-0.3	-1.3	3.1	3.8
United States .....	1.7	1.6	-0.1	-1.3	3.3	2.9
Japan .....	-	2.3	-2.4	-0.7	3.5	3.6
Germany .....	1.6	2.7	3.1	0.6	3.7	4.1
France .....	0.1	1.9	0.6	-1.5	1.9	5.0
Italy .....	-	-	-1.4	-2.7	1.8	6.1
United Kingdom .....	1.7	2.1	-1.6	-4.6	2.0	5.1
Canada .....	2.1	1.7	-0.5	-0.1	3.9	5.5
<i>long-term (1)</i>						
G-7 .....	2.3	2.4	0.4	0.1	3.9	4.6
United States .....	2.7	1.9	0.7	0.1	4.7	4.7
Japan .....	-	2.1	-2.6	0.4	4.0	3.8
Germany .....	3.6	4.6	3.0	2.9	4.0	5.2
France .....	1.1	2.1	0.7	-0.7	2.7	5.7
Italy .....	1.3	4.4	-0.4	-2.0	1.4	4.4
United Kingdom .....	3.0	3.0	0.7	-1.8	2.8	3.8
Canada .....	3.7	2.5	1.8	0.4	4.3	5.6

Source: IMF, *International Financial Statistics*.

(1) Difference between the nominal interest rate (short-term: on money market instruments; long-term: on public bonds) and the change in consumer prices in the twelve preceding months.

It would be difficult, and probably not very useful, to set quantitative targets for the increase in saving in the industrial countries. It is nonetheless worth noting that relatively modest efforts could produce very substantial results. A reduction in budget deficits on the order of two or three per cent of GDP would not require enormous sacrifices; it is certainly an objective that careful economic management could achieve, as several countries have shown in recent years. Some countries, notably Italy, the United States, Canada and now also Germany, need to make a greater adjustment, and could certainly do so.

The present situation is an obvious instance. The cyclical weakness of the world economy cannot be remedied by fiscal policy, which is almost universally geared towards the reduction of budget deficits. Consequently, monetary policy in the industrial

countries is required to satisfy two equally pressing, and partly conflicting requirements: on the one hand, to create the conditions for a resumption of sustained growth and, on the other, to continue to encourage saving and curb inflation.

### 3. External current account imbalances

The high real interest rates of the eighties had an adverse effect on investment. Despite the long period of expansion from 1983 to 1990, the average investment rate was lower than in the two preceding decades in nearly every country (Table 5). The change was particularly marked in Europe and Japan, while the US rate only fell by about one percentage point compared with the seventies, as against a fall of three points in the saving rate.

These pronounced divergences were reflected in a geographical dissociation between saving and investment and unprecedented current account imbalances. They gave rise to exchange rate fluctuations that were not justified by changes in relative prices and aroused fears for the stability of the financial system comparable to those caused by the outbreak of the debt crisis in the developing countries.

The disequilibria have diminished in recent years (Table 6). The US current account deficit fell from \$160 billion in 1987 to around \$99 billion, or less than 2 per cent of GDP, in 1990. A further reduction is expected this year, but it will be due mainly to temporary factors rather than structural adjustment. At the same time Japan's surplus contracted and Germany's disappeared completely following unification.

Table 5

**Investment in the leading industrial countries**  
(gross investment as a percentage of GDP/GNP)

	1960-69	1970-79	1980-89	1986	1987	1988	1989
<b>United States:</b>							
domestic .....	18.9	19.2	17.9	17.9	17.7	17.2	17.0
public .....	2.7	2.0	1.6	1.5	1.6	1.5	1.6
private .....	16.2	17.2	16.3	16.4	16.1	15.6	15.3
<b>Japan:</b>							
domestic .....	34.7	34.5	29.6	27.7	28.5	30.4	31.5
public .....	4.4	5.4	5.3	4.8	5.0	5.0	5.0
private .....	30.3	29.0	24.3	22.9	23.5	25.4	26.5
<b>Japan:</b>							
domestic .....	26.5	23.4	20.6	19.5	19.6	20.4	21.6
public .....	3.9	3.7	2.5	2.3	2.3	2.2	2.2
private .....	22.6	19.8	18.0	17.2	17.3	18.2	19.3
<b>France:</b>							
domestic .....	25.2	25.4	20.8	19.7	20.1	21.0	21.5
public .....	....	3.4	3.2	3.2	3.0	3.1	3.3
private .....	....	22.0	17.6	16.5	17.1	17.9	18.2
<b>Italy:</b>							
domestic .....	26.4	25.8	22.8	20.9	20.9	21.6	21.8
public .....	3.1	3.1	3.6	3.6	3.5	3.5	3.6
private .....	23.3	22.7	19.2	17.3	17.3	18.1	18.2
<b>United Kingdom:</b>							
domestic .....	18.9	19.8	17.4	17.0	17.9	20.4	20.3
public .....	4.1	4.1	1.8	1.8	1.6	1.2	1.7
private .....	14.8	15.7	15.6	15.2	16.4	19.1	18.5
<b>Canada:</b>							
domestic .....	24.2	24.5	22.2	21.5	22.4	23.1	23.6
public .....	4.2	3.4	2.6	2.6	2.4	2.4	2.4
private .....	20.0	21.0	19.6	18.9	20.0	20.8	21.1
<b>Total OECD</b>	<b>22.8</b>	<b>23.5</b>	<b>21.0</b>	<b>20.4</b>	<b>20.6</b>	<b>21.0</b>	<b>21.4</b>

Source: OECD, *National Accounts* (1991).

Table 6

**External current account balances**  
(in billions of dollars; as a percentage of GDP/GNP in brackets)

	1973-79	1980-89	1987	1988	1989	1990
United States .....	0.1 (0.1)	-80.6 (-2.1)	-162.3 (-3.6)	-128.9 (-2.6)	-110.0 (-2.1)	-99.3 (-1.8)
Japan .....	2.4 (0.3)	41.5 (2.1)	87.0 (3.6)	79.6 (2.7)	57.2 (2.0)	35.8 (1.2)
Germany .....	4.4 (1.1)	21.2 (2.1)	45.9 (4.1)	50.5 (4.2)	57.2 (4.8)	47.9 (3.2)
France .....	1.2 (0.2)	-4.0 (-0.6)	-5.0 (-0.6)	-4.4 (-0.5)	-4.6 (-0.5)	-7.8 (-0.7)
Italy .....	0.1 (-0.4)	-4.4 (-0.8)	-1.1 (-0.1)	-5.8 (-0.7)	-10.6 (-1.2)	-14.4 (-1.3)
United Kingdom .....	2.0 (-1.0)	-2.7 (0.0)	-7.7 (-1.0)	-27.7 (-3.3)	-32.6 (-3.9)	-22.7 (-2.4)
Canada .....	-3.2 (-1.6)	-3.7 (-0.8)	-6.9 (-1.7)	-8.3 (-1.7)	-14.1 (-2.6)	-13.7 (-2.4)
OECD .....	<b>-8.2</b> (-0.2)	<b>-46.4</b> (-0.5)	<b>-56.6</b> (-0.4)	<b>-49.9</b> (-0.4)	<b>-78.3</b> (-0.5)	<b>-93.5</b> (-0.6)

Source: OECD Economic Outlook, July 1991.

There remains cause for concern, however, above all in view of the slowness of adjustment and the persistence in many third world debtor countries of the unstable conditions that resulted in a sharp contraction in the flow of resources they received in the early eighties (Table 7). Here again, there has been a gradual improvement in the last few years. The stabilization and adjustment programmes agreed with the IMF and the World Bank have not only permitted the adoption of debt-reduction schemes but have also achieved encouraging results in several countries. Mexico is the leading example, but Venezuela and Chile also stand out, with all three countries beginning to regain access to external finance.

The black hole in the international statistics undermines the claim sometimes made that the industrial countries are net importers of savings from the rest of the world because their aggregate current account is persistently in deficit. One can reach the opposite conclusion if one considers that the rest of the world has also generally recorded a deficit; this

year it is likely to be larger than that of the industrial countries.

This does not mean that the present situation is a healthy one. Conditions must be created that will enable the industrial countries to generate savings and invest them profitably in the rest of the world.

It is essential that the Uruguay Round be resumed and brought to a successful conclusion. Lowering the trade barriers erected by the industrial countries would make a decisive contribution to improving real and financial conditions in the third world. It would permit debtor countries to increase their exports and enhance their debt-servicing ability. The World Bank has estimated that the removal of tariff and non-tariff barriers would increase the GDP of the developing countries by around 3 per cent. It would also benefit consumers in the industrial countries and in the long run increase the latter's potential output. Conversely, if the negotiations were to fail, the improvement in international relations of the last few years would be jeopardized and conditions in the world economy would probably deteriorate.

Table 7

**Net flows of resources and transfers to LDCs, 1980-90**  
(in billions of dollars)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>Net flows of resources (long-term)</b> .	<b>82.8</b>	<b>99.9</b>	<b>88.4</b>	<b>68.2</b>	<b>61.9</b>	<b>56.6</b>	<b>51.2</b>	<b>46.1</b>	<b>60.9</b>	<b>63.3</b>	<b>71.0</b>
Official development finance . . . . .	32.6	33.7	33.8	31.6	34.0	31.8	33.6	32.2	36.3	36.6	46.9
Grants . . . . .	12.5	11.4	10.4	9.9	11.4	13.2	14.0	14.9	18.0	18.6	19.5
Net loans . . . . .	20.1	22.3	23.4	21.7	22.6	18.6	19.6	17.3	18.3	18.0	27.4
<i>bilateral</i> . . . . .	12.2	12.9	11.9	10.6	10.3	6.4	6.3	4.9	6.8	6.1	10.4
<i>multilateral</i> . . . . .	7.8	9.4	11.5	11.0	12.4	12.2	13.3	12.4	11.5	11.9	16.9
Private loans (net) . . . . .	41.1	53.3	43.6	28.1	19.6	14.3	8.1	0.7	5.5	4.3	2.3
<i>Commercial banks</i> . . . . .	30.8	44.0	30.9	19.8	14.6	4.7	2.4	-1.1	0.7	3.0	....
<i>Bonds</i> . . . . .	1.1	1.3	4.8	1.0	0.3	5.0	1.3	0.2	2.2	0.3	....
<i>Other</i> . . . . .	9.2	8.0	7.8	7.4	4.7	4.5	4.4	1.6	2.6	1.0	....
Foreign direct investment . . . . .	9.1	12.9	11.1	8.5	8.3	10.5	9.5	13.2	19.1	22.4	21.8
<b>Net transfers (long-term) (1)</b> . . . . .	<b>37.0</b>	<b>45.7</b>	<b>27.4</b>	<b>10.5</b>	<b>-0.9</b>	<b>-7.4</b>	<b>-10.0</b>	<b>-16.8</b>	<b>-9.5</b>	<b>-1.0</b>	<b>9.3</b>

Source: World Bank, *World Debt Tables*, 1990-91.

(1) Net flows of resources less interest payments and reinvested and repatriated profits.

#### 4. Central and Eastern Europe

The investment needs of the developing countries are now being compounded by those of the countries in Central and Eastern Europe. Even when the whole of the Soviet Union is included, this area accounts for less than 6 per cent of world output and trade, or little more than a country such as France. In the short run, even radical changes in the Central and Eastern European countries will have relatively little impact on total flows of trade and savings. Nonetheless, they are bound to have some effect, as can already be discerned.

According to IMF statistics, these countries regularly recorded trade surpluses in the eighties, coupled with near balance on invisible items. The situation began to deteriorate in 1988, and in 1990 the area's current account deficit exceeded \$20 billion, nearly all of which was attributable to the Soviet Union. However, the deficit of the other Central and Eastern European countries is growing very rapidly and could exceed \$15 billion this year.

Even apart from their pressing immediate needs, import demand in these countries is likely to exceed

their ability to export. The conclusion appears to be the same, whether based on a favourable scenario or one in which economic and political instability persists. In the latter case the trade deficit would be the result of their inability to increase potential output to match consumer demand. By contrast, the favourable scenario would involve massive imports of capital goods to meet the needs of reconstruction and growth. It is worth recalling that after the Second World War it took Western Europe no less than five years to generate the savings necessary to finance investment itself and bring its external current account into balance.

Under the favourable scenario, the higher returns on the capital invested in Central and Eastern Europe would lead to greater economic welfare generally, trade and financial intermediation would expand, and the conditions would be created for comprehensive external adjustment. In the opposite case, the consequences of the failure of these countries' reform programmes would spill over onto the West as a result of large-scale migration and the need for massive emergency aid; inflows of private capital would dry up and debt problems would have repercussions on the international banking system.

## 5. Financial markets

The uncertainty surrounding the scenarios for the main macroeconomic aggregates will influence the development of the financial markets and the tasks they will be required to perform. Only if political conditions are relatively stable and financial disequilibria are not too pronounced is it possible to foresee private operators playing a major role.

The experience of the seventies and eighties shows that the financial markets are able to adapt very rapidly in response to changes in economic conditions. This is demonstrated by the increase in financial flows, which has far outstripped that in world output and trade (Table 8), and by the almost exclusive role the markets play in financing the current account imbalances of the leading countries. The very concept of the sustainability of a financial imbalance has changed radically since official intervention gave way to market financing.

The integration of domestic and international markets has also increased as a result of the liberalization policies pursued by all the leading countries and the rapid pace of financial innovation.

These developments can be expected to continue in the coming years, partly because policies aimed at

liberalizing commercial and financial exchanges will be extended to developing countries. Financial markets are likely to become deeper and more internationally integrated in the nineties. These changes are to be encouraged, even though they give rise to serious problems in the management of risk and the regulation of financial activities. They increase competition and make it possible, or in any case more efficient, to channel savings towards productive purposes outside the traditional areas for foreign investment.

If the countries of Central and Eastern Europe are to share in the benefits, suitable conditions will have to be created not only at macroeconomic level but also in their domestic financial systems. In centrally-planned economies, the only function money performs for enterprises is that of a means of payment. Bank loans are not granted on the basis of creditworthiness but merely reflect the dictates of the plan. Imbuing the financial system with an independent ability to select and monitor worthwhile projects without the constraints of economic planning is thus an essential part of the transformation of these economies.

The development of the financial system is also a prerequisite for mobilizing local savings and

**Bank lending and international bond issues**  
(in billions of dollars)

**Table 8**

	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>International lending</b>												
Stocks (1) .....	265	810	945	1,020	1,085	1,285	1,485	1,805	2,270	2,450	2,825	3,350
Growth rate (in %) .....	15	22	17	8	6	18	16	21.5	25.8	7.9	15.3	18.6
Flows (2) .....	50	160	165	95	85	90	105	200	300	225	410	380
Gross flows .....	88	241	265	181	106	124	234	512	598	425	410	....
<b>International bond issues</b>												
Stocks .....	....	....	....	259	....	....	557	773	991	1,098	1,252	1,473
Net flows (2) .....	....	....	....	58	59	90	132	163	105	144	166	118

Sources: BIS and OECD.  
(1) Net of redepositing. – (2) Issues less redemptions.



preventing them from boosting the demand for consumer products, hedge goods and foreign currency. The industrial countries and the international organizations are working with the authorities of the Central and Eastern European countries and the Soviet Union to draw up coordinated programmes of technical assistance aimed at fostering the reform of their monetary and financial systems. Increasing demands are also likely to be placed on the Bank of Italy in this regard.

Development can be financed either by credit intermediaries or directly in the markets. Until the outbreak of the debt crisis, banks played a dominant role in financing developing countries; between 1976 and 1982 their lending amounted to \$225 billion, while the financial markets provided only \$27 billion. An important innovation in the recent resumption of private finance to these countries has been the growth of bond and share issues to complement traditional syndicated bank loans. In the last two years Mexico and Venezuela have issued bonds worth \$4.5 billion and firms in Mexico and Chile have successfully made large share issues.

This trend is to be encouraged, especially when it creates a closer link between financing and individual investment projects than is the case with traditional medium-term general-purpose syndicated loans. There is a greater incentive to assess firms' creditworthiness and the resulting financial burden is likely to be spread over a period of time more consistent with the life of the project; maturity transformation is on a smaller scale than with bank credit and risks are probably more widely distributed, instead of being concentrated in the banking systems of just a few major countries. Equity finance, moreover, would reduce debtor countries' vulnerability to exogenous shocks, since dividends would depend on the economic cycle and would therefore be more closely related to the country's earning capacity.

## 6. Italy

Following the liberalization of capital movements, which was completed in May 1990, the Italian financial system has begun to take on a more

international appearance. This is confirmed by the increase in gross capital inflows and outflows; as in the other leading countries, they are now much larger than those associated with current transactions (Table 9). A monetary policy geared towards price and exchange rate stability has made this possible, while simultaneously narrowing interest rate differentials vis-à-vis the more stable EMS currencies. Despite recent exchange rate tensions, the short-term differential vis-à-vis the Deutschmark has remained below three percentage points; this compares with more than five points just two years ago.

**Table 9**

**Italy's external financial and current transactions**  
(in billions of lire)

	Financial transactions	Current transactions
1980 .....	92,658	197,752
1981 .....	134,252	251,753
1982 .....	122,258	287,925
1983 .....	158,233	308,524
1984 .....	191,088	373,488
1985 .....	218,454	419,352
1986 .....	247,092	398,265
1987 .....	261,544	427,556
1988 .....	343,698	475,142
1989 .....	535,690	560,598
1990 .....	815,503	634,173

Source: Banca d'Italia, *Relazione annuale*, 1991.

However, a country's role in the international financial system depends less on these gross flows than on the size of its net financial flows.

Italy recorded a deficit on its current account in each of the last ten years except 1983 and 1986. Net of official reserves and gold, the country's foreign debt accordingly rose from 1.8 per cent of GDP in 1985 to 8 per cent in 1990. Interest payments have increased to more than 1 per cent of GDP and are fueling both the deficit on current account and the growth in the debt.

In order to stabilize its foreign debt and comply with its international commitments, Italy must

achieve a substantial current account surplus net of interest payments. This will require a radical change of course on two crucial fronts: fiscal policy and domestic costs.

As in other countries, the reduction in public sector saving has been the principal cause of the fall in the total saving rate in Italy. Households' propensity to save is still relatively high, but the saving ratio is now closer to the OECD average than to the Japanese level. By contrast, Italy has a higher rate of investment, especially as regards the public sector. During the eighties the ratio of public capital expenditure to GDP averaged 3.6 per cent, compared with 1.6 per cent in the United States, 1.8 per cent in the United Kingdom, 2.5 per cent in Germany and 3.2 per cent in France (Table 5). If investment is to be maintained at this level, additional savings will have to be generated, in the first place by reducing the current budget deficit.

This is one of the main planks of the multi-year convergence programme that the Italian Government submitted to the European Community last October under the multilateral surveillance procedure. Measures are envisaged that should reduce the state sector borrowing requirement to 97 trillion lire in 1994. The Government has undertaken to keep the annual objectives unchanged in nominal terms even if macroeconomic conditions are less favourable than expected, if necessary by introducing additional corrective measures. The ECOFIN Council, which examined the programme in mid-November, found the objectives to be adequate, but noted that they are the absolute minimum required if Italy is to continue to participate in the economic and monetary unification of Europe. The Council also drew attention to the risks to which the implementation of the programme is subject; these stem primarily from uncertainty as to the revenue that some of the measures will produce and the failure to specify the action that will be necessary if the objectives are to be achieved, especially after 1992, in key areas such as production subsidies, staff costs, privatization, pensions, taxes and budget procedures.

The decline in Italy's competitiveness must be halted by curbing the rate of increase in domestic costs. The inflation differential compared with our

main trading partners is close to three percentage points when measured on the basis of the cost-of-living index. Unit labour costs in manufacturing industry are rising at an annual rate of 7 per cent, almost twice the OECD average. Italy's share of world trade at constant prices is contracting, import penetration is increasing.

In order to restore Italy's competitiveness, it will be necessary to adopt a rigorous incomes policy, spearheaded by the Government in its role as employer. The cornerstone of this policy in 1992 is to be the capping of the rise in per capita earnings in the public sector at the 4.5 per cent target rate of inflation.

The state of the real economy makes it all the more urgent to curb the rise in domestic costs. Industrial production continues to stagnate at a very low level, and the signs of a revival of domestic demand are weak. The timing and strength of the recovery in world demand are both highly uncertain: the countries most affected by recession – the United States, the United Kingdom and Canada – are showing some signs of improvement, but there is concern at the slowdown in economic activity in Japan and Germany. In these situations competition intensifies in international markets, so that checking the rise in production costs becomes an essential condition for an upturn in economic activity and for safeguarding employment.

Setting on one side these cyclical questions, pressing though they be, I should like to conclude by recalling the central theme of today's meeting. As I have tried to show, the changes that have occurred on the international scene have major implications for financial systems. Markets and intermediaries will be required to perform more complex tasks than in the past; the transfer of resources from the centres of savings formation to the new centres of investment will assume vital importance. It is obvious that there will be significant changes in the structure of markets, in the size of financial flows, and in their direction of movement between countries and sectors.

Success in the management of the economy, banks and firms will depend on anticipating these changes and formulating strategies for coping with them. I am sure that the papers to be submitted and discussed today will help to promote these ends.

## Policies for the development of the Mezzogiorno

*Address by the Deputy Director General, Antonio Fazio, to the Conference  
"What Mezzogiorno for a changing Europe?" sponsored by the Region of Apulia,  
the National Research Council and the University of Bari*

*Bari, 13 December 1991*

The problem of economic underdevelopment in the South of Italy is captured whole in the unemployment statistics. Istat's labour force survey in July this year found an unemployment rate of 19.3 per cent in Southern Italy as against 6.2 per cent in the regions of the Centre and North (Table 1). The official jobless totals are 1.6 million in the South and 1 million in the rest of the country; using a more restrictive definition of unemployment than Italy's lowers the numbers, but they remain alarmingly high in the South, and the disparity with respect to the rest of Italy remains large.

**Table 1**

**Labour force in the South and the Centre-North**  
(in thousands, July 1991)

	South	Centre-North
<b>Total employment</b> .....	<b>6,551</b>	<b>15,267</b>
Agriculture .....	996	894
Industry excluding construction .	768	4,181
Construction .....	770	1,232
Services .....	4,013	8,961
<b>Unemployment rate</b> .....	<b>19.3</b>	<b>6.2</b>
<b>Participation rate</b> .....	<b>38.8</b>	<b>45.0</b>

Source: Istat.

Labour force participation rates are 38.8 per cent in the South and 45 per cent in the rest of Italy.

The number of persons employed continued to grow in the South in 1991, while employment in the Centre-North stagnated, owing among other things to

the difficulties of the industrial sector. The present economic recession is to a significant extent international in origin, and the export-oriented Northern manufacturers inevitably feel the impact.

The comparatively better cyclical performance of the Southern economy is due in part to public sector spending. We cannot rule out the possibility that structural improvements capable of affecting the long-term growth trend are under way. In any event, unless recovery is prompt the recession will eventually spread to the Southern economy as well.

The 1.6 million job seekers in the South include 1,150,000 young people between the ages of 14 and 29, making up 20 per cent of their age group and 41 per cent of the youthful labour force in the region. Turnover within this unoccupied labour force is very slow.

Young Southerners accordingly run a serious risk of getting well into adulthood without ever having worked, or having at best held a series of odd jobs or some precarious employment. The civic and moral consequences are grave. No solution to the problems of the South of Italy is conceivable that does not include a drastic reduction of today's intolerably high unemployment rate.

### The South and the public finances

Some 36.7 per cent of the Italian population resides in the South. According to the Institute for Economic Planning, in 1988 public expenditure amounted to 9.2 million lire per capita in the South and 10.4 million in the Centre-North. The difference

between the two regions was due to the payment of interest on the public debt. Capital expenditure, at about 1 million lire per resident, was slightly higher in the South than in the rest of the country. The difference was not due to public investment, which was equal in the two regions, but to subsidies for private investment, which were greater – on a per capita basis – in the South than in Central and Northern Italy (Table 2).

Table 2

**Public expenditure by region, 1988**  
(trillions of lire)

	South	Centre-North
<b>Current expenditure</b> .....	<b>173.0</b>	<b>344.5</b>
Wages and salaries .....	66.8	84.7
Intermediate consumption .....	22.2	39.8
Social security and welfare .....	63.9	122.4
Grants to enterprises .....	6.7	10.1
Interest .....	9.9	80.9
<b>Capital expenditure</b> .....	<b>21.1</b>	<b>33.7</b>
Gross investment .....	15.7	28.8
Capital grants .....	5.2	4.5
<b>Total expenditure</b> ..	<b>194.1</b>	<b>378.2</b>
<b>Total revenue</b> .....	<b>101.0</b>	<b>352.4</b>
Direct taxation .....	29.5	117.2
Indirect taxation .....	31.2	78.0
Social contributions .....	23.8	126.1
<b>Primary budget balance</b> .....	<b>-83.1</b>	<b>55.1</b>
<b>Current budget balance</b> .....	<b>-72.5</b>	<b>6.6</b>
<b>Net borrowing</b> .....	<b>-93.1</b>	<b>-25.8</b>
<i>Memorandum items:</i>		
GDP at market prices .....	268.6	823.2
Population (millions) .....	21.0	36.5

Source: ISPE, "I trasferimenti pubblici e la loro distribuzione sul territorio in Italia", Rome, 1991.

Overall, 35 per cent of public expenditure is effected in the South and 65 per cent in the Centre-North.

Where the gap between the two regions occurs is on the revenue side. Overall government receipts, per capita, have been about half as much in the South as in the rest of the country. The disparity concerns

revenues from direct and indirect taxation and above all social contributions.

Taxes are related to income, and the difference is accordingly striking with respect to direct taxes, as income tax is progressive. The gap is wider still in the sphere of social security and health contributions, owing to relief from these payroll taxes as an employment incentive for the South and to the region's lower registered employment.

Table 3

**Regional accounts, 1980 and 1990**  
(trillions of lire, at current prices)

	1980		1990	
	South	Centre-North	South	Centre-North
Agriculture (1) .....	10	14	18	28
Manufacturing (1) .....	16	99	48	266
Construction (1) .....	9	19	24	52
Services (1) .....	56	158	218	603
<b>GDP (2) .....</b>	<b>94</b>	<b>294</b>	<b>322</b>	<b>985</b>
Household consumption (2) .....	67	174	233	579
Public consumption (2) ...	20	38	83	147
Gross fixed capital formation (2) .....	26	68	71	193
<i>of which:</i>				
<i>machinery, equipment, transport equipment (2)</i>	10	35	28	102
Net exports (3) .....	-21	5	-65	59

Source: Svimez, *Rapporto 1991 sull'economia del Mezzogiorno*.  
(1) At factor cost. – (2) At market prices. – (3) Exports net of imports of goods and services, excluding spending on tourism.

In strictly accounting terms, four fifths of the public sector deficit can be attributed to the South. Net of interest expenditure, the public finances show a surplus in the Centre-North.

General government expenditure is reflected in aggregate demand in the South, and first and foremost in consumption. The stimulus is now directed to a larger extent than in the past to local economic activity. However, a macroeconomically important share of the stimulus continues to be transmitted, via Southern imports of industrial products, to manufacturing in the Centre and North. Shipments to the South of Italy from these regions amount to 6 per cent of their gross product, and the equivalent of 20 per cent of the South's (Table 3).

Over the past decade spending by the Southern Italy Development Fund has averaged just over 0.5 per cent of Italy's GDP. Including the assistance consisting in tax exemptions and social security contribution relief, the figure rises to 1.2 per cent. This assistance, which is concentrated on industry, is decisive for the vitality of the productive fabric in the South.

Special development spending was appreciably greater in the early seventies, which were also the years during which the gap between Southern and Northern output narrowed (Table 4).

Table 4

**Southern development expenditure, 1951-90**  
(percentage of Italian GDP)

	Special development spending (1)	Tax and social contribution relief	Total
1951-60 . . . . .	0.73	—	0.73
1961-70 . . . . .	0.70	—	0.70
1971-80 . . . . .	0.91	0.41	1.32
1981-90 . . . . .	0.58	0.57	1.15
1987 . . . . .	0.43	0.53	0.96
1988 . . . . .	0.44	0.56	1.00
1989 . . . . .	0.50	0.55	1.05
1990 (2) . . . . .	0.50	0.56	1.06

Sources: Based on INPS, EC Commission, and SVIMEZ data.  
(1) Mainly infrastructural projects, grants to firms, subsidized credit, administrative costs of development agencies. — (2) Estimated.

### Capital endowment and productivity

According to the Company Accounts Data Service, the value of capital per employee is between 20 and 30 per cent greater in the South than in the rest of Italy. This figure must be treated with caution, however, as it is the result of estimates based on accounting data for a miscellany of goods and referring to different dates. Nevertheless, it is clear that the Mezzogiorno suffers no shortage of physical capital for direct productive use in relation to

manpower employed. Development legislation offering capital grants and interest subsidies has encouraged the location of capital-intensive plants in the region. Despite this, surveys by the Association for Industrial Development in Southern Italy have consistently found that labour productivity in Southern manufacturing lags considerably behind the Centre and North (in 1988, value added of 44 million as against 54 million lire per worker).

The explanation for the productivity gap is to be found in "external diseconomies", i.e. causes external to the production unit and inherent in the environment in which enterprises operate. Among the factors cited in this regard is the lower level of skill and training of the work force. The technological spin-offs generated by a more diversified economy may also be lacking. Nor should one neglect the shortcomings of the administrative apparatus and of public services. A grave disincentive is the entrenched power of organized crime.

All these factors unquestionably impede the production of goods and services that have long been produced in other geographical areas.

Specific statistical indicators allow very accurate assessment of the infrastructure at the service of the productive economy. They reveal that in recent years the South's endowment with transportation infrastructure has been about 80 per cent of the Centre-North's. The gap is substantial, given the geographical position of the region, and would probably prove to be even greater if account were taken of the secondary road network in this mountainous region.

The gap is wider still in communications infrastructure and energy, and dramatic in regard to water supply, for which the index drops to 40 per cent.

Private and public productive capital must complement one another. Similarly, public infrastructure systems must also be complementary.

The shortage of public productive capital is an important factor in the differential in labour productivity. The lack of complementarity between public capital structures explains their under-utilization and the waste deplored by international observers.

Table 5

## Banks and bank branches by region

	South		Centre-North		Italy	
	1985	1990	1985	1990	1985	1990
Banks .....	326	337	764	734	1,090	1,071
Bank branches .....	3,437	4,183	11,275	13,538	14,712	17,721
	<i>percentage composition</i>					
Banks .....	29.9	31.5	70.1	68.5	100.0	100.0
Bank branches .....	23.4	23.6	76.6	76.4	100.0	100.0

The closing of the infrastructure gap, beginning with the sectors where the inadequacy is most pronounced, is a necessary step to spurring labour productivity and increasing employment and output in the South.

### The credit system

The size, composition and quality of the South's financial system are affected by the general state of its economy.

Given the South's level of economic development, the extent to which the financial system meets the needs of the economy must be judged first and foremost by the state of banking activity, embracing both banks proper and the special credit institutions engaging in medium and long-term credit.

The structure of the banking system is generally correlated with the level of output, not with the size of the population or its geographical distribution. In 1990 the Mezzogiorno, which accounted for about 25 per cent of Italian GDP, had some 31.5 per cent of the country's banks and 23.6 per cent of the nationwide total of 17,700 bank branches (Table 5).

Deposits amounted to 20.1 per cent of the national total and lending to 16.8 per cent. The financial needs of the South are partly met by large-scale public and private transfers (Table 6).

According to figures that do not yet reflect the recent liberalization of branching rules in more than minimal fashion, the percentage of municipalities with no banking facility was 45.1 in the South as against 32.6 in the Centre-North (Table 7).

Financial activity, which is essential to the productive economy and to the expansion of output, cannot alone be the engine of growth.

The smaller average size of Southern banks, the greater lending risk, and certain vulnerable aspects of the financial system are primarily a reflection of general economic weaknesses.

However, financial deficiencies and inadequacies must be overcome so that they do not impede development.

The Southern credit system can and must improve its efficiency, grow to dimensions more consonant with heightened competition and strengthen its capital base.

In recent years, stimulus for greater efficiency has come from the growing competition in financial intermediation encouraged by supervisory guidelines. The use of the standard operating techniques and management principles prevalent in the rest of the country is bound to become more widespread in the South, owing in part to the increasing presence in the region of large, nationwide banking enterprises.

Table 6

**Banking intermediation by region**  
(billions of lire)

	South		Centre-North		Italy	
	1985	1990	1985	1990	1985	1990
Deposits .....	99,711	143,660	390,188	572,715	489,899	716,375
Lending .....	47,330	92,498	234,392	458,576	281,722	551,074
	<i>percentage composition</i>					
Deposits .....	20.4	20.1	79.6	79.9	100.0	100.0
Lending .....	16.8	16.8	83.2	83.2	100.0	100.0

Law 218/1990 presents new opportunities for banking, and in particular for the publicly controlled banks, which are present in the South on a large scale. So far six restructuring plans submitted by credit institutions located in the South have been approved by the Minister of the Treasury or are at an advanced stage in the application process. Other intermediaries have begun work on such projects and have made preliminary contact with the supervisory authorities.

activity, should be designed to remove impediments to the growth and strengthening of the Southern credit system. Mergers and agreements to exploit strategic and operating synergies should form part of this approach.

In truth, however, one cannot help noting the lack of plans by Southern credit institutions any broader in scope than the simple transformation of their corporate form.

Greater concentration would be helpful, especially for the smallest banks, whose technical position can be anomalous or at any rate potentially weak. In general, larger size can bring greater efficiency through economies of scale.

This kind of rationalization does not imply neglect of the typical values of community service and local roots. On the contrary, the achievement of more appropriate dimensions can use the local banks' historical heritage of knowledge and service to the best advantage.

Table 7

**Municipalities with and without banks, by region**

	South	Centre-North	Italy
<b>1990</b>			
Without banks (a) ....	1,151	1,808	2,959
With banks (b) .....	1,399	3,739	5,138
Total (c) .....	2,550	5,547	8,097
(a/c)x100 .....	45.1	32.6	36.5
(b/c)x100 .....	54.9	67.4	63.5
<b>1978</b>			
Without banks (a) ....	1,334	2,098	3,432
With banks (b) .....	1,196	3,447	4,643
Total (c) .....	2,530	5,545	8,075
(a/c)x100 .....	52.73	37.84	42.50
(b/c)x100 .....	47.27	62.16	57.50

Such restructuring plans, in addition to adopting the corporate form of the limited company, which is undoubtedly more consonant with entrepreneurial

Table 8

**Lending of special credit institutions by region**  
(percentages)

	South		Centre-North	
	1985	1990	1985	1990
Institutions with head office in:				
– South .....	63.6	62.1	36.4	37.9
– Centre-North ...	12.7	13.2	87.3	86.8

The need for adjustment also applies to the special credit institutions, some of which are adversely affected by the narrow geographical confines within which they are now obliged to operate, as well as by the limitations stemming from the not uncommon lack of significant shareholders capable of orienting the institutions' activities towards well defined corporate aims (Table 8).

### **The cost of labour and Southern competitiveness**

To date, what has restored the competitiveness of the Southern economy vis-à-vis the more advanced regions of the Centre and North has been the reduction of regional labour costs through relief from social security contributions.

This form of subsidy is only a small part of the state's overall income redistribution in favour of the South. It amounted to 7.2 trillion lire in 1990, or 0.55 per cent of national income. But it was the equivalent of 20 per cent of the labour costs of the firms benefiting from the programme and 10 per cent of total value added by Southern industrial enterprises.

Nonetheless, this realignment of the cost of labour cannot completely overcome the difficulties besetting the Southern economy. Social and environmental factors continue to hamper the expansion of economic activity and to impede new initiatives.

The elimination or at least the attenuation of the region's external diseconomies must be achieved first of all by improving the performance of local governmental authorities. Another contribution could be provided by concentrating public investment in the sectors where infrastructure is most sorely deficient, namely water resources, energy and some transportation and communications sectors.

During the first stage in the Southern industrial development programme, in the fifties, projects consisted largely in public works, which successfully overcame the worst infrastructure deficiencies.

Subsequently, greater reliance was placed on subsidies to directly productive enterprise, including

large-scale investment in such highly capital-intensive sectors as steel and chemicals. In the mid-seventies these industries suffered the repercussions of worldwide slumps, diminishing the ultimate development impact of the projects; but as we have seen, profitability in other areas of the Southern economy is not high either.

Investment designed to overcome external diseconomies must form part of a broad strategic design. Fragmentation may prove counterproductive. Obviously, planning of the entire economy is out of the question; nonetheless, publicly financed projects still need to be linked by an overall conception to ensure that they are complementary and mutually reinforcing.

The financial burden of such projects need not necessarily fall entirely on government. Given their size and nature, they cannot be entrusted to market forces alone, but the participation of private capital is both feasible and desirable in cases where the services will be subject to a charge.

International rules to ensure competition will increasingly preclude aid to specific industries and individual firms, but these restrictions will not affect clearly identified regional development spending.

Social security relief for employers, even apart from its impact on the finances of the pension system, is bound to decrease in the years to come. This tax expenditure needs to be redirected to removing the causes of the disparity rather than compensating for its effects.

What is required, ultimately, is the restoration of wage flexibility, through collective bargaining, so as to align labour costs more closely with productivity. In fact, the cost of living is lower in the less affluent regions, as many necessities, notably housing, are less expensive. Flexibility in labour utilization and wages could lead to an expansion of employment, which would improve social welfare and would be a vastly preferable alternative to the resumption of large-scale internal migration. Progress in reducing unemployment, more than merely raising living standards and increasing disposable income, is thus the true gauge of the success of Southern development policy.



## Risk in large-value payment systems

*Speech by the Deputy Director General,  
Tommaso Padoa-Schioppa, at the National Westminster Bank*

*London, 13 February 1992*

### 1. Introduction

In recent years, technological and financial innovation and the development of financial markets have spurred an exponential growth in large payment operations, to the point that the stability of the financial system has come to depend more and more on the proper functioning of interbank clearing and settlement arrangements.

Raised initially at the national level, the issue of risk in large-value payments is increasingly being debated in the international arena. With the integration of financial markets, national interbank payment systems have become more interdependent. Accordingly, the concept of a global payment system, consisting of a network of payment relations spanning many countries, has come to the fore. Banks are acquiring direct or indirect access to the principal foreign payment systems through a growing network of branches and subsidiaries abroad and through ample use of reciprocal and correspondent accounts.

Central banks have followed these developments with great attention and some concern, becoming involved in both their regulatory and their operational capacity. The liquidity and credit risks inherent in large-value payment systems could adversely affect public confidence; this is the reason why risk considerations are a main concern, and I would say “the” main concern, of central banks. This is why, as the only central banker on the programme, I shall focus my remarks on large-value payment systems. The disruption of large-value payments, by its nature, would potentially have far-reaching repercussions on the monetary system and the economy as a whole.

In what follows, I shall first deal with the *settlement of large-value transactions*, focusing on the differences between “inside” and “outside” money, netting (or clearing) and gross settlement systems; in this context, “netting” and “clearing” will be used synonymously. I shall then move on to the emergence of a “new” *mode* of settlement, which I call continuous gross settlement in central bank money. Next I shall broadly review *actions taken by central banks* to reduce risk in both clearing and gross settlement systems at the national level. Finally, I shall deal briefly with the specific problems raised by *cross-border payments*.

### 2. Risks in traditional systems

The configuration of payment systems we have known for many years was the outcome of a secular evolutionary process directed towards reducing transaction costs and smoothing trading. A watershed in this process was the transition from commodity money to fiat money, i.e. a medium of exchange that has no intrinsic value and is merely a liability issued by a particular type of intermediary.

The functioning of a system based on fiat money requires, first and foremost, full confidence in the power of this liability to discharge obligations. The history of systems based on fiat money, from John Law on, has shown that this confidence is susceptible to sudden collapses that have an enormous capacity to disrupt investment and economic activity. As a result of negative experiences, a complex system took shape, centred on the role of an “outside” institution legally empowered to issue “universally” valid

liabilities, i.e. *legal tender* that any debtor could use to discharge obligations definitively. This institution is the central bank.

From the outset the central bank was actively engaged in supplying “final money” and services for the settlement of payments. Only later, and as a consequence of its primary function of creating final money, did the central bank begin to supervise credit intermediaries and the payment system as a whole. Even monetary policy itself, which is now rightly regarded as the fundamental task of the central bank, can be seen as a “by-product” (although a special one indeed) of the central bank’s unique function in the payment system.

Thus a first important distinction, to which I shall refer throughout, is between “inside” or commercial bank money, and “outside” or central bank money.

Another distinction is between settlement of individual payment operations (so called gross settlement) and netting. In the interbank network, the first option is generally implemented by debiting or crediting a settlement account. With the second option economic agents can handle a stream of payments during the operating period and settle only the final (bilateral or multilateral) balances at the end, using either commercial or central bank money.

The organization of payment systems is thus confronted with a double option: firstly, between commercial and central bank money as a means of settlement; secondly, between gross settlement and netting. In practice, the choices made depend on a number of parameters, such as the type of transaction (large-value vs. retail), the operators involved (final users vs. banks) and so on. In a modern market economy “final” or central bank money is used for small payments in the form of notes and coins, and for large payments in the form of deposits. But a large, indeed by far the largest, share of total payments is made in commercial bank, or “inside”, money. Habits, prudential rules for banks and the efficiency of the payment services provided by banks make payments in “inside” money quite acceptable. This is so because in practice the payee is confident that, if he so requests, the payor could settle in central, rather than commercial, bank money.

It should never be forgotten, however, that the two types of money are not as perfectly substitutable as they are perceived to be. History shows that the distinction between inside and outside money is more than academic: bank runs were caused by sudden collapses of confidence in the definitive power of commercial bank money to discharge obligations.

The risks in large-value payment systems – leaving aside those arising from the operational vulnerability of the technical infrastructure – are all related to the problems and implications of the double option I mentioned above. And in essence they reflect a choice between deferred and immediate finality of payment. Indeed, of the four possible “modes” of executing payments (obtained by combining the two pairs involved in the double option) settlement in commercial bank money (with or without netting) and netting with settlement in central bank money all imply deferred finality. Only gross settlement in central bank money (to which I shall henceforth refer as gross settlement systems) achieves immediate finality, hence minimum risk.

Clearly, the systems entailing deferred finality (clearing systems and gross settlement in commercial bank money) have both advantages and disadvantages compared with gross settlement in central bank money. Cost considerations have led to clearing systems playing a predominant role. The reduction of liquidity-related costs that they make possible is enormous, and directly proportional to the amounts “netted”, that is, to the number of participants and the volume of transactions. On the other hand, the very fact that central bank money is dramatically economized through the netting procedure may produce situations in which very large debtor positions accumulate during the daily operating period, far exceeding the amount of final, “outside” money in the central bank accounts. This generates *settlement risk*, the risk of a participant being unable to meet his obligations at the time the final balance is to be settled. It is also at the origin of “unwinding clauses”, i.e. the provision that payments to and from a defaulter be cancelled and net balances be calculated anew. But this amplifies *systemic risk*, i.e. the danger of a “chain reaction” transmitting the difficulties of one institution to other institutions within the system, from one system to another, and

from one market to another. Thus netting, while permitting liquidity savings, has inevitably spawned risks.

In traditional large-value payment systems gross settlement in central bank money was prohibitively expensive, because participants needed to hold very high levels of non-interest-bearing reserves, to settle all their gross obligations in central bank money and in the course of the business day. Today these costs are much lower, though still large. It is no accident that even today gross settlement systems are found chiefly in countries where the central bank supplies cost-free daylight overdrafts, whereas elsewhere central bank money is mainly used to settle clearing balances. On the other hand, by triggering movements of reserves on the settlement accounts at the central bank, gross settlement systems ensure the immediate finality of payments. Thus, compared with “unprotected” clearing systems, the overall risk is reduced. In short, one could say that operators making payments in central bank money on a gross basis “buy” lower risk levels at the (opportunity) “cost” of holding reserves on centralized accounts. This is sometimes referred to as the trade-off between efficiency and risk in payment systems.

### 3. The effects of telematics

To sum up: in the traditional, pre-telematic world I have briefly described, large-value interbank payment systems operated mainly (I use the past tense but this reality is still largely with us) in two modes: *gross settlement with commercial bank money* on correspondent accounts; *netting with settlement in central bank money*. The former is still the main method for cross-border transactions, but it was also used at the domestic level, where there are circuits restricting access to specific categories of banks and tiering arrangements. The latter was predominant in domestic systems. The use of central bank money for gross settlement of large-value interbank transactions was virtually nil. For large-value payment systems the advent of telematics, i.e. the combination of data processing and telecommunications, has been a watershed comparable to the replacement of commodity money by paper currency. The impact of

the new information technology has made available a third “mode” at reasonable cost: *continuous gross settlement with central bank money*. The key term here is the modifier “continuous”, for it implies that technology has given central bank deposits the same virtually unbounded velocity of circulation that had always been the feature of banknotes. Indeed, “electronic banknote” would be the right term for a central bank deposit that can be transferred at will by the holder. An indication of the potential increase in velocity is given by the Swiss SIC system, where the average daily turnover of reserves was about 10 at the end of 1987 but rose to over 50 by the middle of 1989, with peak values of 90 during heavy traffic days.

The other mode, the clearing system, has also been affected by financial and technological innovation. As the latter has contributed to the unprecedented growth in financial markets in the last 15 years, the volume of transactions channelled into clearing systems has expanded explosively. The speed of data processing has virtually freed clearing system handling capacity from all technological constraint. By making it easier to offset payments during the business day through clearing systems, the new information technology has also allowed operators to reduce the reserves they need for settlement. The other side of the coin, of course, has been a corresponding increase in risk, both settlement and systemic. Indeed the very speed of execution can augment the instability of clearing systems, owing to the uncertainty of final settlement and the rapidity with which crisis situations may spread from one system to another.

All these developments necessitate the introduction or reinforcement of risk control mechanisms in payment systems. At the same time, they have set in motion a new search for the institutional arrangement that can achieve the “optimal” trade-off between efficiency and risk.

This search requires careful analysis and involves hard choices. Whatever the outcome, better risk management requires that payment system operators and market participants become increasingly aware that it is they, not the central bank, who must assume the risks, and hence the primary responsibility for the efficient and safe functioning of the system.

#### 4. Domestic risk management

In their role as ultimate overseers of the soundness and integrity of financial systems, central banks have acted more and more vigorously in their national interbank payment systems. They have focused their action on both clearing and gross settlement systems.

In clearing systems, which have been in existence in all G-10 and EC countries for decades, recent risk reduction measures have mainly concentrated on large-value systems, through a variety of provisions concerning access, caps, loss sharing schemes, collateralization of exposures and novation.

In virtually all countries direct *access*, i.e. access to the netting system and to settlement at the central bank, is reserved to credit institutions alone. In the United Kingdom, controls on access appear to be the main safeguard of the system, admission to settlement at the central bank being reserved to thirteen clearing banks. In some countries that allow only banks in the clearing system, such as Italy, the UK and France, banks are subject to specific capital and technical requirements. In no EC country are non-financial institutions, even those directly involved in the payment industry such as credit card companies and retailers, admitted to clearing and settlement systems.

*Limits on exposures* or caps are a second common risk management measure. They are already operative in the clearing systems of the US, Japan, Canada, Sweden, Germany and the UK, and are currently under study in France, Denmark and Italy. In most countries, limits are set voluntarily by participants on a bilateral basis. In the US multilateral limits are imposed by the central bank.

*Loss sharing schemes* have also been introduced in various countries. They have been associated with limits on exposures in the US, Japanese and Canadian clearing systems.

Fourth, the *provision of collateral* has been adopted by the US and Japan, and France is planning to introduce it. Although collateral is mainly used to cope with credit risk, it can also be adopted to manage liquidity risks (e.g. CHIPS).

Finally, *legal agreements* to impart finality to clearing balances have been introduced recently in Italy, in the form of *novation* on final bilateral balances in two sub-systems of its clearing network.

Let me now turn to risk reduction policies for continuous settlement in central bank money. Here, the most important thing is that the very existence of a continuous settlement system and its widespread use for large-value payments are an important, perhaps *the* main factor of risk reduction. Telematic gross settlement systems were introduced in the US in 1982, in Switzerland in 1987, in Italy and Japan in 1988 and in Sweden in 1990. At present, four of the twelve EC countries (Denmark, Germany, Italy and the Netherlands) operate systems of this type; the French system is scheduled to become operational at the start of 1993 and one is under study in the United Kingdom. The other G-10 countries all have gross settlement systems, except for Canada, where its introduction is imminent.

More widespread use of gross settlement systems in all the EC countries is highly desirable. This does not mean that all large-value payments should be channeled into these systems. I am convinced that in the optimal configuration of a modern system total payments would tend to be distributed among the three modes, each mode being the efficient solution for a certain class of payments.

In gross settlement systems risk control measures take three main forms: control on access, exposure limits, and pricing of daylight exposures. Control on *access* is generally less restrictive than in clearing systems. In Japan non-bank institutions have access to settlement accounts at the central bank, provided that they accept central bank supervision. In Denmark and the Netherlands, access is open to financial institutions and brokers as well as the post office; in Germany, to all Bundesbank account-holders.

*Limits on exposures* are now set by only a few systems, most notably Fedwire in the US and SIC in Switzerland. Until recently, banks participating in Fedwire had unlimited, uncollateralized daylight overdraft facilities and therefore needed forms of risk control. Limits to net exposures were introduced in the early eighties. In the Swiss system daylight overdrafts are not permitted, but a queuing facility

defers the execution of payments when no funds are available in the settlement accounts. This mechanism can be seen as the equivalent of a zero limit on exposure.

Finally, there is the possibility of *pricing* daylight overdrafts. This possibility is currently under study at the Fed. The demand for intraday payments is fostered by the gains to be reaped from referring the traditional optimum cash management model to time fractions shorter than the day as well as by the need for immediate finality in certain types of operation, such as those in the securities and cross-border markets. The demand for intraday payment means that 10 million pounds of cross-border money is worth more at 10 a.m. than at 2 p.m., which implies the need to establish a price for intraday funds. For the moment, only Japan has such an intraday interbank market, but I would venture to predict that in a few years it will be part of all well developed systems.

We should not be surprised that in some countries commercial banks still seem to be reluctant to settle transactions on a continuous basis and may even oppose the creation of a gross settlement system. This is understandable. But in no case can central banks ignore their responsibility to minimize systemic risk. This is not the special interest of central banks, but a vital public interest entrusted to them.

Commercial banks may regard the development of gross settlement systems as entailing additional costs for them. To assess the validity of this argument, however, we should bear two points in mind.

First, a distinction should be made between an extra cost and a loss of revenue. Clearly if a substantial number of payments previously channeled through a clearing system operated by just a few banks are shifted into the gross settlement mode, clearing banks will suffer a loss of revenue. To them it is a "cost", but for the economy as a whole this might be a gain, in terms of both risk and efficiency.

Second, the cost of clearing systems is perceived as lower partly because externalities are not being properly priced. Several systems are currently in the process of adopting risk reduction policies aiming at internalizing externalities. In fact, the soundness of clearing systems is being improved by provisions

making clearing balances legally binding, by limits to daylight exposures and by the prior posting of collateral to cover debtor positions against default at the end of the day. Unavoidably, these measures also make clearing systems more expensive. At the other end, risk-reduction devices are being introduced in continuous settlement systems, such as pricing of overdrafts, which induce a more parsimonious use by participants. In practice, the development of gross settlement systems depends largely on the central banks' willingness to take on a share of the costs associated with continuous settlement, by supplying some form of cheap intraday credit. The availability of intraday central bank credit would effectively establish a period of time during which settlement participants run no risk of credit loss, as they do when they operate in clearing systems.

Arguments can be made for and against central bank daylight overdrafts. On the one hand, settlement with central bank credit can lower the social cost of the system by eliminating systemic risk, while its informational advantages put the central bank in a better position than the individual participants to assess risks. On the other hand, by supplying daylight credit to participants the central bank itself takes on credit risk, thereby creating moral hazard. On this issue, consideration of the pricing of the service comes to the fore.

## 5. Cross-border payment systems

As I have mentioned, the remarkable increase in the degree of integration of the world economy and the swift pace of technological change have brought exponential growth in the volume of international payments, which often involve foreign exchange contracts. These developments have put increasing pressure on the providers of cross-border payment services.

When considering cross-border payment systems, it has to be borne in mind that they lack the unitary character of national systems. Five basic features are relevant in this respect. First of all, with different sets of national laws and regulations operating at the same time, there is no single *legal system*. Secondly, there is no single *currency*, since

prices, invoices and hence payments carry a variety of denominations. Thirdly, there is no uniform *technology*, because standards and software are not necessarily unified. Fourthly, in the international payment system the *time* dimension is not uniform because of different time zones. Last, and most important, there is no single *central bank*.

These differences bear directly on the risk features of cross-border as compared with national payment systems.

In response to the development of international large-value payments, central banks have acted at both the G-10 and the EC level.

At the G-10 level the Committee on Interbank Netting Schemes chaired by Mr. Lamfalussy has extended central banks' analysis of the implications of private cross-border netting schemes and defined *minimum standards* that such systems should satisfy as well as *principles for cooperative central bank oversight* of cross-border netting schemes.

Following this work, G-10 central banks have undertaken a series of initiatives on international netting schemes. An important part of the current activity in this field aims at verifying conformity with the minimum standards. Meanwhile, a working group has been set up within the Committee on Payment and Settlement Services of the G-10 central banks to deal with issues concerning the possible role of central banks in strengthening the soundness of such systems.

Initiatives are also under way at the EC level. In September 1990 the EC Commission published a discussion paper called "Making Payments in the Internal Market", concerning cross-border payment systems in Europe. Following that paper, two working groups were set up in March 1991 to study possible improvements in retail payment systems. Moreover, the Bank of Italy has recently published the proceedings of a workshop on payment system issues raised by the process of European monetary union. Finally, within the Committee of Central Bank Governors an Ad Hoc Working Group on EC Payment Systems has been formed with the mandate of analyzing present and future issues of common concern.

The Ad Hoc Working Group is now assessing the ecu clearing system in the light of the minimum standards set forth in the Lamfalussy Report. A set of measures to improve compliance with the standards and more generally to enhance the integrity of the system are being outlined in cooperation with the BIS and the Ecu Banking Association. Some central banks have also planned the provision of collateralized liquidity facilities, in order to ensure the timely circulation of ecu balances in view of an orderly completion of settlement. The facility provided by the Banque de France has already come into operation, and that of the Bank of England will soon follow.

The Ad Hoc Working Group is also preparing a report on national payment systems of EC countries (Blue Book), and is currently focusing on problems raised by the implementation of the Single Market. Under the Second Banking Directive banks will be free to open branches or establish subsidiaries anywhere within the Community as well as to provide services, such as "money transmission services", anywhere in Europe without having to establish local branches or subsidiaries. In the coming months the Ad Hoc Working Group will report to the Governors on the problems these developments pose for central banks.

## 6. Conclusions

The need to reduce risks in large-value payment systems and the internationalization of transactions are the two major forces that are shaping payment systems today. The interaction between them requires that the international implications of any domestic arrangement to cope with risk be taken into account. At the same time the issue of risk is coming to the forefront in international fora. It is for these reasons that the central banks of the Group of 10 countries have concluded a landmark agreement on the oversight of the system, providing a framework for the allocation of central banks' responsibilities in this field. This is certainly a milestone on the road towards greater international cooperation.

However, risk also raises a host of new problems for central banks in their role as operators in the

system. Thanks to new technology central bank money can play a greater role as a payment medium in interbank transactions. Its availability at any time of the day in continuous gross settlement systems can lower risks and improve efficiency. The terms upon which central bank money should be provided (price, the amount of overdrafts, collateral) will need to be extensively discussed. Care must be taken to prevent the risk reduction and efficiency improvements generated by greater central bank participation in wholesale payment systems being offset by a weakening of market self-discipline. But I am firmly convinced that the difficulty of the task should not discourage central banks from concretely exploring

the possibility of supplying services that would allow extended use of central bank money in interbank transactions.

The need for central bank cooperation in tackling these issues will be more stringent in the European context. The creation of the European payment system will require the cooperation of all the operators involved, but the role to be played by the banking system and the central banks is essential. The experience acquired at the national level will be invaluable in tackling the problems that are bound to arise, as will be the studies being undertaken by the EC central banks.

# Appendix

## Statistical tables

### The world economy

Table	a1	—	Gross product, implicit price deflator and current account balance
"	a2	—	Industrial production
"	a3	—	Consumer prices
"	a4	—	Wholesale prices
"	a5	—	Short-term interest rates
"	a6	—	Long-term interest rates and share price indices
"	a7	—	Interest rates on international markets and US dollar premium/discount
"	a8	—	Lira exchange rates and the price of gold
"	a9	—	Nominal effective exchange rates
"	a10	—	Real effective exchange rates
"	a11	—	Real effective intra-EC exchange rates
"	a12	—	External position of the Italian credit system

### The Italian economy

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In the following tables the figures for “Germany” refer to the western regions of the country unless otherwise specified. See the Notes to the Tables.

Unless indicated otherwise, the figures in the tables have been computed by the Bank of Italy.

Symbols and conventions:

- the phenomenon in question does not occur.
- .... the phenomenon occurs but its value is not known.
- .. the value is known but is less than the minimum figure considered significant.
- ( ) provisional.
- ( ) estimated.

Table a1

## Gross product, implicit price deflator and current account balance

	US	Japan	Germany	France	UK	Italy	Canada
<b>Real GNP</b>							
<i>(% changes on previous period; seasonally adjusted data)</i>							
1986 .....	2.9	2.7	2.2	2.5	4.0	2.9	3.3
1987 .....	3.1	4.3	1.4	2.2	4.6	3.1	4.2
1988 .....	3.9	6.3	3.5	4.2	4.2	4.1	4.7
1989 .....	2.5	4.8	3.8	3.9	2.3	3.0	2.5
1990 .....	1.0	5.3	4.7	2.9	1.1	2.0	0.5
1991 .....	-0.7	....	....	....	....	....	....
1990 - 3rd qtr. ....	0.1	0.7	1.8	0.7	-1.3	0.4	-0.3
4th " .....	-1.0	1.0	0.6	-0.2	-1.0	-0.1	-1.2
1991 - 1st qtr. ....	-0.6	2.0	2.4	0.2	-0.7	0.6	-1.2
2nd " .....	0.3	0.7	-0.6	0.7	-0.5	0.4	1.4
3rd " .....	0.5	0.4	-0.5	0.8	0.1	0.1	0.2
4th " .....	0.1	....	....	....	....	....	....
<b>GNP deflator</b>							
<i>(% changes on previous period; seasonally adjusted data)</i>							
1986 .....	2.7	1.8	3.3	5.2	3.5	7.9	2.4
1987 .....	3.2	..	2.0	2.9	4.9	6.0	4.7
1988 .....	3.8	0.3	1.5	3.0	6.6	6.6	4.8
1989 .....	4.4	1.9	2.6	3.1	6.8	6.0	4.7
1990 .....	4.1	1.9	3.4	2.8	6.7	7.5	3.0
1991 .....	....	....	....	....	....	....	....
1990 - 3rd qtr. ....	1.2	-0.1	1.1	0.3	2.4	....	0.7
4th " .....	0.7	1.1	0.3	0.6	1.4	....	0.8
1991 - 1st qtr. ....	1.2	0.5	1.0	0.9	0.9	....	1.1
2nd " .....	0.7	0.3	2.2	0.6	3.4	....	0.6
3rd " .....	0.6	-0.1	1.2	0.4	1.0	....	0.2
4th " .....	....	....	....	....	....	....	....
<b>Current account balance</b>							
<i>(billions of dollars; seasonally adjusted data)</i>							
1986 .....	-145.4	85.5	40.3	1.8	0.3	2.5	-8.2
1987 .....	-162.3	86.9	45.8	-5.1	-7.1	-1.1	-8.8
1988 .....	-127.4	78.8	50.5	-4.7	-27.7	-5.7	-11.3
1989 .....	-106.3	57.7	57.4	-4.6	-33.4	-10.6	-17.5
1990 .....	-92.1	35.8	47.1	-9.5	-26.4	-14.4	-18.9
1991 .....	....	78.6	....	(-6.2)	....	....	....
1990 - 3rd qtr. ....	-23.9	7.0	12.6	-3.5	-4.8	-2.9	-4.3
4th " .....	-23.4	6.4	5.5	-2.0	-4.3	-3.8	-4.6
1991 - 1st qtr. ....	10.5	17.8	-6.9	-4.0	-5.1	-1.7	-4.8
2nd " .....	3.0	18.7	-5.6	-1.6	-0.2	-5.3	-4.8
3rd " .....	-10.5	19.6	-3.6	-0.2	-2.2	-7.2	-6.3
4th " .....	....	22.6	....	(-0.3)	....	....	....

Table a2

## Industrial production

*(% changes on previous period; seasonally adjusted data)*

	US	Japan	Germany	France	UK	Italy	Canada
1986 .....	1.0	-0.2	1.9	1.1	2.3	3.6	-0.8
1987 .....	4.9	3.4	0.4	1.9	3.3	3.9	4.9
1988 .....	5.4	9.3	3.6	4.1	3.7	6.0	5.5
1989 .....	2.6	6.0	4.8	3.7	0.2	3.1	-0.1
1990 .....	1.0	4.7	5.2	1.3	-0.5	0.1	-4.3
1991 .....	(-2.0)	(2.4)	3.1	....	....	....	....
1989 - 4th qtr. ....	0.1	0.7	0.7	-0.2	-0.1	1.4	-0.3
1990 - 1st qtr. ....	0.2	0.8	1.5	-0.2	-0.5	-1.4	-1.9
2nd " .....	1.0	2.2	0.1	1.4	1.9	-0.1	-0.4
3rd " .....	1.0	2.2	3.2	1.3	-2.8	0.4	-0.9
4th " .....	-1.9	1.4	0.3	-2.5	-1.7	-2.6	-3.3
1991 - 1st qtr. ....	-2.5	0.2	1.7	0.5	-0.3	0.6	-2.1
2nd " .....	0.6	-0.6	0.2	0.8	-1.1	-0.5	1.4
3rd " .....	1.6	0.3	-0.5	0.3	0.9	-1.1	0.9
4th " .....	(-0.2)	(-0.8)	-1.2	....	....	....	....
1990 - Dec. ....	-1.0	-0.4	-0.3	-2.1	-0.6	0.7	-1.1
1991 - Jan. ....	-0.6	1.6	2.5	3.9	-0.6	1.3	-0.1
Feb. ....	-0.8	-0.1	-0.7	-0.9	1.6	-0.8	-0.9
Mar. ....	-0.7	-2.1	..	-2.3	0.2	0.4	-0.2
Apr. ....	0.5	0.2	-0.4	2.7	-2.6	-2.7	1.1
May ....	0.8	2.2	-0.7	..	-0.3	2.3	0.8
June ....	0.9	-2.5	4.0	-0.1	3.2	2.3	0.5
July ....	0.7	3.1	-1.7	0.8	..	-3.3	0.4
Aug. ....	-0.1	-3.0	-1.9	..	-1.8	-0.9	-0.5
Sept. ....	0.2	0.7	0.2	-1.2	0.3	1.6	0.7
Oct. ....	..	0.2	..	1.3	0.9	-0.4	-0.7
Nov. ....	-0.3	-0.1	0.4	-0.6	-0.7	3.5	..
Dec. ....	(-0.2)	(-1.0)	-2.8	....	....	....	....

Table a3

**Consumer prices**  
(% changes on corresponding period)

	US	Japan	Germany	France	UK	Italy	Canada
1986 .....	1.9	0.4	-0.1	2.6	3.4	5.9	4.2
1987 .....	3.7	-0.2	0.2	3.3	4.1	4.7	4.4
1988 .....	4.1	0.5	1.3	2.7	4.9	5.0	4.0
1989 .....	4.8	2.2	2.8	3.5	7.8	6.3	5.0
1990 .....	5.4	3.1	2.7	3.4	9.5	6.5	4.8
1991 .....	4.2	3.3	3.5	3.1	5.8	6.4	5.6
1989 - 4th qtr. ....	4.6	2.6	3.0	3.6	7.6	6.3	5.2
1990 - 1st qtr. ....	5.2	3.7	2.7	3.4	7.8	6.5	5.4
2nd " .....	4.6	2.6	2.3	3.1	9.7	6.1	4.6
3rd " .....	5.6	2.6	2.7	3.4	10.4	6.5	4.2
4th " .....	6.2	3.7	3.0	3.6	10.0	6.7	4.9
1991 - 1st qtr. ....	5.3	3.8	2.7	3.4	8.7	6.4	6.5
2nd " .....	4.9	3.4	3.1	3.2	6.0	6.6	6.3
3rd " .....	3.9	3.2	4.1	3.0	4.8	6.4	5.7
4th " .....	3.0	2.8	4.0	2.8	4.1	6.0	4.1
1991 - Jan. ....	5.7	4.1	2.8	3.5	8.9	6.3	6.9
Feb. ....	5.3	3.5	2.7	3.5	8.9	6.4	6.2
Mar. ....	4.9	3.6	2.5	3.2	8.2	6.6	6.3
Apr. ....	4.9	3.4	2.8	3.2	6.3	6.6	6.3
May ....	5.0	3.4	3.0	3.2	5.8	6.7	6.2
June ....	4.6	3.5	3.5	3.3	5.8	6.6	6.3
July ....	4.5	3.6	4.4	3.4	5.5	6.7	5.9
Aug. ....	3.8	3.3	4.1	3.0	4.7	6.3	5.8
Sept. ....	3.3	2.7	3.9	2.6	4.1	6.3	5.4
Oct. ....	2.9	2.6	3.5	2.5	3.6	6.0	4.4
Nov. ....	3.0	3.1	4.2	3.0	4.3	6.0	4.2
Dec. ....	3.1	2.7	4.2	3.1	4.5	6.1	3.8
1992 - Jan. ....	2.6	....	4.0	....	....	....	....

Table a4

**Wholesale prices**  
(% changes on corresponding period)

	US	Japan	Germany	France	UK	Italy	Canada
1986 .....	-2.9	-9.1	-7.4	-2.8	4.3	0.2	0.9
1987 .....	2.6	-3.8	-3.8	0.6	3.9	3.0	2.8
1988 .....	4.0	-1.0	1.1	5.2	4.5	3.6	4.3
1989 .....	5.0	2.6	5.1	5.4	5.1	5.9	2.0
1990 .....	3.6	2.1	0.6	-1.2	5.9	4.1	0.3
1991 .....	(0.2)	0.2	(1.6)	-0.8	5.8	....	(-1.0)
1989-4th qtr. ....	4.0	3.7	4.0	0.9	5.2	5.8	0.2
1990-1st qtr. ....	3.2	3.7	0.8	-1.7	5.4	4.9	-0.4
2nd " .....	1.3	1.8	-0.2	-2.3	6.3	3.7	-0.4
3rd " .....	3.6	0.9	0.8	-1.4	6.0	4.0	0.1
4th " .....	6.2	1.9	0.8	0.7	5.9	4.0	1.9
1991-1st qtr. ....	2.6	1.6	1.7	0.7	6.3	4.2	1.2
2nd " .....	1.7	0.4	1.4	-0.7	6.0	3.9	-0.6
3rd " .....	-0.3	..	1.8	-1.6	5.7	3.1	-1.5
4th " .....	(-3.0)	-1.3	(1.6)	....	5.1	....	(-3.0)
1991-Jan. ....	3.6	2.1	1.6	....	6.3	4.2	2.3
Feb. ....	2.4	1.6	2.6	....	6.3	4.2	1.0
Mar. ....	1.8	1.0	1.1	....	6.3	4.2	0.5
Apr. ....	1.7	0.1	0.9	....	6.2	4.0	..
May ....	1.6	0.6	1.3	....	6.0	3.8	-0.8
June ....	1.8	0.6	1.9	....	5.8	3.8	-1.0
July ....	1.4	0.4	3.1	....	5.9	3.9	-0.8
Aug. ....	-0.2	0.1	1.3	....	5.7	2.8	-1.4
Sept. ....	-2.0	-0.4	1.0	....	5.6	2.7	-2.3
Oct. ....	-3.7	-0.9	0.7	....	5.2	2.1	-2.7
Nov. ....	-3.1	-1.3	2.2	....	5.1	2.3	-3.1
Dec. ....	(-2.1)	-1.6	(1.8)	....	4.9	....	(-3.1)
1992-Jan. ....	(-2.5)	(-2.2)	....	....	(4.5)	....	....

Table a5

## Short-term interest rates

	US	Japan	Germany	France	UK	Italy	Canada
<b>Official reference rates</b> <i>(end-of-period data)</i>							
1987 .....	6.00	2.50	2.50	7.75	8.50	12.00	8.66
1988 .....	6.50	2.50	3.50	7.75	13.00	12.50	11.17
1989 .....	7.00	4.25	6.00	10.00	15.00	13.50	12.47
1990 .....	6.50	6.00	6.00	9.25	14.00	12.50	11.78
1991 – Jan. ....	6.50	6.00	6.00	9.25	14.00	12.50	10.88
Feb. ....	6.00	6.00	6.50	9.25	13.00	12.50	10.02
Mar. ....	6.00	6.00	6.50	9.00	12.50	12.50	9.92
Apr. ....	5.50	6.00	6.50	9.00	12.00	12.50	9.66
May ....	5.50	6.00	6.50	9.00	11.50	11.50	9.07
June ....	5.50	6.00	6.50	9.00	11.00	11.50	8.91
July ....	5.50	5.50	6.50	9.00	11.00	11.50	8.94
Aug. ....	5.50	5.50	7.50	9.00	11.00	11.50	8.80
Sept. ....	5.00	5.50	7.50	9.00	10.50	11.50	8.68
Oct. ....	5.00	5.50	7.50	8.75	10.50	11.50	8.17
Nov. ....	4.50	5.00	7.50	9.25	10.50	11.50	7.69
Dec. ....	3.50	4.50	8.00	9.60	10.50	12.00	7.67
1992 – Jan. ....	3.50	4.50	8.00	9.60	10.50	12.00	7.08
<b>Money market rates</b> <i>(period averages)</i>							
1988 .....	6.67	4.05	4.28	7.94	10.34	9.58	10.94
1989 .....	8.11	5.33	7.07	9.40	13.89	10.85	12.22
1990 .....	7.49	7.59	8.43	10.32	14.77	10.67	11.47
1991 .....	5.37	7.33	9.18	9.62	11.53	10.84	7.42
1991 – Jan. ....	6.22	8.04	9.27	10.28	13.97	11.38	10.48
Feb. ....	5.94	7.99	9.01	9.79	13.26	11.43	9.72
Mar. ....	5.90	8.08	9.02	9.43	12.40	10.96	9.67
Apr. ....	5.65	7.95	9.12	9.35	11.95	10.67	9.24
May ....	5.46	7.79	9.00	9.23	11.53	10.23	8.81
June ....	5.57	7.76	8.99	9.71	11.24	10.19	8.65
July ....	5.57	7.40	9.10	9.59	11.10	10.68	8.66
Aug. ....	5.33	7.34	9.25	9.60	10.90	11.16	8.53
Sept. ....	5.22	6.83	9.22	9.43	10.29	10.77	8.34
Oct. ....	4.99	6.44	9.33	9.33	10.40	10.44	7.79
Nov. ....	4.56	6.24	9.37	9.54	10.48	10.65	7.41
Dec. ....	4.07	6.11	9.51	10.11	10.78	11.47	7.42
1992 – Jan. ....	3.80	5.26	9.47	9.98	10.65	10.57	7.04

Table a6

**Long-term interest rates and share price indices**  
(period averages)

	US	Japan	Germany	France	UK	Italy	Canada
<b>Bond rates</b>							
1988 .....	8.84	4.68	6.11	9.06	9.36	10.54	10.36
1989 .....	8.50	5.25	7.03	8.79	9.58	11.61	9.69
1990 .....	8.55	7.38	8.85	9.96	11.08	11.87	10.51
1991 .....	7.86	6.40	8.64	(9.05)	(9.92)	11.37	8.97
1991 – Jan. ....	8.09	6.85	9.10	9.79	10.22	12.04	10.22
Feb. ....	7.85	6.44	8.60	9.18	9.89	12.00	9.89
Mar. ....	8.11	6.61	8.50	9.06	10.06	11.69	9.88
Apr. ....	8.04	6.69	8.50	8.92	9.99	11.34	9.91
May ....	8.07	6.64	8.50	8.88	10.15	10.99	9.91
June ....	8.28	6.80	8.50	9.15	10.34	11.06	10.36
July ....	8.27	6.72	8.80	9.19	10.10	11.33	10.17
Aug. ....	7.90	6.48	8.80	9.10	9.89	11.41	9.97
Sept. ....	7.65	6.14	8.70	8.89	9.54	11.24	9.59
Oct. ....	7.53	5.89	8.60	8.80	9.62	11.02	9.12
Nov. ....	7.42	5.89	8.60	(8.85)	(9.67)	11.06	9.18
Dec. ....	7.09	5.62	8.50	(8.79)	(9.52)	11.25	8.97
1992 – Jan. ....	7.03	5.29	8.14	(8.44)	(9.35)	10.98	8.92
<b>Share price indices (1975=100)</b>							
1988 .....	311.92	683.75	220.77	461.42	699.55	810.37	330.28
1989 .....	379.06	824.26	283.80	668.05	834.11	1,001.84	380.15
1990 .....	392.88	699.73	337.38	675.47	820.88	1,008.71	342.11
1991 .....	441.68	591.13	305.86	643.91	892.06	854.50	346.95
1991 – Jan. ....	382.16	546.51	273.45	559.58	759.36	779.84	327.29
Feb. ....	425.33	601.26	297.04	601.67	822.86	845.83	346.24
Mar. ....	437.10	632.39	304.76	650.94	894.67	901.90	349.57
Apr. ....	445.80	638.90	312.40	663.20	914.50	919.49	346.88
May ....	443.90	629.40	319.10	662.80	904.30	905.42	354.61
June ....	444.16	606.72	328.12	662.38	900.58	937.11	346.58
July ....	446.40	580.90	314.10	636.00	907.90	882.90	353.96
Aug. ....	457.20	564.50	311.30	644.30	935.60	865.20	351.79
Sept. ....	454.60	571.30	311.90	672.80	951.20	846.30	338.79
Oct. ....	454.20	600.00	301.30	671.80	935.50	813.10	351.58
Nov. ....	453.10	578.00	303.50	667.70	909.20	789.90	344.85
Dec. ....	456.20	543.70	293.30	633.70	869.10	767.00	351.24
1992 – Jan. ....	488.52	522.52	302.96	676.62	903.81	826.12	....

Table a7

## Interest rates on international markets and US dollar premium/discount

*(period averages)*

	US dollar	Japanese yen	Deutsche-mark	Pound sterling	Lira	US dollar	Japanese yen	Deutsche-mark	Pound sterling	Lira
<b>Rates on 3-month Eurodeposits</b>					<b>Rates on 12-month Eurodeposits</b>					
1988 .....	7.85	4.40	4.18	10.25	10.80	8.28	4.49	4.48	10.55	11.18
1989 .....	9.15	5.33	6.97	13.83	12.01	9.17	5.41	7.16	13.54	12.22
1990 .....	8.16	7.63	8.39	14.70	11.63	8.32	7.77	8.88	14.40	12.07
1991 .....	5.86	7.22	9.14	11.45	11.52	6.23	6.77	9.26	11.01	11.69
1991 - Jan. ....	7.23	8.04	9.23	13.88	12.13	7.30	7.52	9.46	12.89	12.21
Feb. ....	6.59	7.89	8.92	13.19	12.17	6.79	7.32	9.03	12.14	12.03
Mar. ....	6.46	8.02	8.98	12.34	11.86	6.94	7.35	9.03	11.55	11.82
Apr. ....	6.10	7.81	9.05	11.88	11.39	6.69	7.41	9.25	11.31	11.49
May ....	5.92	7.69	8.95	11.45	11.06	6.49	7.34	9.11	11.04	11.39
June ...	6.07	7.67	8.93	11.17	11.06	6.78	7.41	9.08	10.79	11.46
July ....	6.02	7.42	9.07	11.00	11.18	6.70	7.15	9.31	10.70	11.73
Aug. ....	5.63	7.20	9.20	10.82	11.41	6.03	6.76	9.42	10.59	11.88
Sept. ...	5.49	6.61	9.13	10.23	11.25	5.81	6.19	9.31	10.08	11.66
Oct. ....	5.34	6.32	9.30	10.34	11.08	5.48	5.77	9.33	10.14	11.35
Nov. ....	4.96	6.11	9.35	10.42	11.34	5.10	5.62	9.36	10.29	11.32
Dec. ....	4.50	5.90	9.53	10.72	12.28	4.60	5.44	9.46	10.60	11.99
1992 - Jan. ....	4.10	5.11	9.41	10.57	11.71	4.37	4.77	9.24	10.38	11.74
<b>3-month US dollar premium (-)/discount (+)</b>					<b>12-month US dollar premium (-)/discount (+)</b>					
1988 .....		3.46	3.67	-2.39	-2.94		3.78	3.79	-2.27	-2.91
1989 .....		3.83	2.18	-4.68	-2.86		3.76	2.02	-4.37	-3.05
1990 .....		0.53	-0.23	-6.54	-3.47		0.55	-0.56	-6.08	-3.75
1991 .....		-1.36	-3.28	-5.59	-5.66		-0.55	-3.04	-4.78	-5.47
1991 - Jan. ....		-0.81	-2.00	-6.65	-4.90		-0.22	-2.16	-5.59	-4.91
Feb. ....		-1.30	-2.33	-6.60	-5.58		-0.53	-2.24	-5.35	-5.24
Mar. ....		-1.56	-2.52	-5.88	-5.40		-0.41	-2.09	-4.61	-4.88
Apr. ....		-1.71	-2.95	-5.78	-5.29		-0.72	-2.56	-4.62	-4.80
May ....		-1.77	-3.03	-5.53	-5.14		-0.85	-2.62	-4.55	-4.90
June ...		-1.60	-2.86	-5.10	-4.99		-0.63	-2.30	-4.01	-4.68
July ....		-1.40	-3.05	-4.98	-5.16		-0.45	-2.61	-4.00	-5.03
Aug. ....		-1.57	-3.57	-5.19	-5.78		-0.73	-3.39	-4.56	-5.85
Sept. ...		-1.12	-3.64	-4.74	-5.76		-0.38	-3.50	-4.27	-5.85
Oct. ....		-0.98	-3.96	-5.00	-5.74		-0.29	-3.85	-4.66	-5.87
Nov. ....		-1.15	-4.39	-5.46	-6.38		-0.52	-4.26	-5.19	-6.22
Dec. ....		-1.40	-5.03	-6.22	-7.78		-0.84	-4.86	-6.00	-7.39
1992 - Jan. ....		-1.01	-5.31	-6.47	-7.61		-0.40	-4.87	-6.01	-7.37



Table a8

## Lira exchange rates and the price of gold

	Lire per unit of currency								Gold (dollars per ounce)
	US dollar	Japanese yen	Deutsche- mark	French franc	Pound sterling	Swiss franc	SDR	Ecu	
1986 .....	1,489.6	8.8749	686.98	215.07	2,185.5	830.61	1,747.5	1,461.9	390.90
1987 .....	1,296.8	8.9828	721.65	215.74	2,123.7	870.44	1,676.9	1,495.0	484.10
1988 .....	1,302.9	10.1594	741.17	218.51	2,315.4	889.68	1,751.0	1,537.3	410.25
1989 .....	1,373.6	9.9659	729.71	215.07	2,248.6	838.96	1,760.6	1,509.6	401.00
1990 .....	1,198.4	8.2983	741.60	220.09	2,133.2	864.13	1,626.0	1,524.8	385.00
1991 .....	1,241.4	9.2251	747.67	219.87	2,187.3	865.25	1,749.5	1,534.4	353.60
1989 - 4th qtr. ....	1,338.1	9.3487	736.72	216.49	2,120.0	831.73	1,717.7	1,505.2	401.00
1990 - 1st qtr. ....	1,254.9	8.4842	741.80	218.72	2,077.6	833.07	1,650.9	1,511.7	368.25
2nd " ....	1,232.3	7.9465	734.49	218.36	2,065.9	854.80	1,616.0	1,507.8	352.40
3rd " ....	1,177.4	8.1138	738.52	220.24	2,191.1	880.78	1,613.6	1,530.1	406.75
4th " ....	1,129.0	8.6432	751.52	223.04	2,197.3	887.95	1,618.1	1,549.3	385.00
1991 - 1st qtr. ....	1,149.0	8.5824	749.45	220.35	2,188.4	877.97	1,625.3	1,542.4	355.65
2nd " ....	1,287.4	9.3042	742.34	219.12	2,198.1	873.01	1,722.5	1,527.6	368.35
3rd " ....	1,303.1	9.5473	746.55	219.68	2,192.5	857.45	1,742.1	1,532.3	354.50
4th " ....	1,225.7	9.4589	752.21	220.32	2,170.4	853.07	1,697.3	1,535.3	353.60
1991 - Jan. ....	1,135.4	8.4911	751.83	221.32	2,194.5	892.34	1,615.5	1,550.1	366.00
Feb. ....	1,111.0	8.5221	750.64	220.53	2,183.3	877.02	1,600.5	1,543.7	362.70
Mar. ....	1,199.5	8.7356	745.81	219.16	2,186.8	863.81	1,656.2	1,532.9	355.65
Apr. ....	1,261.0	9.2044	741.26	219.30	2,208.9	876.35	1,703.9	1,528.5	357.75
May ....	1,274.3	9.2265	742.34	218.94	2,199.8	875.97	1,712.0	1,526.3	360.40
June ....	1,327.6	9.4855	743.43	219.13	2,185.5	866.55	1,751.5	1,528.0	368.35
July ....	1,332.4	9.6611	744.66	219.41	2,194.5	859.30	1,760.8	1,530.3	362.85
Aug. ....	1,304.3	9.5347	747.54	219.99	2,195.0	857.88	1,742.1	1,534.4	347.40
Sept. ....	1,269.9	9.4354	747.63	219.67	2,188.0	854.99	1,718.9	1,532.6	354.50
Oct. ....	1,263.8	9.6714	747.70	219.32	2,176.6	854.56	1,721.3	1,531.3	357.50
Nov. ....	1,221.8	9.4253	753.32	220.47	2,173.1	851.02	1,692.0	1,537.5	366.25
Dec. ....	1,185.6	9.2481	756.30	221.33	2,160.5	853.42	1,669.4	1,537.7	353.60
1992 - Jan. ....	1,190.8	9.5039	753.71	220.99	2,152.8	848.21	1,629.8	1,536.4	354.10

Table a9

**Nominal effective exchange rates**  
(period averages; indices, 1980=100)

	US	Canada	Japan	Germany	France	UK	Italy	Switzerland
1986 .....	109.3	86.7	155.6	111.5	79.9	78.8	74.5	121.0
1987 .....	96.9	87.8	170.1	117.8	79.6	77.5	74.0	126.6
1988 .....	90.0	93.2	188.5	117.1	78.1	82.0	71.7	125.4
1989 .....	93.5	98.4	179.3	116.1	77.3	79.5	72.3	118.8
1990 .....	90.0	98.4	162.5	121.5	80.7	78.3	73.4	125.5
1991 .....	88.2	99.9	175.5	120.0	79.3	78.6	72.3	123.4
1989 – 4th qtr. ....	93.6	99.8	171.2	118.6	78.5	75.6	72.8	118.8
1990 – 1st qtr. ....	92.8	98.0	162.0	121.3	80.1	75.7	73.3	120.6
2nd " .....	93.5	99.2	153.3	121.1	80.6	76.0	73.9	124.9
3rd " .....	89.0	99.2	160.1	121.0	80.9	80.9	73.4	128.3
4th " .....	84.6	96.9	174.5	122.4	81.3	80.7	72.8	128.1
1991 – 1st qtr. ....	85.7	97.8	171.7	122.3	80.3	80.4	72.9	126.9
2nd " .....	90.3	100.4	173.4	118.6	78.7	78.4	72.1	124.2
3rd " .....	90.3	101.0	175.4	118.8	78.7	77.7	71.8	121.3
4th " .....	86.4	100.4	181.4	120.5	79.4	77.7	72.2	121.3
1991 – Jan. ....	85.3	97.7	170.7	122.6	80.6	80.7	72.9	129.0
Feb. ....	84.0	97.3	174.0	123.0	80.6	80.8	73.2	127.3
Mar. ....	87.9	98.6	170.2	121.2	79.6	79.8	72.6	124.4
Apr. ....	89.5	99.7	173.6	118.8	79.0	79.2	72.4	125.0
May ....	89.9	100.2	173.0	118.7	78.8	78.6	72.1	124.8
June ....	91.5	101.4	173.4	118.2	78.4	77.3	71.8	122.6
July ....	91.4	100.9	175.9	118.1	78.4	77.4	71.7	121.2
Aug. ....	90.7	101.0	173.3	118.9	78.7	77.8	71.8	121.3
Sept. ....	88.7	101.0	177.1	119.5	78.9	78.0	72.0	121.3
Oct. ....	87.6	101.5	182.0	119.3	78.8	77.5	72.1	121.3
Nov. ....	86.2	100.7	181.0	120.6	79.4	77.8	72.1	120.9
Dec. ....	85.3	98.9	181.2	121.6	80.0	77.9	72.3	121.7
1992 – Jan. ....	85.1	97.8	186.0	121.1	79.9	77.5	72.3	120.9

Table a10

**Real effective exchange rates**  
(*period averages; indices, 1980=100*)

	US	Canada	Japan	Germany	France	UK	Italy	Switzerland
1985 .....	128.5	103.2	95.7	89.8	92.1	91.8	97.9	98.1
1986 .....	103.3	99.2	120.9	97.6	98.2	90.1	100.6	103.7
1987 .....	93.7	101.2	125.8	102.1	99.3	91.6	102.6	105.7
1988 .....	88.2	108.6	134.5	100.5	98.4	98.8	100.0	104.4
1989 .....	93.4	111.8	124.9	98.5	96.8	96.5	102.3	99.1
1990 .....	91.8	108.4	111.7	102.2	100.2	98.8	106.2	103.6
1989 – 3rd qtr. ....	94.8	112.3	122.6	97.8	96.6	95.9	103.2	99.3
4th " .....	93.7	111.9	119.4	100.3	98.0	92.8	104.3	98.9
1990 – 1st qtr. ....	93.8	109.2	112.1	102.3	99.7	94.3	105.9	100.4
2nd " .....	93.9	110.9	106.3	102.2	100.7	96.5	106.6	104.1
3rd " .....	90.9	108.9	109.9	101.9	100.1	102.6	106.3	106.2
4th " .....	88.6	104.4	118.4	102.5	100.3	102.0	106.1	103.8
1991 – 1st qtr. ....	87.4	106.9	118.5	102.8	99.4	104.2	107.6	103.1
2nd " .....	91.3	108.9	120.4	99.8	97.9	103.6	106.2	101.1
3rd " .....	91.5	108.4	121.4	100.8	98.0	103.0	105.6	98.6
1990 – Nov. ....	88.2	103.8	119.6	102.6	100.5	102.2	106.2	104.0
Dec. ....	88.1	105.8	116.9	103.3	100.1	101.9	106.9	103.5
1991 – Jan. ....	88.2	106.0	116.8	103.0	99.4	103.6	107.2	104.5
Feb. ....	85.5	106.5	120.2	103.4	100.0	104.5	108.3	103.6
Mar. ....	88.5	108.2	118.6	102.0	98.9	104.4	107.3	101.3
Apr. ....	90.2	108.7	120.8	100.1	98.1	104.6	106.5	101.8
May ....	91.0	108.5	120.1	99.9	98.0	104.0	106.2	101.7
June ....	92.7	109.5	120.3	99.4	97.5	102.1	105.8	99.7
July ....	92.5	108.8	121.8	100.1	97.5	102.4	105.4	98.6
Aug. ....	92.1	108.2	119.8	100.8	98.1	103.1	105.5	98.8
Sept. ....	90.0	108.2	122.4	101.4	98.3	103.4	105.9	98.4
Oct. ....	89.7	107.9	124.9	101.1	98.3	102.6	106.0	98.1
Nov. ....	88.4	106.8	124.1	102.3	99.1	103.3	106.0	97.7

Table a11

## Real effective intra-EC exchange rates

*(period averages; indices, 1980=100)*

	Belgium	France	Germany	UK	Netherlands	Italy	Spain
1985 .....	94.4	98.7	98.0	103.9	98.8	104.9	101.8
1986 .....	88.8	102.4	103.9	96.7	93.8	104.5	97.5
1987 .....	87.2	101.6	106.5	95.1	93.6	104.8	94.5
1988 .....	85.4	101.0	105.3	103.7	92.0	102.2	97.9
1989 .....	87.3	99.8	103.4	102.6	92.3	105.3	103.1
1990 .....	87.5	100.8	103.7	100.0	90.7	106.8	103.8
1989 – 3rd qtr. ....	87.5	99.9	102.8	102.2	92.0	106.5	103.5
4th " .....	88.3	100.4	104.3	97.1	92.1	106.6	103.0
1990 – 1st qtr. ....	87.5	101.0	104.7	96.4	91.4	107.1	102.6
2nd " .....	87.3	101.5	103.9	97.8	90.2	107.3	104.8
3rd " .....	87.8	100.3	102.8	103.2	90.1	106.5	104.5
4th " .....	87.4	100.5	103.5	102.6	91.0	106.1	103.2
1991 – 1st qtr. ....	85.3	99.5	103.8	104.8	89.8	107.6	104.5
2nd " .....	85.0	99.6	103.0	107.7	88.2	108.0	104.3
3rd " .....	84.6	99.6	103.8	107.0	88.9	107.2	103.2
1990 – Nov. ....	87.1	100.6	103.5	102.6	91.0	106.1	103.2
Dec. ....	87.2	100.0	104.0	102.0	90.5	106.7	103.0
1991 – Jan. ....	86.0	99.4	103.8	103.9	90.8	107.2	103.9
Feb. ....	85.1	99.6	103.9	104.3	89.9	107.9	104.6
Mar. ....	84.7	99.5	103.6	106.1	88.8	107.9	105.1
Apr. ....	84.8	99.6	102.9	108.1	88.1	108.1	104.6
May ....	85.1	99.6	102.9	107.9	88.2	107.9	104.5
June ....	85.3	99.7	103.1	107.0	88.2	108.1	103.8
July ....	84.4	99.6	103.8	107.2	88.8	107.4	103.1
Aug. ....	84.6	99.7	103.8	107.1	88.8	107.1	103.4
Sept. ....	84.7	99.6	103.9	106.6	89.1	107.1	103.0
Oct. ....	84.8	99.8	103.9	106.1	89.1	107.3	102.6
Nov. ....	84.9	99.9	104.2	105.5	89.3	106.6	102.5

Table a12

**External position of the Italian credit system**  
(end-of-period outstanding claims in billions of lire)

VIS-A-VIS	1991-Q1	1991-Q2	1991-Q3
Industrial countries .....	(214,240)	(206,828)	(200,011)
OPEC countries .....	(7,364)	(7,538)	(7,417)
Other developing countries .....	(11,349)	(11,824)	(10,464)
of which: Latin America .....	(6,407)	(6,672)	(6,076)
Africa .....	(1,416)	(1,381)	(1,192)
Asia .....	(2,853)	(2,949)	(2,659)
Middle East .....	(674)	(822)	(538)
Eastern Europe .....	(8,113)	(8,356)	(8,495)
Offshore centres .....	(26,940)	(27,673)	(24,730)
International organizations .....	(2,142)	(2,132)	(2,112)
<b>Total .....</b>	<b>(270,148)</b>	<b>(264,351)</b>	<b>(253,229)</b>
Memorandum item:			
Argentina .....	(2,025)	(2,284)	(1,833)
Bolivia .....	(7)	(9)	(11)
Brazil .....	(1,232)	(1,180)	(1,148)
Chile .....	(297)	(254)	(216)
Colombia .....	(120)	(139)	(127)
Ivory Coast .....	(38)	(26)	(25)
Ecuador .....	(197)	(192)	(171)
Philippines .....	(113)	(153)	(133)
Yugoslavia .....	(399)	(410)	(368)
Morocco .....	(563)	(578)	(383)
Mexico .....	(2,125)	(2,183)	(2,113)
Nigeria .....	(1,090)	(1,063)	(997)
Peru .....	(142)	(151)	(127)
Uruguay .....	(72)	(92)	(66)
Venezuela .....	(725)	(744)	(710)
<b>Total .....</b>	<b>(9,145)</b>	<b>(9,458)</b>	<b>(8,428)</b>
Albania .....	....	....	....
Bulgaria .....	(567)	(618)	(617)
Czechoslovakia .....	(126)	(115)	(108)
Poland .....	(1,842)	(1,926)	(1,756)
Romania .....	(7)	(10)	(12)
Hungary .....	(393)	(461)	(435)
Ex USSR .....	(5,135)	(5,184)	(5,524)

Table a13

**Sources and uses of income**  
*(% changes on previous period, at 1985 prices)*

	SOURCES			USES					
	GDP	Imports	Total	Gross fixed investment			Households' consumption	Other domestic uses	Exports
				Building	Machinery, equipment and vehicles	Total			
1985 .....	2.6	3.9	2.8	-0.5	2.0	0.6	3.0	4.5	3.2
1986 .....	2.9	2.9	2.9	1.9	2.5	2.2	3.7	1.6	2.5
1987 .....	3.1	8.9	4.2	-0.7	11.5	5.0	4.2	3.1	4.4
1988 .....	4.1	7.0	4.6	2.3	11.6	6.9	4.2	2.4	5.7
1989 .....	3.0	9.0	4.2	3.9	5.2	4.6	3.6	-0.7	10.0
1990 .....	2.0	6.7	2.9	2.5	3.5	3.0	2.7	-2.3	7.5
1989 - 3rd qtr. ...	0.9	0.4	0.8	1.1	1.5	1.3	0.4	2.2	0.4
4th " ...	0.4	0.6	0.4	1.7	4.4	3.1	0.7	-4.4	0.9
1990 - 1st qtr. ...	0.7	4.6	1.5	0.9	-0.4	0.2	0.5	8.5	0.8
2nd " ...	0.1	1.6	0.4	-0.5	-0.3	-0.4	1.1	-6.7	5.0
3rd " ...	0.4	-0.4	0.2	-0.3	1.2	0.5	0.7	-1.5	-0.1
4th " ...	-0.1	0.2	..	0.2	-0.6	-0.2	0.5	-4.6	1.8
1991 - 1st qtr. ...	0.6	..	0.5	..	-0.9	-0.4	0.6	3.0	-0.7
2nd " ...	0.4	3.1	1.0	0.8	2.7	1.8	1.0	6.7	-3.6
3rd " ...	0.1	2.2	0.5	0.2	2.8	1.6	0.5	-0.2	..

Table a14

## Industrial production and business opinion indicators

*(seasonally adjusted data)*

	INDUSTRIAL PRODUCTION				ISCO BUSINESS OPINION INDICATORS				
	General index	Consumer goods	Investment goods	Intermedi-ate goods	Changes in level of orders			Expected demand in 3-4 months	Stocks of finished goods vis-à-vis normal
					Domestic	Foreign	Total		
	<i>(indices, 1985=100)</i>				<i>(average balance of monthly responses)</i>				
1987 .....	107.6	105.9	110.3	107.7	-8.4	-25.4	-9.1	10.9	-0.8
1988 .....	114.1	111.6	119.6	113.6	3.3	-9.6	2.9	18.6	-7.5
1989 .....	117.6	114.6	123.1	117.5	0.5	-5.7	2.8	23.0	-4.1
1990 .....	117.8	115.7	125.4	116.5	-9.4	-16.1	-7.4	11.8	3.7
1991 .....	....	....	....	....	-27.5	-31.5	-26.7	11.2	8.5
1987 - 4th qtr. ...	109.2	106.6	113.0	109.4	-5.1	-22.4	-5.5	9.6	-4.3
1988 - 1st qtr. ...	112.6	110.4	117.0	112.4	-2.2	-16.6	-1.7	9.8	-2.7
2nd " ...	113.1	110.3	119.1	112.5	1.4	-10.0	1.1	14.7	-7.0
3rd " ...	114.6	112.2	122.0	113.9	5.4	-8.3	4.4	21.8	-8.7
4th " ...	116.1	113.2	120.5	115.8	8.6	-3.6	7.6	28.2	-11.7
1989 - 1st qtr. ...	115.7	112.2	120.7	115.5	6.0	-3.1	9.2	24.8	-8.0
2nd " ...	116.5	114.4	119.9	116.0	-0.4	-6.1	2.0	23.0	-1.7
3rd " ...	118.3	116.5	123.8	118.8	-2.3	-3.9	0.9	22.6	-4.3
4th " ...	120.0	115.3	127.9	119.5	-1.4	-9.8	-0.8	21.4	-2.3
1990 - 1st qtr. ...	118.4	114.4	127.1	117.2	-0.6	-9.9	-0.9	17.6	-2.0
2nd " ...	118.3	114.9	127.6	116.9	-4.9	-9.4	-1.6	16.2	2.3
3rd " ...	118.7	117.8	125.6	118.3	-11.4	-20.3	-9.3	5.5	6.7
4th " ...	115.7	115.7	121.3	113.7	-20.6	-24.8	-17.9	7.8	7.7
1991 - 1st qtr. ...	116.4	116.7	120.5	114.8	-29.1	-34.3	-27.8	10.2	9.7
2nd " ...	115.8	115.4	120.4	114.8	-27.5	-32.6	-27.5	12.0	9.7
3rd " ...	114.4	115.1	117.5	112.4	-25.5	-31.0	-25.1	11.7	8.3
4th " ...	....	....	....	....	-27.9	-28.2	-26.2	10.8	6.3

Table a15

## Labour market statistics

*(seasonally adjusted data; thousands of units and percentages)*

	Employment					Unemployment	Labour force	Unemployment rate		Participation rate
	Agriculture	Industry excluding construction	Construction	Other	Total			Official	Adjusted for wage supplementation	
1987 .....	2,169	4,867	1,849	11,952	20,837	2,832	23,669	12.0	13.3	41.8
1988 .....	2,053	4,928	1,823	12,181	20,984	2,868	23,852	12.0	13.0	42.0
1989 .....	1,946	4,953	1,801	12,305	21,004	2,866	23,870	12.0	12.7	42.0
1990 .....	1,895	4,986	1,859	12,564	21,304	2,621	23,926	11.0	11.7	42.0
1991 .....	1,823	4,958	1,957	12,854	21,592	2,653	24,245	10.9	....	42.4
1988 – 1st qtr. ....	2,092	4,915	1,816	12,154	20,977	2,884	23,861	12.1	13.2	42.1
2nd " ....	2,069	4,931	1,825	12,192	21,018	2,865	23,883	12.0	13.0	42.1
3rd " ....	2,016	4,942	1,829	12,209	20,996	2,851	23,847	12.0	12.9	42.0
4th " ....	1,971	4,928	1,827	12,224	20,950	2,869	23,819	12.0	12.9	41.9
1989 – 1st qtr. ....	1,944	4,925	1,778	12,280	20,926	2,892	23,818	12.1	13.0	41.9
2nd " ....	1,930	4,958	1,774	12,310	20,971	2,896	23,867	12.1	13.0	42.0
3rd " ....	1,950	4,984	1,823	12,330	21,087	2,837	23,925	11.9	12.6	42.1
4th " ....	1,966	5,010	1,847	12,378	21,201	2,734	23,936	11.4	12.2	42.1
1990 – 1st qtr. ....	1,944	5,026	1,862	12,451	21,283	2,639	23,922	11.0	11.8	42.0
2nd " ....	1,894	4,966	1,857	12,607	21,324	2,602	23,926	10.9	11.6	42.0
3rd " ....	1,847	4,948	1,857	12,677	21,328	2,603	23,931	10.9	11.7	42.0
4th " ....	1,830	4,990	1,880	12,722	21,421	2,569	23,990	10.7	11.6	42.0
1991 – 1st qtr. ....	1,816	5,029	1,929	12,817	21,591	2,686	24,277	11.1	12.0	42.5
2nd " ....	1,843	4,965	1,964	12,856	21,628	2,642	24,271	10.9	11.9	42.5
3rd " ....	1,831	4,887	1,985	12,889	21,592	2,618	24,210	10.8	11.8	42.4



Table a16

**Wholesale and consumer prices**  
(% changes on corresponding period)

	Wholesale prices				Consumer prices				Cost of living	Scala mobile index
	Con-sumer goods	Invest-ment goods	Intermedi-ate goods	Total	Food	Non-food products	Services	Total		
1986 .....	....	....	....	....	5.5	3.7	8.9	5.9	6.1	5.9
1987 .....	....	....	....	....	4.3	4.4	5.5	4.7	4.6	5.4
1988 .....	....	....	....	....	3.9	4.7	6.4	5.0	5.0	5.3
1989 .....	....	....	....	....	6.3	5.1	7.7	6.3	6.6	6.5
1990 .....	5.7	5.5	8.3	7.4	6.2	5.9	7.3	6.5	6.1	7.2
1991 .....	....	....	....	5.2	6.7	5.4	7.5	6.4	6.4	....
1989 – 4th qtr. ....	....	....	....	....	6.2	5.7	7.3	6.3	6.6	6.6
1990 – 1st qtr. ....	5.5	5.7	6.9	6.4	6.1	5.9	7.5	6.5	6.2	6.9
2nd " .....	5.7	5.2	4.1	4.6	6.1	5.4	7.0	6.1	5.7	6.8
3rd " .....	5.5	5.8	10.2	8.6	6.5	6.0	7.3	6.5	6.1	7.3
4th " .....	5.9	5.3	11.9	9.9	6.2	6.4	7.4	6.7	6.4	7.7
1991 – 1st qtr. ....	6.8	5.1	9.6	8.5	6.4	6.0	6.9	6.4	6.6	7.9
2nd " .....	6.8	4.4	8.0	7.5	6.6	6.1	7.4	6.6	6.8	8.1
3rd " .....	7.1	3.8	2.7	4.0	6.6	5.4	7.9	6.4	6.4	8.1
4th " .....	....	....	....	1.1	6.9	4.0	8.0	6.0	6.1	....
1991 – Jan. ....	6.0	5.1	8.7	7.8	6.8	5.6	6.6	6.3	6.5	7.9
Feb. ....	6.9	5.4	11.3	9.7	6.1	6.2	6.8	6.4	6.7	8.1
Mar. ....	7.4	4.8	8.7	8.1	6.5	6.1	7.2	6.6	6.6	7.7
Apr. ....	6.6	4.8	7.8	7.3	6.5	6.1	7.2	6.6	6.7	7.8
May ....	6.9	4.2	8.7	7.9	6.6	6.1	7.5	6.7	6.8	8.0
June ....	6.9	4.3	7.6	7.2	6.6	6.1	7.4	6.6	6.9	8.4
July ....	6.8	4.1	7.3	6.9	6.7	6.1	7.7	6.7	6.7	8.6
Aug. ....	7.1	3.9	1.3	3.1	6.7	5.3	7.7	6.3	6.3	8.0
Sept. ....	7.5	3.3	-0.1	2.2	6.6	4.7	8.2	6.3	6.2	7.8
Oct. ....	7.8	3.3	-3.8	-0.3	6.6	3.9	8.0	6.0	6.1	7.3
Nov. ....	7.4	3.3	0.2	2.3	6.8	4.1	8.0	6.0	6.2	....
Dec. ....	....	....	....	1.3	7.3	4.0	7.9	6.1	6.0	....
1992 – Jan. ....	....	....	....	....	....	....	....	....	6.1	....

Table a17

**Balance of payments on a settlements basis**  
(billions of lire)

	Goods (cif-fob)	Services and transfers				Balance on current account	Non-bank capital flows	Bank capital flows	Errors and omissions	Change in official reserves
		Foreign travel	Income from capital	Other	Total					
1988 .....	-12,826	8,349	-10,578	2,770	541	-12,285	13,164	10,224	-197	-10,906
1989 .....	-19,518	7,151	-12,666	-676	-6,191	-25,709	24,920	14,979	1,196	-15,386
1990 .....	(-19,469)	(7,085)	(-17,301)	(421)	(-9,795)	(-29,264)	(29,504)	(22,973)	(-8,055)	(-15,158)
1991 .....	....	....	....	....	....	....	....	(38,923)	....	(8,571)
1990 - Dec. ...	(-3,242)	(586)	(-1,683)	(-326)	(-1,423)	(-4,665)	(-1,332)	(5,175)	(-228)	(1,050)
1991 - Jan. ...	(-2,311)	(303)	(-1,601)	(153)	(-1,145)	(-3,456)	(3,309)	(537)	(-1,184)	(794)
Feb. ...	(-3,249)	(299)	(-772)	(-510)	(-983)	(-4,232)	(7,289)	(-736)	(71)	(-2,392)
Mar. ...	(-2,314)	(966)	(-1,720)	(-407)	(-1,161)	(-3,475)	(5,682)	(2,925)	(1,048)	(-6,180)
Apr. ...	(-2,698)	(1,092)	(-2,257)	(-79)	(-1,244)	(-3,942)	(3,215)	(628)	(-662)	(761)
May ...	(-2,119)	(1,095)	(-1,969)	(-262)	(-1,136)	(-3,255)	(-5,299)	(5,140)	(2,186)	(1,228)
June ..	(-2,594)	(1,123)	(-1,725)	(-84)	(-686)	(-3,280)	(-7,985)	(10,941)	(189)	(135)
July ...	(-1,706)	(1,239)	(-2,133)	(-147)	(-1,041)	(-2,747)	(-7,432)	(8,739)	(471)	(969)
Aug. ...	(692)	(205)	(-1,343)	(-562)	(-1,700)	(-1,008)	(-2,790)	(2,525)	(367)	(906)
Sept. ..	(-3,149)	(545)	(-2,218)	(-339)	(-2,012)	(-5,161)	(3,850)	(1,690)	(-40)	(-339)
Oct. ...	....	....	....	....	....	....	....	(4,436)	....	(1,204)
Nov. ...	....	....	....	....	....	....	....	(1,349)	....	(3,757)
Dec. ...	....	....	....	....	....	....	....	(749)	....	(7,728)

**Balance of payments on a transactions basis**  
(billions of lire)

	Goods (fob-fob)	Services and transfers				Balance on current account	Non-bank capital flows	Bank capital flows	Errors and omissions	Change in official reserves
		Foreign travel	Income from capital	Other	Total					
1988 .....	-1,501	8,349	-9,278	-5,084	-6,013	-7,514	11,108	10,224	-2,912	-10,906
1989 .....	-2,956	7,151	-11,366	-7,397	-11,612	-14,568	18,963	14,979	-3,988	-15,386
1990 .....	(563)	(7,085)	(-16,001)	(-8,990)	(-17,906)	(-17,343)	(24,890)	(22,973)	(-15,362)	(-15,158)
1991 .....	....	....	....	....	....	....	....	(38,923)	....	(8,571)
1989 - 4th qtr.	1,727	943	-2,987	-1,646	-3,690	-1,963	-5,947	2,313	1,625	3,972
1990 - 1st qtr.	(-5,323)	(708)	(-3,100)	(-3,684)	(-6,076)	(-11,399)	(7,888)	(9,967)	(-552)	(-5,904)
2nd "	(1,615)	(2,076)	(-4,301)	(-2,043)	(-4,268)	(-2,653)	(19,938)	(4,747)	(-6,570)	(-15,462)
3rd "	(3,509)	(2,405)	(-3,804)	(-1,250)	(-2,649)	(860)	(4,857)	(-2,790)	(-784)	(-2,143)
4th "	(762)	(1,896)	(-4,796)	(-2,013)	(-4,913)	(-4,151)	(-7,793)	(11,049)	(-7,456)	(8,351)
1991 - 1st qtr.	(-2,737)	(1,568)	(-4,093)	(-3,469)	(-5,994)	(-8,731)	(15,216)	(2,726)	(-1,433)	(-7,778)
2nd "	(-1,156)	(3,310)	(-5,301)	(-2,878)	(-4,869)	(-6,025)	(-12,638)	(16,709)	(-170)	(2,124)
3rd "	(899)	(1,989)	(-5,694)	(-2,088)	(-5,793)	(-4,894)	(-9,450)	(12,954)	(-146)	(1,536)
4th "	....	....	....	....	....	....	....	(6,534)	....	(12,689)

Table a18

## External position of BI-UIC

	Short-term position							Medium and long-term position			Overall position
	Assets					Liabilities	Net reserves	Assets		Liabilities	
	Gold	SDRs	Reserve position in the IMF	Ecus	Convertible currencies			Total	of which: foreign securities		
<i>(billions of lire)</i>											
1986 .....	35,203	1,085	1,713	10,158	14,340	285	62,214	358	269	1,161	61,411
1987 .....	39,812	1,253	1,691	12,220	20,307	127	75,156	306	193	1,165	74,297
1988 .....	37,242	1,239	1,653	10,360	32,136	192	82,438	1,571	1,452	1,234	82,775
1989 .....	33,663	1,268	1,834	11,409	44,847	401	92,620	1,793	1,793	1,173	93,240
1990 - Dec. .	(30,580)	(1,172)	(1,937)	(10,433)	(57,579)	(398)	(101,303)	(3,232)	(3,220)	(1,130)	(103,405)
1991 - Jan. .	(30,580)	(1,169)	(2,197)	(10,066)	(56,377)	(434)	(99,955)	(3,163)	(3,151)	(1,126)	(101,992)
Feb. .	(30,580)	(1,207)	(2,261)	(10,005)	(57,863)	(682)	(101,234)	(4,342)	(4,330)	(1,134)	(104,442)
Mar. .	(29,443)	(1,234)	(2,477)	(9,981)	(63,797)	(232)	(106,700)	(5,866)	(5,854)	(1,198)	(111,368)
Apr. .	(29,443)	(1,225)	(2,491)	(10,947)	(61,070)	(348)	(104,828)	(6,938)	(6,908)	(1,206)	(110,560)
May .	(29,443)	(1,260)	(2,492)	(10,978)	(58,692)	(284)	(102,581)	(8,161)	(8,131)	(1,206)	(109,536)
June	(28,367)	(1,300)	(2,511)	(11,002)	(58,470)	(221)	(101,429)	(9,258)	(9,227)	(1,245)	(109,442)
July .	(28,367)	(1,175)	(2,465)	(11,587)	(57,045)	(262)	(100,377)	(9,537)	(9,468)	(1,222)	(108,692)
Aug. .	(28,367)	(1,179)	(2,572)	(11,582)	(55,721)	(287)	(99,134)	(9,821)	(9,752)	(1,221)	(107,734)
Sept.	(29,603)	(1,156)	(2,691)	(11,567)	(55,302)	(352)	(99,967)	(9,811)	(9,743)	(1,197)	(108,581)
Oct. .	(29,603)	(1,137)	(2,619)	(11,055)	(52,675)	(408)	(96,681)	(11,645)	(11,577)	(1,203)	(107,123)
Nov. .	(29,603)	(1,100)	(2,582)	(11,064)	(49,392)	(548)	(93,193)	(11,194)	(11,085)	(1,192)	(103,195)
Dec. .	(29,288)	(1,067)	(2,595)	(11,092)	(41,229)	(418)	(84,853)	(10,642)	(10,536)	(1,157)	(94,338)
<i>(millions of dollars)</i>											
1986 .....	26,055	803	1,268	7,518	10,614	211	46,047	265	199	859	45,453
1987 .....	34,050	1,072	1,446	10,451	17,368	109	64,278	262	165	996	63,543
1988 .....	28,521	949	1,266	7,934	24,611	147	63,134	1,203	1,112	945	63,392
1989 .....	26,496	998	1,444	8,980	35,299	316	72,901	1,411	1,411	923	73,389
1990 - Dec. .	(27,060)	(1,037)	(1,714)	(9,232)	(50,950)	(352)	(89,641)	(2,860)	(2,849)	(1,000)	(91,501)
1991 - Jan. .	(27,060)	(1,046)	(1,966)	(9,007)	(50,445)	(388)	(89,135)	(2,830)	(2,819)	(1,008)	(90,958)
Feb. .	(27,060)	(1,062)	(1,989)	(8,803)	(50,909)	(600)	(89,223)	(3,820)	(3,810)	(998)	(92,045)
Mar. .	(23,238)	(974)	(1,955)	(7,878)	(50,353)	(183)	(84,214)	(4,630)	(4,620)	(946)	(87,899)
Apr. .	(23,238)	(957)	(1,945)	(8,548)	(47,685)	(272)	(82,100)	(5,417)	(5,394)	(942)	(86,576)
May .	(23,238)	(984)	(1,945)	(8,570)	(45,817)	(222)	(80,332)	(6,371)	(6,347)	(941)	(85,762)
June	(21,047)	(965)	(1,863)	(8,163)	(43,382)	(164)	(75,255)	(6,869)	(6,846)	(924)	(81,201)
July .	(21,047)	(901)	(1,890)	(8,884)	(43,739)	(201)	(76,261)	(7,313)	(7,260)	(937)	(82,636)
Aug. .	(21,047)	(907)	(1,978)	(8,909)	(42,859)	(221)	(75,479)	(7,554)	(7,501)	(939)	(82,094)
Sept.	(23,772)	(928)	(2,161)	(9,289)	(44,409)	(283)	(80,276)	(7,878)	(7,824)	(961)	(87,193)
Oct. .	(23,772)	(907)	(2,089)	(8,820)	(42,025)	(326)	(77,288)	(9,291)	(9,236)	(960)	(85,619)
Nov. .	(23,772)	(895)	(2,101)	(9,004)	(40,195)	(446)	(75,522)	(9,110)	(9,021)	(970)	(83,661)
Dec. .	(23,230)	(927)	(2,254)	(9,636)	(35,818)	(363)	(71,503)	(9,245)	(9,153)	(1,005)	(79,743)

Table a19

**State sector borrowing requirement**  
(billions of lire)

	Budget revenues			Budget disbursements			Deficit (-)	Other trans- actions	Borrowing require- ment (-)	Borrowing requirement (-)	
	Fiscal	Other	Total	Current expendi- ture	Capital expendi- ture	Total				net of debt settle- ments in securities	of which: settle- ments of past debts in cash
1986 .....	202,090	51,779	253,869	307,338	63,681	371,019	-117,150	6,991	-110,159	-110,159	-606
1987 .....	224,676	56,867	281,542	333,987	67,252	401,239	-119,696	5,446	-114,250	-113,829	-132
1988 .....	257,274	54,801	312,074	366,805	66,043	432,848	-120,774	-4,869	-125,643	-124,911	-64
1989 .....	293,462	60,531	353,993	394,547	70,172	464,719	-110,727	-23,127	-133,854	-133,400	-1,064
1990 .....	329,971	76,893	406,863	465,810	69,630	535,441	-128,577	-16,684	-145,261	-140,680	-249
1991 .....	367,016	79,969	446,985	509,257	68,031	577,289	-130,304	-21,929	-152,233	-152,233	-74
1989 - 4th qtr. ..	88,160	23,884	112,044	136,359	34,005	170,364	-58,320	8,050	-50,270	-50,270	-89
1990 - 1st qtr. ..	71,601	10,548	82,149	70,676	6,197	76,873	5,277	-30,364	-25,088	-25,088	-145
2nd " ..	90,030	16,667	106,697	142,304	18,075	160,380	-53,683	30,967	-22,716	-22,716	..
3rd " ..	73,244	17,403	90,647	106,855	16,601	123,456	-32,810	-2,826	-35,635	-35,635	-69
4th " ..	95,097	32,274	127,371	145,975	28,757	174,732	-47,361	-14,461	-61,823	-57,241	-35
1991 - 1st qtr. ..	75,852	12,025	87,877	79,781	8,214	87,995	-118	-33,030	-33,148	-33,148	-5
2nd " ..	96,348	15,992	112,340	165,521	16,235	181,757	-69,416	44,298	-25,118	-25,118	-1
3rd " ..	83,823	20,469	104,292	123,147	15,886	139,033	-34,741	-11,537	-46,279	-46,279	-29
4th " ..	110,993	31,483	142,476	140,808	27,696	168,504	-26,028	-21,660	-47,688	-47,688	-39
1990 - Dec. ....	43,174	19,602	62,776	60,048	17,374	77,422	-14,646	-4,087	-18,733	-18,733	-21
1991 - Jan. ....	30,588	1,114	31,702	26,306	657	26,963	4,739	-9,845	-5,106	-5,106	..
Feb. ....	20,152	4,629	24,781	28,235	1,431	29,666	-4,885	-3,506	-8,391	-8,391	-4
Mar. ....	25,112	6,282	31,394	25,240	6,126	31,367	28	-19,678	-19,651	-19,651	-1
Apr. ....	21,038	4,605	25,643	50,105	4,094	54,199	-28,556	11,760	-16,796	-16,796	..
May ....	30,305	5,695	36,000	82,325	7,596	89,921	-53,922	37,689	-16,233	-16,233	..
June ....	45,006	5,692	50,698	33,091	4,545	37,636	13,062	-5,151	7,911	7,911	-1
July ....	33,627	5,687	39,313	40,058	8,183	48,240	-8,927	-2,678	-11,605	-11,605	-21
Aug. ....	28,529	10,100	38,629	50,488	2,332	52,820	-14,191	2,162	-12,030	-12,030	-8
Sept. ....	21,668	4,682	26,350	32,602	5,371	37,973	-11,623	-11,021	-22,644	-22,644	..
Oct. ....	23,874	7,243	31,117	37,704	2,565	40,269	-9,152	-11,096	-20,247	-20,247	-2
Nov. ....	33,059	9,177	42,236	35,087	6,139	41,227	1,009	-15,135	-14,126	-14,126	-37
Dec. ....	54,060	15,063	69,123	68,017	18,992	87,009	-17,886	4,570	-13,315	-13,315	..

Table a20

## Financing of the state sector borrowing requirement

(billions of lire)

	Medium and long-term securities		Treasury bills		BI-UIC financing other than securities purchases		PO deposits	Foreign loans	Other	Borrowing requirement	
	Total	of which: net purchases by BI-UIC		of which: net purchases by BI-UIC	Total	of which: Treasury overdraft with BI					
1986 .....	87,072	7,904	9,697	1,402	1,673	4,525	11,267	856	-407	110,159	10,980
1987 .....	56,090	1,311	27,482	-4,515	10,224	9,274	12,917	6,066	1,470	114,250	7,020
1988 .....	60,972	4,215	41,982	-5,274	3,704	4,331	10,996	4,227	3,763	125,643	2,645
1989 .....	59,191	8,052	43,143	-2,981	1,835	1,842	15,364	8,397	5,923	133,854	6,906
1990 .....	69,799	-8,096	40,515	6,205	2,811	2,909	12,770	14,914	4,451	145,261	920
1991 .....	113,791	20,113	11,588	-3,693	2,524	2,011	11,700	5,375	7,256	152,233	18,944
1989-4th qtr. ...	21,417	6,916	12,997	1,076	5,296	5,148	9,914	754	-109	50,270	13,288
1990-1st qtr. ...	8,759	2,584	8,558	-5,077	2,127	1,811	2,660	2,334	649	25,088	-365
2nd " ...	24,439	-7,462	7,972	3,789	-16,576	-16,757	819	4,773	1,289	22,716	-20,249
3rd " ....	7,987	-4,703	8,901	-1,848	12,125	12,849	733	4,891	999	35,635	5,574
4th " ....	28,614	1,485	15,083	9,340	5,136	5,005	8,559	2,916	1,515	61,823	15,960
1991-1st qtr. ...	20,616	6,032	4,044	-3,231	-878	-1,399	1,585	6,524	1,259	33,148	1,923
2nd " ...	34,161	2,829	-770	-5,353	-8,214	-7,487	-33	-591	564	25,118	-10,737
3rd " ....	27,399	-5,159	4,907	678	10,949	11,217	726	-780	3,077	46,279	6,467
4th " ....	31,615	16,410	3,407	4,213	667	-320	9,422	221	2,356	47,688	21,290
1990-Dec. ....	9,496	-2,284	5,641	6,811	-7,391	-7,330	9,463	646	878	18,733	-2,865
1991-Jan. ....	3,854	5,821	-213	-3,735	850	777	1,055	191	-630	5,106	2,936
Feb. ....	8,354	3,612	3,006	2,810	-7,909	-7,581	573	2,328	2,038	8,391	-1,487
Mar. ....	8,408	-3,400	1,250	-2,305	6,180	5,405	-43	4,005	-150	19,651	475
Apr. ....	12,164	-4,676	210	-1,998	4,961	5,127	-591	-62	115	16,796	-1,713
May ....	13,241	296	250	-1,351	2,783	4,189	414	-542	87	16,233	1,728
June ....	8,756	7,209	-1,229	-2,003	-15,958	-16,802	145	14	362	-7,911	-10,752
July ....	7,643	2,266	405	719	3,508	3,733	-510	-353	912	11,605	6,492
Aug. ....	8,236	-175	2,001	207	-208	-347	914	195	891	12,030	-176
Sept. ....	11,520	-7,250	2,501	-248	7,649	7,831	322	-622	1,274	22,644	151
Oct. ....	13,425	3,042	1,750	477	5,174	4,699	-296	69	125	20,247	8,693
Nov. ....	13,842	6,287	3,195	2,544	-3,013	-3,018	50	47	5	14,126	5,818
Dec. ....	4,348	7,081	-1,538	1,192	-1,494	-2,001	9,667	105	2,226	13,315	6,779

Table a21

## The domestic public debt

*(end-of-period face value; billions of lire)*

	Medium and long-term securities excluding BI portfolio	Treasury bills in lire and ecus excluding BI-portfolio	PO deposits	Lending by credit institutions	Other domestic debt	Subtotal	Borrowing from BI-UIC	Total debt	
									of which: state sector
1983 .....	149,876	137,772	44,261	29,800	2,147	363,857	79,630	443,486	421,237
1984 .....	207,892	152,691	50,626	38,630	2,379	452,217	92,864	545,081	516,215
1985 .....	294,961	150,814	59,693	36,418	2,437	544,323	120,286	664,609	639,252
1986 – 3rd qtr. ..	359,336	163,507	62,490	35,217	2,443	622,993	123,503	746,496	722,477
4th " ..	374,454	159,187	70,960	37,948	2,461	645,010	130,955	775,965	750,698
1987 – 1st qtr. ..	402,094	154,059	73,091	37,292	2,501	669,037	132,528	801,565	776,487
2nd " ..	419,910	156,222	74,102	38,144	2,553	690,930	135,268	826,198	799,401
3rd " ..	429,284	172,444	76,189	36,806	2,614	717,338	144,446	861,784	837,678
4th " ..	429,752	191,427	83,877	41,376	2,606	749,038	137,968	887,006	861,915
1988 – 1st qtr. ..	442,761	204,162	86,519	40,853	2,636	776,931	136,233	913,163	888,705
2nd " ..	456,102	216,429	86,783	41,258	2,706	803,278	135,601	938,879	913,129
3rd " ..	464,710	239,400	87,969	42,715	2,722	837,517	138,859	976,375	953,377
4th " ..	483,509	239,318	94,873	45,535	2,743	865,978	140,522	1,006,500	984,063
1989 – 1st qtr. ..	491,939	257,762	97,000	44,588	2,749	894,039	139,905	1,033,943	1,011,786
2nd " ..	501,706	262,129	98,400	47,666	2,807	912,709	133,209	1,045,918	1,024,469
3rd " ..	522,273	273,266	100,323	48,616	2,842	947,320	133,939	1,081,259	1,060,927
4th " ..	534,939	284,976	110,237	52,899	2,844	985,895	147,474	1,133,369	1,111,328
1990 – 1st qtr. ..	540,438	299,333	112,897	54,551	2,901	1,010,119	147,154	1,157,273	1,135,710
2nd " ..	574,814	302,313	113,716	56,095	2,995	1,049,932	126,564	1,176,496	1,154,365
3rd " ..	588,324	313,184	114,449	53,542	3,058	1,072,556	131,858	1,204,415	1,186,687
4th " ..	616,967	318,949	123,007	60,248	3,032	1,122,202	147,752	1,269,954	1,247,170
1991 – 1st qtr. ..	631,884	326,159	124,592	63,875	3,133	1,149,643	149,722	1,299,365	1,275,324
2nd " ..	664,519	330,232	124,560	67,843	3,274	1,190,427	138,932	1,329,359	1,301,773
1991 – July .....	669,670	329,934	124,050	67,113	3,317	1,194,084	145,457	1,339,541	1,314,257
Aug. ....	678,718	331,724	124,964	67,929	3,341	1,206,675	145,374	1,352,049	1,326,817
Sept. ....	698,167	334,466	125,286	67,964	3,360	1,229,242	145,357	1,374,599	1,350,588
Oct. ....	708,983	335,749	124,990	69,506	3,400	1,242,629	154,046	1,396,675	1,371,208
Nov. ....	716,624	336,403	125,040	70,963	3,445	1,252,475	160,031	1,412,506	1,385,542
Dec. ....	....	....	(134,707)	....	(3,403)	....	(166,976)	....	(1,399,261)

Table a22

**Monetary base**  
(flows in billions of lire)

	SOURCES					TOTAL	Currency in circulation	USES			
	Foreign sector	Treasury	Open market	Refinancing	Other sectors			Bank reserves			Total
								Deposits with the Bank of Italy	of which: compulsory reserves	Other	
1989 .....	14,971	8,452	-2,106	1,203	-2,015	20,505	10,507	9,746	9,567	252	9,998
1990 .....	15,454	-1,383	2,393	1,260	-4,048	13,675	1,780	10,745	13,026	1,150	11,895
1991 .....	(-8,649)	(-9,404)	(26,998)	(2,716)	(-500)	(11,161)	(7,164)	(3,646)	(3,424)	(351)	(3,997)
1991 - Jan. ...	-832	-2,206	5,148	-2,612	-28	-529	-3,396	4,801	2,847	-1,934	2,867
Feb. ...	2,397	-7,886	6,408	2,925	-787	3,056	255	3,351	4,921	-550	2,802
Mar. ...	5,995	4,579	-4,098	-3,049	-1,283	2,144	2,465	-2,713	-3,270	2,392	-321
Apr. ...	-600	3,695	-5,396	37	-986	-3,250	-2,757	-1,253	-1,594	760	-493
May ...	-1,226	1,929	-191	102	155	770	469	894	-319	-594	300
June ..	-131	-18,568	7,820	297	2,975	-7,606	2,412	-8,427	-4,858	-1,591	-10,018
July ...	-801	4,413	2,094	1,024	-294	6,434	2,071	3,064	-1,286	1,299	4,364
Aug. ...	-1,085	-2,388	2,218	-1,597	-360	-3,212	-2,264	321	2,140	-1,269	-948
Sept. ...	839	6,557	-6,402	-857	-2,204	-2,066	395	-2,855	-1,089	394	-2,461
Oct. ...	-1,658	5,026	2,226	7	-877	4,725	-67	4,221	1,604	572	4,792
Nov. ...	-3,826	-2,002	7,829	970	372	3,342	1,905	2,897	2,836	-1,459	1,437
Dec. ...	(-7,721)	(-2,555)	(9,342)	(5,469)	(2,817)	(7,353)	(5,677)	(-655)	(1,494)	(2,330)	(1,676)
1992 - Jan. ...	(-702)	(-5,385)	(6,657)	(-5,957)	(-1,081)	(-6,468)	(-4,850)	(908)	(1,857)	(-2,526)	(-1,618)

**Monetary base financing of the Treasury**  
(changes in billions of lire)

	Borrowing requirement	NON-MONETARY FINANCING							Treasury monetary base
		Net sales of securities on the primary market					Other forms of financing	Total	
		Treasury bills	Treasury credit certificates	Treasury bonds	Other	Total			
1989 .....	133,853	-36,298	-18,757	-26,038	-14,693	-95,784	-29,619	-125,401	8,452
1990 .....	145,262	-39,336	-59,193	9,014	-25,082	-114,598	-32,047	-146,643	-1,383
1991 .....	152,233	(-21,683)	(-15,552)	(-85,744)	(-14,430)	(-137,407)	-24,228	(-161,637)	(-9,404)
1991 - Jan. ....	5,106	-1,092	-107	-5,207	-297	-6,703	-609	-7,312	-2,206
Feb. ....	8,391	-3,023	132	-6,624	-1,832	-11,347	-4,929	-16,276	-7,886
Mar. ....	19,651	-2,348	280	-7,426	-1,772	-11,266	-3,806	-15,072	4,579
Apr. ....	16,796	-1,507	-2,416	-7,842	-1,887	-13,651	550	-13,101	3,695
May ....	16,233	-1,141	-1,446	-9,888	-1,881	-14,356	52	-14,304	1,929
June ....	-7,911	-2,080	-489	-6,689	-883	-10,141	-516	-10,657	-18,568
July ....	11,605	188	55	-6,230	-1,169	-7,157	-35	-7,192	4,413
Aug. ....	12,030	-3,289	-2,242	-6,186	-706	-12,423	-1,994	-14,417	-2,388
Sept. ....	22,644	-2,145	-2,270	-8,237	-2,465	-15,117	-969	-16,087	6,557
Oct. ....	20,247	-1,938	-1,851	-9,487	-2,057	-15,333	112	-15,221	5,026
Nov. ....	14,126	-2,226	-2,460	-7,982	-3,367	-16,034	-93	-16,128	-2,002
Dec. ....	13,315	(-1,082)	(-2,738)	(-3,946)	(3,886)	(-3,879)	-11,991	(-15,870)	(-2,555)
1992 - Jan. ....	6,500	(-814)	(-1,999)	(-7,119)	(-555)	(-10,487)	-1,398	(-11,885)	(-5,385)

Table a23

**Monetary base**  
(stocks in billions of lire)

	SOURCES							
	Foreign sector	BI-UIC financing of the Treasury				Memorandum item: undrawn overdraft facility	Refinancing	Other sectors
		Total	of which:					
			Government securities and Treasury c/c	Treasury overdraft with BI				
1988 .....	30,257	140,722	70,302	66,312	4,341	3,669	-9,588	
1989 .....	45,228	146,810	74,489	68,155	1,658	4,872	-11,345	
1990 .....	60,682	147,817	72,596	71,063	6,266	6,132	-15,391	
1991 - Jan. ....	59,850	150,759	74,682	71,840	9,396	3,520	-15,419	
Feb. ....	62,247	149,282	81,103	64,260	17,307	6,445	-16,206	
Mar. ....	68,242	149,763	75,397	69,664	11,981	3,395	-17,489	
Apr. ....	67,642	148,061	68,723	74,791	6,944	3,432	-18,475	
May ....	66,417	149,799	67,668	78,980	2,783	3,535	-18,321	
June ....	66,286	139,052	72,874	62,178	19,606	3,831	-15,345	
July ....	65,484	145,558	75,858	65,911	16,048	4,855	-15,640	
Aug. ....	64,399	145,388	75,890	65,563	16,459	3,258	-15,999	
Sept. ....	65,238	145,544	68,393	73,394	8,641	2,402	-18,204	
Oct. ....	63,580	152,797	70,461	78,093	3,998	2,409	-19,081	
Nov. ....	59,754	158,624	79,292	75,075	6,688	3,379	-18,708	
Dec. ....	(52,033)	(165,411)	(87,565)	(73,074)	(9,121)	(8,848)	(-15,891)	
1992 - Jan. ....	(51,331)	(166,683)	(93,685)	(68,877)	(13,318)	(2,891)	(-16,972)	

	USES						Total monetary base
	Currency in circulation		Bank reserves				
	Total	of which: notes and coin	Deposits with the Bank of Italy		Other	Total	
				of which: compulsory reserves			
1988 .....	57,180	56,955	103,235	102,898	4,644	107,880	165,060
1989 .....	67,687	67,473	112,981	112,465	4,897	117,878	185,565
1990 .....	69,467	69,338	123,726	125,491	6,047	129,773	199,240
1991 - Jan. ....	66,070	65,932	128,527	128,338	4,113	132,641	198,711
Feb. ....	66,325	66,210	131,879	133,258	3,563	135,442	201,767
Mar. ....	68,790	68,628	129,166	129,988	5,955	135,121	203,911
Apr. ....	66,033	65,955	127,912	128,394	6,716	134,628	200,660
May ....	66,502	66,349	128,806	128,074	6,122	134,928	201,430
June ....	68,914	68,802	120,379	123,216	4,531	124,910	193,824
July ....	70,985	70,801	123,443	121,930	5,831	129,274	200,259
Aug. ....	68,721	68,572	123,765	124,070	4,561	128,326	197,046
Sept. ....	69,116	69,016	120,909	122,981	4,955	125,865	194,981
Oct. ....	69,049	68,819	125,130	124,585	5,527	130,657	199,706
Nov. ....	70,953	70,883	128,027	127,421	4,068	132,094	203,048
Dec. ....	(76,631)	(76,492)	(127,372)	(128,915)	(6,398)	(133,770)	(210,401)
1992 - Jan. ....	(71,781)	(71,674)	(128,280)	(130,772)	(3,872)	(132,152)	(203,933)



**Monetary base and BI operations:**  
( *stocks in billions* )

	MONETARY BASE				
	Currency in circulation	Bank reserves			
		Deposits with the Bank of Italy	of which: excess reserves	Cash	Undrawn advances facilities
1989 .....	65,547	113,308	748	3,833	2,017
1990 .....	69,569	125,698	197	4,390	897
1991 – Jan. ....	66,324	128,464	152	3,357	593
Feb. ....	66,079	133,390	131	3,295	603
Mar. ....	67,058	130,122	134	3,292	2,725
Apr. ....	66,212	128,575	125	3,250	3,071
May ....	66,478	128,213	139	3,547	2,680
June ....	67,905	123,541	174	3,159	2,223
July ....	70,823	122,084	154	3,534	1,838
Aug. ....	69,074	124,227	21	3,534	1,427
Sept. ....	68,876	123,111	130	3,559	1,692
Oct. ....	69,169	124,701	116	3,372	2,045
Nov. ....	71,062	127,564	138	3,752	667
Dec. ....	77,277	128,991	76	(4,506)	900
1992 – Jan. ....	72,224	130,902	132	(3,759)	696

Table a24

**averages of daily data**  
*of lire)*

				BI OPERATIONS			
		TOTAL	Percentage changes (over 12 months)	Repurchase agreements			Ordinary and fixed term advances
Total	Percentage changes (over 12 months)			Purchases	Sales	TOTAL	
119,158	9.1	184,705	9.5	1,905	277	1,628	2,158
130,986	9.5	200,555	10.1	1,912	1,052	861	4,447
132,414	2.2	198,738	4.9	6,538	2,115	4,423	3,100
137,289	8.8	203,368	9.5	12,405	43	12,362	3,375
136,139	9.1	203,197	9.4	11,454	153	11,301	517
134,895	8.1	201,107	8.0	4,801	227	4,575	150
134,440	8.0	200,918	8.4	10,492	202	10,290	934
128,924	11.0	196,829	10.6	10,827	208	10,618	1,165
127,455	6.7	198,278	7.4	8,148	121	8,028	2,521
129,188	7.0	198,262	7.9	8,945	214	8,731	2,029
128,361	8.0	197,237	8.6	3,608	341	3,267	456
130,119	7.2	199,288	8.6	6,397	386	6,011	80
131,983	7.9	203,045	8.9	17,105	138	16,968	1,923
(134,397)	(8.3)	(211,674)	(9.4)	16,951	178	16,773	2,618
(135,356)	(9.9)	(207,580)	(9.5)	28,675	220	28,455	1,853

Table a25

**BI-UIC operations in government securities**  
(billions of lire)

	PRIMARY MARKET		OPEN MARKET				VARIATIONS IN BI-UIC PORTFOLIO
	subscriptions	redemptions	of which: repurchase agreements				
			temporary purchases	temporary sales	other		
<b>Total</b>							
1989 .....	23,091	16,540	-2,106	2,880	..	1,531	4,445
1990 .....	21,141	25,424	2,393	2,120	..	179	-1,891
1991 .....	(10,251)	(22,280)	(26,998)	18,000	..	-501	(14,969)
1991 - Jan. ....	933	3,995	5,148	7,268	..	-2,227	2,086
Feb. ....	1,080	1,067	6,408	5,232	..	1,064	6,421
Mar. ....	571	2,179	-4,098	-1,422	..	-1,468	-5,706
Apr. ....	35	1,313	-5,396	-5,647	..	-195	-6,674
May ....	338	1,202	-191	192	..	-55	-1,055
June ....	3,000	5,614	7,820	4,991	..	270	5,206
July ....	1,510	619	2,094	-1,479	..	-90	2,984
Aug. ....	657	2,843	2,218	-313	..	-5	32
Sept. ....	532	1,628	-6,402	-5,057	..	-435	-7,498
Oct. ....	31	190	2,226	1,580	..	-195	2,068
Nov. ....	1,042	39	7,829	5,500	..	1,162	8,831
Dec. ....	(524)	(1,593)	(9,342)	7,155	..	1,673	(8,273)
1992 - Jan. ....	(22)	(559)	(6,657)	10,459	..	-1,421	(6,120)
<b>of which: Treasury bills</b>							
1989 .....	18,887	15,406	-6,464	..	..	1,342	-2,983
1990 .....	15,750	10,444	899	1,283	..	-49	6,205
1991 .....	(9,000)	(16,790)	(4,100)	375	..	-356	(-3,691)
1991 - Jan. ....	900	2,204	-2,431	-350	..	-2,021	-3,735
Feb. ....	1,000	1,017	2,827	681	..	1,078	2,810
Mar. ....	500	1,598	-1,207	-281	..	-948	-2,305
Apr. ....	..	1,296	-702	-366	..	55	-1,998
May ....	300	1,191	-460	-383	..	-155	-1,351
June ....	2,300	5,610	1,307	713	..	120	-2,003
July ....	1,400	42	-639	-817	..	-90	719
Aug. ....	600	1,888	1,495	644	..	40	207
Sept. ....	500	144	-604	139	..	-100	-248
Oct. ....	..	188	666	-234	..	..	478
Nov. ....	1,000	32	1,575	275	..	287	2,544
Dec. ....	(500)	(1,582)	(2,274)	354	..	1,378	(1,192)
1992 - Jan. ....	..	(485)	(-1,242)	1,432	..	-1,076	(-1,727)



Table a26

## Treasury bill auctions

	MATURING BILLS			Bills offered	Maturity (days)	Market demand	BILLS ALLOTTED AT AUCTION			Price	YIELDS	
	market	BI	total				market	BI	total		after-tax	gross
<b>3-month</b>												
1991 – end-Jan. ....	11,570	930	12,500	12,500	90	11,463	11,288	500	11,788	97.07	11.11	12.82
mid-Feb. ....	3,895	105	4,000	4,250	90	5,181	4,250	..	4,250	96.95	11.59	13.39
end- " ....	10,485	15	10,500	11,500	91	12,889	11,500	..	11,500	96.90	11.66	13.46
mid-Mar. ....	4,905	345	5,250	5,500	92	6,176	5,200	300	5,500	96.83	11.81	13.63
end- " ....	12,470	30	12,500	12,000	91	14,757	12,000	..	12,000	97.07	10.98	12.67
mid-Apr. ....	4,175	75	4,250	4,250	91	6,664	4,250	..	4,250	97.06	11.02	12.71
end- " ....	10,991	797	11,788	11,000	91	12,758	11,000	..	11,000	97.11	10.82	12.48
mid-May ....	4,235	15	4,250	4,000	93	6,203	4,000	..	4,000	97.11	10.57	12.20
end- " ....	11,430	70	11,500	11,500	92	12,673	11,200	300	11,500	97.19	10.38	11.97
mid-June ....	5,115	385	5,500	4,500	94	4,923	4,500	..	4,500	97.13	10.38	11.97
end- " ....	11,975	25	12,000	12,000	94	13,068	12,000	..	12,000	97.06	10.65	12.29
mid-July ....	4,245	5	4,250	4,500	92	5,833	4,500	..	4,500	97.09	10.77	12.43
end- " ....	10,985	15	11,000	11,500	92	13,344	11,500	..	11,500	97.07	10.85	12.52
mid-Aug. ....	4,000	..	4,000	4,500	90	6,578	4,500	..	4,500	97.11	10.95	12.63
end- " ....	10,980	520	11,500	12,500	91	14,349	12,500	..	12,500	97.06	11.02	12.71
mid-Sept. ....	4,419	81	4,500	5,000	91	8,226	5,000	..	5,000	97.15	10.66	12.30
end- " ....	11,985	15	12,000	13,000	92	14,144	13,000	..	13,000	97.16	10.50	12.11
mid-Oct. ....	4,475	25	4,500	4,750	92	6,976	4,750	..	4,750	97.16	10.50	12.11
end- " ....	11,420	80	11,500	11,500	92	12,655	11,500	..	11,500	97.19	10.38	11.97
mid-Nov. ....	4,480	20	4,500	5,000	92	6,527	5,000	..	5,000	97.15	10.54	12.16
end- " ....	12,500	..	12,500	13,500	91	12,820	12,500	1,000	13,500	97.02	11.18	12.90
mid-Dec. ....	4,922	78	5,000	5,000	91	6,068	5,000	..	5,000	96.89	11.70	13.51
end- " ....	12,896	104	13,000	13,000	91	15,430	13,000	..	13,000	96.79	12.11	13.98
1992 – mid-Jan. ....	4,650	100	4,750	5,000	91	8,291	5,000	..	5,000	97.11	10.82	12.48
end- " ....	11,405	95	11,500	11,750	91	12,018	11,750	..	11,750	97.20	10.46	12.07
mid-Feb. ....	4,995	5	5,000	5,000	91	6,318	5,000	..	5,000	97.10	10.86	12.53
<b>6-month</b>												
1991 – end-Jan. ....	12,500	..	12,500	12,750	181	15,812	12,750	..	12,750	94.15	11.18	12.93
mid-Feb. ....	4,748	502	5,250	5,500	183	5,544	5,499	..	5,499	94.05	11.25	13.02
end- " ....	13,463	30	13,493	14,500	183	14,925	14,000	500	14,500	93.93	11.50	13.30
mid-Mar. ....	4,455	45	4,500	5,000	186	5,856	5,000	..	5,000	93.88	11.41	13.19
end- " ....	13,692	308	14,000	14,000	185	17,323	14,000	..	14,000	94.21	10.80	12.49
mid-Apr. ....	5,685	65	5,750	5,750	183	6,337	5,750	..	5,750	94.30	10.74	12.42
end- " ....	14,870	130	15,000	15,500	183	16,055	15,500	..	15,500	94.35	10.64	12.30
mid-May ....	4,384	116	4,500	4,500	183	6,146	4,500	..	4,500	94.41	10.52	12.16
end- " ....	10,656	844	11,500	11,000	183	13,204	11,000	..	11,000	94.61	10.12	11.68
mid-June ....	2,980	1,575	4,555	4,000	185	4,628	4,000	..	4,000	94.59	10.04	11.60
end- " ....	11,671	2,388	14,059	14,000	186	13,304	12,700	1,300	14,000	94.46	10.24	11.83
mid-July ....	5,250	..	5,250	5,500	184	5,421	5,421	..	5,421	94.35	10.58	12.23
end- " ....	12,730	20	12,750	12,500	184	13,944	12,500	..	12,500	94.28	10.72	12.39
mid-Aug. ....	5,304	195	5,499	6,000	182	6,240	6,000	..	6,000	94.19	11.03	12.75
end- " ....	13,995	505	14,500	14,500	182	14,951	14,500	..	14,500	94.10	11.22	12.97
mid-Sept. ....	4,990	10	5,000	5,250	182	8,873	5,250	..	5,250	94.18	11.05	12.78
end- " ....	13,987	13	14,000	14,000	183	17,183	14,000	..	14,000	94.34	10.66	12.32
mid-Oct. ....	5,720	30	5,750	6,000	183	7,807	6,000	..	6,000	94.37	10.60	12.25
end- " ....	15,500	..	15,500	15,750	183	16,858	15,750	..	15,750	94.48	10.38	11.99
mid-Nov. ....	4,492	8	4,500	5,000	183	6,086	5,000	..	5,000	94.45	10.44	12.06
end- " ....	10,998	2	11,000	11,500	182	11,805	11,500	..	11,500	94.33	10.74	12.42
mid-Dec. ....	4,000	..	4,000	4,000	182	4,290	4,000	..	4,000	94.19	11.03	12.75
end- " ....	12,600	1,400	14,000	13,500	182	13,389	13,000	500	13,500	93.91	11.61	13.43
1992 – mid-Jan. ....	5,216	205	5,421	5,000	182	9,253	5,000	..	5,000	94.14	11.13	12.87
end- " ....	12,500	..	12,500	12,250	182	16,517	12,250	..	12,250	94.53	10.34	11.94
mid-Feb. ....	5,839	161	6,000	6,000	182	6,826	6,000	..	6,000	94.51	10.38	11.99

Table a26 cont.

## Treasury bill auctions

	MATURING BILLS			Bills offered	Maturity (days)	Market demand	BILLS ALLOTTED AT AUCTION			Price	YIELDS		
	market	BI	total				market	BI	total		after-tax	gross	
<b>12-month</b>													
1991 –	end-Jan.	13,750	..	13,750	13,750	365	14,540	13,750	..	13,750	88.55	11.13	12.93
	mid-Feb.	4,695	55	4,750	5,250	365	4,868	4,750	500	5,250	88.40	11.30	13.12
	end- "	13,690	310	14,000	14,000	365	14,492	14,000	..	14,000	88.35	11.35	13.19
	mid-Mar.	3,155	845	4,000	4,500	368	5,129	4,300	200	4,500	88.20	11.42	13.27
	end- "	11,975	25	12,000	12,500	368	15,787	12,500	..	12,500	88.90	10.67	12.38
	mid-Apr.	3,521	229	3,750	3,750	366	4,778	3,750	..	3,750	89.05	10.57	12.26
	end- "	10,000	..	10,000	10,500	366	11,420	10,500	..	10,500	89.20	10.41	12.07
	mid-May	2,859	141	3,000	3,500	366	4,074	3,500	..	3,500	89.15	10.46	12.14
	end- "	6,995	5	7,000	7,500	365	8,566	7,500	..	7,500	89.55	10.06	11.67
	mid-June	2,246	254	2,500	3,000	367	2,772	2,700	300	3,000	89.50	10.06	11.67
	end- "	9,018	982	10,000	10,000	368	9,290	9,185	700	9,885	89.25	10.30	11.95
	mid-July	2,500	..	2,500	2,500	366	3,245	2,500	..	2,500	89.35	10.25	11.89
	end- "	10,498	2	10,500	11,000	366	10,006	9,600	1,400	11,000	89.20	10.41	12.07
	mid-Aug.	2,500	..	2,500	2,500	364	2,852	2,500	..	2,500	89.15	10.52	12.20
	end- "	9,332	668	10,000	10,000	367	9,574	9,400	600	10,000	89.00	10.59	12.29
	mid-Sept.	2,725	25	2,750	3,000	365	3,705	3,000	..	3,000	88.95	10.70	12.42
	end- "	10,500	..	10,500	11,000	366	11,524	10,500	500	11,000	88.90	10.73	12.45
	mid-Oct.	3,750	..	3,750	3,750	366	6,890	3,750	..	3,750	89.05	10.57	12.26
	end- "	11,447	53	11,500	12,500	366	13,944	12,500	..	12,500	89.25	10.35	12.01
	mid-Nov.	3,500	..	3,500	4,000	368	4,628	4,000	..	4,000	89.10	10.46	12.13
	end- "	9,631	2	9,633	10,000	367	9,829	9,829	..	9,829	88.80	10.81	12.54
	mid-Dec.	2,500	..	2,500	2,500	365	3,476	2,500	..	2,500	88.85	10.81	12.55
	end- "	11,250	..	11,250	11,750	365	12,957	11,750	..	11,750	88.55	11.13	12.93
1992 –	mid-Jan.	4,415	85	4,500	4,750	366	7,734	4,750	..	4,750	88.75	10.89	12.64
	end- "	13,750	..	13,750	14,000	365	16,997	14,000	..	14,000	89.30	10.33	11.98
	mid-Feb.	5,164	86	5,250	5,500	364	6,410	5,500	..	5,500	89.35	10.30	11.95
<b>Total</b>													
1991 –	end-Jan.	37,820	930	38,750	39,000	–	41,815	37,788	500	38,288	–	11.14	12.90
	mid-Feb.	13,338	662	14,000	15,000	–	15,593	14,499	500	14,999	–	11.37	13.16
	end- "	37,638	355	37,993	40,000	–	42,306	39,500	500	40,000	–	11.49	13.31
	mid-Mar.	12,515	1,235	13,750	15,000	–	17,161	14,500	500	15,000	–	11.56	13.38
	end- "	38,137	363	38,500	38,500	–	47,867	38,500	..	38,500	–	10.81	12.51
	mid-Apr.	13,381	369	13,750	13,750	–	17,779	13,750	..	13,750	–	10.78	12.47
	end- "	35,861	927	36,788	37,000	–	40,233	37,000	..	37,000	–	10.63	12.29
	mid-May	11,478	272	11,750	12,000	–	16,423	12,000	..	12,000	–	10.52	12.17
	end- "	29,081	919	30,000	30,000	–	34,443	29,700	300	30,000	–	10.20	11.79
	mid-June	10,341	2,214	12,555	11,500	–	12,323	11,200	300	11,500	–	10.18	11.76
	end- "	32,664	3,395	36,059	36,000	–	35,662	33,885	2,000	35,885	–	10.39	12.02
	mid-July	11,995	5	12,000	12,500	–	14,499	12,421	..	12,421	–	10.58	12.23
	end- "	34,213	37	34,250	35,000	–	37,294	33,600	1,400	35,000	–	10.67	12.33
	mid-Aug.	11,804	195	11,999	13,000	–	15,670	13,000	..	13,000	–	10.90	12.60
	end- "	34,307	1,693	36,000	37,000	–	38,874	36,400	600	37,000	–	10.98	12.70
	mid-Sept.	12,134	116	12,250	13,250	–	20,804	13,250	..	13,250	–	10.82	12.52
	end- "	36,472	28	36,500	38,000	–	42,851	37,500	500	38,000	–	10.62	12.29
	mid-Oct.	13,945	55	14,000	14,500	–	21,673	14,500	..	14,500	–	10.56	12.21
	end- "	38,367	133	38,500	39,750	–	43,457	39,750	..	39,750	–	10.37	11.99
	mid-Nov.	12,472	28	12,500	14,000	–	17,241	14,000	..	14,000	–	10.48	12.12
	end- "	33,129	4	33,133	35,000	–	34,454	33,829	1,000	34,829	–	10.93	12.64
	mid-Dec.	11,422	78	11,500	11,500	–	13,834	11,500	..	11,500	–	11.27	13.04
	end- "	36,746	1,504	38,250	38,250	–	41,776	37,750	500	38,250	–	11.63	13.46
1992 –	mid-Jan.	14,281	390	14,671	14,750	–	25,278	14,750	..	14,750	–	10.95	12.66
	end- "	37,655	95	37,750	38,000	–	45,532	38,000	..	38,000	–	10.37	11.99
	mid-Feb.	15,997	253	16,250	16,500	–	19,554	16,500	..	16,500	–	10.50	12.14

Table a27

## Bank of Italy repurchase agreements

	AMOUNT		MATURITY (DAYS)		YIELDS	
	offered	taken up	minimum	maximum	marginal	weighted average
1991 – July 24 .....	5,000	5,000	7	8	10.10	10.12
1991 – " 25 .....	7,000	4,785	6	14	10.00	10.04
1991 – " 29 .....	1,000	1,000	2	14	10.00	10.05
1991 – Aug. 5 .....	3,000	3,000	8	11	10.10	10.15
1991 – " 9 .....	1,000	1,000	5	5	10.15	10.18
1991 – " 13 .....	6,500	6,500	3	20	10.15	10.20
1991 – " 22 .....	4,000	4,000	7	21	10.10	10.17
1991 – " 23 .....	4,000	4,000	7	10	10.00	10.10
1991 – " 26 .....	2,000	1,950	8	8	10.00	10.05
1991 – Sept. 2 .....	3,000	3,000	9	10	10.10	10.15
1991 – " 5 .....	1,500	1,500	11	11	10.25	10.25
1991 – " 17 .....	1,500	1,500	13	16	10.30	10.31
1991 – " 23 .....	3,000	3,000	5	14	10.15	10.22
1991 – " 25 .....	5,000	5,000	6	6	10.00	10.09
1991 – Oct. 3 .....	2,250	2,250	8	8	10.10	10.18
1991 – " 23 .....	6,000	6,000	4	14	10.85	11.09
1991 – " 24 .....	6,000	6,000	5	11	10.55	10.76
1991 – Nov. 5 .....	3,750	3,750	3	16	10.50	10.60
1991 – " 11 .....	1,500	1,500	9	9	10.75	10.76
1991 – " 18 .....	4,000	4,000	9	24	11.20	11.29
1991 – " 21 .....	3,000	3,000	25	25	11.50	11.60
1991 – " 22 .....	4,000	4,000	4	22	11.55	11.62
1991 – " 25 .....	7,500	7,500	3	3	11.70	11.75
1991 – " 27 .....	2,000	2,000	21	21	12.10	12.26
1991 – " 28 .....	3,000	3,000	21	21	12.35	12.46
1991 – Dec. 2 .....	3,000	3,000	18	18	12.45	12.56
1991 – " 3 .....	5,500	5,500	8	17	12.25	12.40
1991 – " 5 .....	3,250	3,250	13	13	12.40	12.48
1991 – " 16 .....	4,000	4,000	22	22	12.15	12.31
1991 – " 19 .....	6,000	6,000	20	21	12.25	12.34
1991 – " 23 .....	5,000	5,000	10	10	13.05	13.23
1991 – " 30 .....	8,000	8,000	8	8	12.50	13.08
1992 – Jan. 7 .....	9,000	9,000	14	14	12.05	12.41
1992 – " 8 .....	4,000	4,000	26	26	12.10	12.22
1992 – " 9 .....	3,000	3,000	27	27	12.00	12.09
1992 – " 21 .....	8,500	8,500	28	28	11.50	11.74
1992 – " 23 .....	7,000	7,000	28	28	11.55	11.66
1992 – " 27 .....	8,500	7,459	16	16	11.50	11.76
1992 – " 30 .....	3,500	3,500	18	18	11.60	11.68
1992 – Feb. 3 .....	2,500	2,500	15	15	11.70	11.75
1992 – " 4 .....	3,000	3,000	15	15	11.85	11.92
1992 – " 5 .....	4,000	4,000	16	16	11.95	12.02
1992 – " 7 .....	2,500	2,500	25	25	11.90	11.95
1992 – " 17 .....	5,000	5,000	23	23	11.95	12.02
1992 – " 18 .....	11,000	11,000	17	17	11.90	11.98
1992 – " 19 .....	5,000	5,000	28	29	11.95	12.00

Table a28

**Bank of Italy financing of purchases at Treasury bill auctions**  
(billions of lire)

		Maximum amount	Actual amount	Maturity (days)
1989 – Dec.	15	2,880	558	7
1989 – "	29	3,601	2,070	4
1990 – Jan.	15	3,747	885	8
1990 – "	30	11,772	269	2
1990 – Feb.	14	4,396	628	7
1990 – "	28	9,265	723	1
1990 – Apr.	30	10,252	910	2
1990 – May	15	3,596	300	2
1990 – June	15	2,658	584	4
1990 – "	28	7,033	1,170	4
1990 – July	16	2,946	542	2
1990 – "	31	9,622	1,150	2
1990 – Aug.	16	3,268	55	5
1990 – "	31	8,172	250	3
1990 – Sept.	28	9,165	903	3
1990 – Oct.	15	4,175	87	2
1990 – "	30	10,216	610	3
1990 – Nov.	15	3,385	685	6
1990 – "	30	7,479	395	3
1990 – Dec.	14	2,187	782	7
1990 – "	31	8,536	2,005	2
1991 – Jan.	15	3,887	207	2
1991 – "	30	10,278	871	1
1991 – Feb.	14	3,916	477	4
1991 – "	28	9,804	1,078	8
1991 – Mar.	14	4,003	439	4
1991 – "	29	10,304	130	7
1991 – Apr.	15	3,904	500	4
1991 – "	30	9,530	185	2
1991 – May	15	3,559	..	5
1991 – "	30	7,762	30	8
1991 – June	14	2,850	30	4
1991 – "	28	7,597	150	11
1991 – July	30	8,104	60	8
1991 – Aug.	30	9,304	100	10
1991 – Sept.	16	4,076	..	7
1991 – "	30	8,736	..	4
1991 – Oct.	15	4,606	..	2
1991 – "	30	9,871	..	5
1991 – Nov.	14	4,038	80	4
1991 – "	29	7,645	287	7
1991 – Dec.	16	2,884	..	8
1991 – "	31	9,553	1,665	7
1992 – Jan.	15	4,653	..	5
1992 – "	30	11,016	649	4
1992 – Feb.	14	5,074	798	7



Table a29

## Bank of Italy reverse repurchase agreements

	AMOUNT		MATURITY (DAYS)		YIELDS	
	offered	taken up	minimum	maximum	marginal	weighted average
1989 – Oct. 6 .....	2,000	2,000	19	25	13.00	12.74
1989 – " 11 .....	1,750	1,750	14	20	12.90	12.80
1989 – " 12 .....	1,500	1,500	13	19	12.60	12.46
1989 – " 13 .....	1,750	1,750	12	18	12.70	12.52
1989 – " 18 .....	1,000	1,000	7	7	12.45	12.26
1989 – Nov. 3 .....	1,500	1,500	12	12	11.70	11.33
1989 – " 7 .....	1,500	1,500	8	8	12.70	12.48
1989 – " 15 .....	4,500	4,500	12	15	11.95	11.78
1989 – " 17 .....	1,500	1,500	7	18	12.40	11.95
1990 – Jan. 11 .....	1,500	1,500	13	14	12.65	12.55
1990 – Mar. 7 .....	2,000	2,000	16	19	13.00	12.84
1990 – " 12 .....	2,500	2,500	7	11	12.80	12.69
1990 – Apr. 2 .....	5,000	5,000	15	15	10.70	10.47
1990 – " 3 .....	3,500	3,500	2	2	7.20	4.74
1990 – " 4 .....	3,000	3,000	22	26	11.55	11.35
1990 – " 6 .....	2,000	2,000	11	24	11.90	11.63
1990 – " 13 .....	3,000	3,000	13	17	10.65	10.52
1990 – " 17 .....	2,500	2,500	9	10	11.45	11.22
1990 – " 18 .....	3,000	3,000	8	9	10.90	10.41
1990 – " 19 .....	1,500	1,500	7	8	11.95	11.74
1990 – " 20 .....	1,000	1,000	6	7	10.50	10.46
1990 – " 30 .....	1,000	1,000	28	30	10.90	10.55
1990 – May 2 .....	2,500	2,500	26	29	10.75	10.56
1990 – " 9 .....	1,000	1,000	16	21	11.95	11.62
1990 – " 11 .....	3,000	3,000	13	19	12.30	12.02
1990 – Sept. 5 .....	3,000	3,000	9	9	7.10	6.69
1990 – " 7 .....	2,500	2,500	7	7	6.00	5.80
1990 – " 11 .....	2,000	2,000	17	17	8.80	8.24
1990 – " 13 .....	4,000	4,000	12	15	8.20	7.78
1990 – " 14 .....	3,000	3,000	11	14	7.20	6.97
1990 – " 18 .....	3,000	3,000	7	7	5.60	5.19
1990 – " 19 .....	1,250	1,250	6	9	5.10	4.98
1990 – Oct. 1 .....	7,500	6,642	14	24	10.50	9.46
1990 – " 5 .....	1,000	1,000	17	26	10.60	10.33
1990 – " 10 .....	1,000	1,000	21	21	11.35	11.16
1990 – " 11 .....	750	750	20	20	11.40	11.11
1990 – " 12 .....	1,750	1,750	13	19	11.30	11.09
1990 – " 15 .....	2,000	2,000	10	10	10.90	10.78
1990 – Nov. 8 .....	1,500	1,500	11	15	11.75	11.45
1990 – " 13 .....	750	450	10	10	13.35	13.20
1990 – " 15 .....	1,000	1,000	8	8	13.55	13.33
1990 – " 29 .....	2,250	1,035	5	5	14.10	13.91
1991 – Jan. 8 .....	750	750	23	23	12.65	12.64
1991 – " 10 .....	3,000	3,000	13	14	12.45	12.37
1991 – " 11 .....	3,000	3,000	12	13	12.05	11.82
1991 – Feb. 1 .....	2,000	2,000	4	4	15.00	14.15

Table a30

## Interest rates

	BI OPERATIONS						TREASURY BILLS			
	Base	Fixed term advances	Repurchase agreements				3-month	6-month	12-month	Average
			Purchases		Sales					
			minimum	average	maximum	average				
1988 .....	12.50	12.63	12.02	12.19	11.47	11.18	11.17	11.06	11.17	11.13
1989 .....	13.50	13.74	12.78	13.17	12.44	12.21	12.65	12.55	12.55	12.58
1990 .....	12.50	13.49	11.52	11.90	11.29	11.02	12.28	12.33	12.53	12.38
1991 – Jan. ....	12.50	13.04	11.67	11.97	12.38	12.28	12.88	13.17	12.97	13.01
Feb. ....	12.50	12.86	11.78	11.97	15.00	14.15	13.44	13.22	13.17	13.27
Mar. ....	12.50	13.05	10.72	10.92	–	–	12.96	12.67	12.61	12.75
Apr. ....	12.50	–	10.23	10.40	–	–	12.54	12.33	12.12	12.34
May ....	11.50	11.50	10.03	10.10	–	–	12.03	11.82	11.82	11.90
June ...	11.50	11.50	10.03	10.07	–	–	12.20	11.77	11.89	11.95
July ....	11.50	11.50	10.06	10.11	–	–	12.49	12.34	12.03	12.31
Aug. ....	11.50	11.50	10.08	10.14	–	–	12.69	12.91	12.27	12.67
Sept. ...	11.50	11.50	10.16	10.20	–	–	12.16	12.45	12.44	12.35
Oct. ....	11.50	11.50	10.50	10.68	–	–	12.01	12.06	12.07	12.05
Nov. ....	11.50	12.00	11.46	11.54	–	–	12.69	12.31	12.42	12.49
Dec. ....	12.00	12.50	12.44	12.63	–	–	13.85	13.27	12.86	13.36
1992 – Jan. ....	12.00	12.50	11.76	11.94	–	–	12.19	12.21	12.15	12.18

Table a31

## Short-term bank interest rates

	Interbank operations					Customer operations						ABI prime rate
	Sight deposits	Over-night	1-month	3-month	3-month Euro/lira	Deposits		Certificates of deposit		Loans		
						Maximum	Average	6-month	12-month	Minimum	Average	
1988 .....	11.73	11.76	–	–	11.91	9.62	6.77	9.98	10.06	12.34	13.67	13.00
1989 .....	12.76	13.39	–	12.83	12.69	9.93	7.02	10.75	10.54	12.99	14.18	14.00
1990 .....	12.40	14.52	14.39	13.45	12.35	9.67	6.73	10.50	10.59	12.37	13.77	13.00
1991 – Jan. ....	13.20	13.24	13.46	13.13	12.13	9.76	6.83	10.53	10.53	12.47	14.01	13.13
Feb. ....	13.35	13.79	13.73	13.30	12.17	9.85	6.89	10.57	10.52	12.68	14.24	13.50
Mar. ....	13.15	12.55	12.73	12.51	11.86	9.92	6.94	10.59	10.59	12.79	14.28	13.50
Apr. ....	12.45	11.41	11.91	11.90	11.39	9.88	6.87	10.53	10.56	12.67	14.22	13.38
May ....	11.74	11.28	11.53	11.46	11.06	9.66	6.65	10.43	10.49	12.43	14.10	12.63
June ...	11.36	11.46	11.50	11.47	11.06	9.44	6.34	10.21	10.26	12.08	13.73	12.50
July ....	11.27	11.31	11.60	11.73	11.18	9.45	6.42	10.21	10.29	11.97	13.59	12.50
Aug. ....	11.51	11.63	11.78	11.86	11.41	9.47	6.44	10.24	10.28	12.01	13.66	12.50
Sept. ...	11.43	10.63	11.46	11.61	11.25	9.50	6.48	10.37	10.32	12.04	13.72	12.50
Oct. ....	11.31	11.05	11.21	11.46	11.08	9.57	6.54	10.46	10.35	12.00	13.68	12.50
Nov. ....	11.30	11.48	11.71	11.63	11.34	9.60	6.58	10.46	10.27	11.99	13.64	12.50
Dec. ....	12.25	12.30	13.10	12.47	12.28	9.66	6.67	10.46	10.29	12.11	13.83	13.00
1992 – Jan. ....	(12.35)	12.26	12.26	12.00	11.71	(9.76)	(6.78)	(10.48)	(10.34)	(12.43)	(14.12)	13.00

Table a32

## Principal assets and liabilities of banks

(billions of lire)

	ASSETS										
	Bank reserves	Loans		Securities			Shares and equity interests	Bad debts	Interbank accounts	Accounts with special credit institutions	Interest-bearing external assets
		in lire	in foreign currency	of which:							
				Treasury bills	Other government securities						
1987 .....	98,085	263,248	33,889	220,992	23,583	121,030	12,979	24,205	92,842	9,386	73,682
1988 .....	106,721	307,815	43,602	208,701	20,939	118,542	14,641	24,944	88,645	9,485	80,268
1989 .....	116,814	374,248	52,935	200,395	22,171	112,658	19,599	26,166	104,171	10,420	100,608
1990 .....	128,781	437,408	58,511	191,134	25,161	108,130	21,482	28,269	82,414	9,327	100,960
1991 - Jan. ...	131,411	432,515	57,235	158,384	15,001	87,708	21,187	28,797	59,419	8,054	96,129
Feb. ...	134,339	429,862	58,126	148,610	13,302	80,091	21,389	29,070	59,042	7,654	96,433
Mar. ...	133,983	424,884	61,209	152,444	14,157	82,067	20,568	29,328	59,016	8,484	104,402
Apr. ...	133,485	432,510	61,042	155,597	15,082	86,236	20,845	29,641	55,947	8,408	95,545
May ...	133,653	437,867	63,243	157,346	14,553	90,100	21,348	29,951	62,711	8,269	98,771
June ..	123,864	447,894	67,663	163,252	18,233	93,068	21,572	30,087	58,216	9,653	103,370
July ...	128,150	464,238	68,917	153,579	14,368	90,107	22,382	31,103	52,748	8,391	96,982
Aug. ...	127,139	452,634	68,958	158,067	17,208	91,331	22,043	31,825	53,583	7,345	93,848
Sept. ...	124,731	455,339	69,060	171,653	20,758	99,908	22,585	32,876	64,912	7,828	97,693
Oct. ...	129,492	463,270	70,895	175,742	22,050	103,860	22,829	33,619	66,141	8,188	98,134
Nov. ...	130,898	468,355	70,924	177,092	22,288	104,184	23,293	33,725	66,755	10,115	101,880
Dec. ...	(132,612)	(499,355)	(69,424)	(194,092)	(25,788)	....	....	....	....	....	....
1992 - Jan. ...	....	(494,055)	(73,424)	....	....	....	....	....	....	....	....
	LIABILITIES										
		Deposits		Resi- dents' foreign currency accounts	Funds managed for public bodies	Loans from BI-UIC	Interbank accounts	Accounts with special credit insti- tutions	Capital and reserves	Interest bearing external liabilities	Other items
		of which:									
		current accounts	CDs								
1987 .....	531,819	299,903	31,968	1,012	2,220	5,718	103,966	5,777	72,433	103,828	2,536
1988 .....	571,564	324,769	55,929	2,203	1,834	5,730	98,018	5,787	77,740	122,999	-1,054
1989 .....	625,348	358,420	86,093	2,908	1,534	6,298	119,609	6,337	87,468	152,955	2,899
1990 .....	686,279	390,416	119,956	4,097	1,724	7,563	89,747	7,141	95,695	158,049	7,991
1991 - Jan. ...	651,555	356,733	124,555	4,412	1,768	4,928	65,040	7,030	107,153	154,156	-2,912
Feb. ...	645,493	350,714	127,225	4,309	1,732	7,854	62,950	6,637	106,284	153,496	-4,230
Mar. ...	649,292	354,521	129,471	4,476	1,689	4,812	65,208	7,431	107,661	159,205	-5,458
Apr. ...	654,699	360,317	130,843	4,158	1,715	4,854	60,616	6,260	108,032	152,069	617
May ...	646,501	351,507	133,863	3,887	1,731	4,959	67,168	4,222	107,904	161,686	15,101
June ..	662,288	365,567	135,296	3,838	1,726	5,262	65,835	5,806	108,157	175,536	-2,875
July ...	657,645	361,174	137,915	4,051	1,758	6,283	59,107	5,475	110,353	175,429	6,389
Aug. ...	653,894	356,480	140,339	4,417	1,717	4,652	59,403	5,753	109,794	175,737	75
Sept. ...	669,403	369,888	144,156	4,675	1,678	3,815	70,116	6,610	109,778	177,033	3,569
Oct. ...	675,957	373,780	148,562	4,752	1,717	2,366	70,654	5,460	110,260	180,753	16,395
Nov. ...	674,908	371,775	150,951	5,076	1,746	3,340	71,023	6,278	110,293	186,817	23,556
Dec. ...	(746,108)	(430,775)	(153,551)	....	....	8,826	....	....	....	....	....
1992 - Jan. ...	(697,408)	(384,775)	(160,451)	....	....	....	....	....	....	....	....

Table a33

## Principal assets and liabilities of the special credit institutions

(billions of lire)

	ASSETS							
	Cash and liquid assets	Loans		Securities	Shares and equity interests	Foreign assets		
		domestic	on behalf of the Treasury			buyer credit	loans to non-residents	other
1987 .....	5,159	175,788	5,036	15,247	3,452	4,064	297	1,487
1988 .....	5,461	202,951	3,879	16,880	3,949	4,123	551	1,621
1989 .....	5,099	238,558	2,791	13,875	4,481	4,344	1,280	4,056
1990 – Dec. ....	5,504	277,402	1,708	15,909	4,867	5,476	1,311	3,857
1991 – Jan. ....	7,217	277,897	1,309	16,699	4,853	5,366	1,419	3,858
Feb. ....	6,363	281,901	1,309	16,301	4,841	5,425	1,525	3,695
Mar. ....	7,599	285,812	1,309	16,090	4,846	5,895	1,421	4,522
Apr. ....	7,025	288,709	1,309	17,329	4,893	5,955	1,474	4,409
May ....	5,096	292,553	1,309	17,505	4,891	6,025	1,430	4,383
June ....	5,386	291,751	963	18,439	5,094	6,177	1,421	4,412
July ....	5,458	296,729	963	20,402	5,091	6,098	1,661	4,251
Aug. ....	6,090	299,997	963	19,632	5,090	6,143	1,634	4,233
Sept. ....	6,977	301,247	963	19,807	5,160	6,249	1,800	4,732
Oct. ....	5,551	305,010	963	19,885	5,160	6,299	1,833	4,650
Nov. ....	6,490	310,074	963	18,907	5,457	6,242	1,829	4,710
Dec. ....	....	(314,485)	....	....	....	....	....	....

	LIABILITIES								
	Bonds		Certificates of deposit	Short-term financing	Public funds	Mediocredito centrale	Capital and reserves	Foreign liabilities	Other
	ordinary	on behalf of the Treasury							
1988 .....	121,239	3,949	43,837	6,656	7,911	3,541	25,957	36,528	-10,202
1989 .....	129,378	2,863	52,804	8,016	8,806	4,237	28,365	52,730	-12,715
1990 – Dec. ....	135,590	1,759	64,836	8,478	9,323	4,149	30,867	74,144	-13,112
1991 – Jan. ....	136,180	1,339	64,629	8,007	9,392	4,158	30,867	74,410	-10,365
Feb. ....	137,649	1,320	65,166	6,535	9,344	4,176	30,867	76,753	-10,451
Mar. ....	137,874	1,318	65,435	7,106	9,348	4,034	32,203	81,146	-10,970
Apr. ....	140,163	1,318	66,188	7,354	9,340	4,127	32,203	84,380	-13,969
May ....	141,361	1,316	66,206	8,156	9,316	4,144	32,203	84,493	-14,002
June ....	141,841	1,316	68,438	7,867	9,292	4,198	33,199	86,069	-18,576
July ....	142,042	1,006	68,394	8,390	9,206	4,237	33,199	86,944	-12,765
Aug. ....	143,340	991	69,208	7,043	8,985	4,318	33,199	87,991	-11,291
Sept. ....	145,132	984	69,109	7,138	9,215	4,126	33,404	88,555	-10,728
Oct. ....	146,769	984	69,779	6,088	9,300	4,217	33,404	90,084	-11,274
Nov. ....	148,970	981	70,246	7,293	9,224	4,275	33,404	91,715	-11,436

Table a34

## Loans by branch of economic activity

(billions of lire; percentage changes)

November 1991

	BANKS				SPECIAL CREDIT INSTITUTIONS			
	Enterprises		Producer households		Enterprises		Producer households	
	Out-standing	12-month % change	Out-standing	12-month % change	Out-standing	12-month % change	Out-standing	12-month % change
Agricultural, forestry and fishery products .....	9,980	7.0	6,043	13.1	7,447	0.2	5,173	9.6
Energy products .....	6,259	6.9	53	10.4	7,986	18.6	12	33.3
Ferrous and non-ferrous ores and metals .....	6,072	-14.8	289	5.1	3,275	3.9	26	23.8
Non-metallic mineral products .....	8,649	15.4	1,661	11.4	3,909	10.5	216	15.5
Chemical products .....	9,049	1.3	397	11.2	4,069	-4.2	44	15.8
Metal products except machinery and transport equipment .....	13,302	13.5	4,255	13.6	4,497	11.6	353	21.3
Agricultural and industrial machinery	14,671	9.6	1,821	9.0	8,539	5.2	355	7.9
Office and data processing machines; precision and optical instruments .	3,279	-21.3	317	19.2	2,056	-10.8	32	28.0
Electrical goods .....	11,556	21.1	1,003	17.6	5,001	7.8	91	26.4
Motor vehicles .....	6,588	24.9	548	13.2	5,405	12.0	71	12.7
Food products, beverages and tobacco products .....	16,489	9.7	2,531	9.7	8,056	9.0	550	17.8
Textiles, leathers, footwear and clothing .....	25,411	4.6	5,409	7.9	4,862	8.3	459	18.3
Paper, products of printing and publishing .....	7,097	4.9	1,262	11.8	3,566	21.2	111	22.0
Rubber and plastic products .....	5,093	5.6	1,123	7.4	1,591	13.3	94	25.3
Other manufacturing products .....	9,396	15.8	3,928	12.2	2,301	9.6	390	17.1
Building and construction .....	38,290	24.4	11,596	13.4	23,790	13.8	2,965	9.3
Wholesale and retail trade .....	56,066	13.2	24,763	11.1	10,934	19.2	4,404	15.7
Lodging and catering services .....	4,276	23.7	3,289	20.7	3,802	24.2	1,906	20.3
Inland transport services .....	5,505	9.7	2,554	8.5	15,044	24.8	165	27.9
Maritime and air transport services .	1,505	16.7	54	10.2	1,970	3.6	5	-66.7
Auxiliary transport services .....	2,890	49.4	296	12.5	2,082	-0.7	49	28.9
Communication services .....	685	30.2	14	..	10,207	9.3	1	....
Other market services .....	36,152	37.2	6,454	25.6	16,565	22.8	1,620	27.3
TOTAL BORROWINGS .....	298,260	14.4	79,660	12.8	156,954	12.6	19,092	14.5
TOTAL FACILITIES GRANTED .....	543,504	9.1	106,969	11.5	210,065	11.0	20,809	13.1

**Italian investment  
securities portfolios**  
*(end-of-period balance sheet)*

	LIRA SECURITIES						
	Government securities				Bonds	Shares	TOTAL
	of which:						
	Treasury bills	Treasury bonds	Treasury credit certificates				
1988 .....	22,292	1,528	3,962	15,533	4,672	13,958	40,922
1989 .....	18,634	1,434	2,887	12,427	4,404	14,881	37,919
1990 .....	23,250	2,168	1,487	17,347	3,829	10,813	37,893
1991 .....	30,504	1,049	5,904	19,699	3,509	8,297	42,309
1989 – 4th qtr. ....	18,634	1,434	2,887	12,427	4,404	14,881	37,919
1990 – 1st qtr. ....	16,918	827	2,005	12,610	4,426	13,901	35,246
2nd " .....	21,043	601	2,679	15,758	4,314	15,708	41,065
3rd " .....	21,137	1,420	1,368	16,545	4,056	11,713	36,905
4th " .....	23,250	2,168	1,487	17,347	3,829	10,813	37,893
1991 – 1st qtr. ....	26,355	1,652	3,574	17,854	3,819	10,406	40,579
2nd " .....	28,562	1,052	5,030	18,951	3,866	10,277	42,705
3rd " .....	29,517	1,139	4,681	19,905	3,796	9,280	42,593
4th " .....	30,504	1,049	5,904	19,699	3,509	8,297	42,309
1990 – Dec. ....	23,250	2,168	1,487	17,347	3,829	10,813	37,893
1991 – Jan. ....	22,746	1,333	1,818	17,152	3,775	9,792	36,312
Feb. ....	23,843	1,568	2,642	16,836	3,814	10,643	38,300
Mar. ....	26,355	1,652	3,574	17,854	3,819	10,406	40,579
Apr. ....	27,463	1,227	3,826	18,800	3,824	10,062	41,348
May ....	28,510	945	5,005	18,992	3,881	10,507	42,897
June ....	28,562	1,052	5,030	18,951	3,866	10,277	42,705
July ....	28,340	1,154	4,037	19,687	3,722	9,975	42,037
Aug. ....	29,261	1,130	4,224	20,142	3,678	9,566	42,505
Sept. ....	29,517	1,139	4,681	19,905	3,796	9,280	42,593
Oct. ....	30,043	826	5,328	20,574	3,610	8,675	42,328
Nov. ....	30,348	1,110	5,643	19,745	3,513	8,608	42,470
Dec. ....	30,504	1,049	5,904	19,699	3,509	8,297	42,309

Table a35

**funds:  
and net assets**  
*values; billions of lire)*

FOREIGN CURRENCY SECURITIES		Other financial assets	Total portfolio	NET ASSETS	Memorandum items:	
	of which: shares				Gross sales	Net sales
7,922	3,485	638	49,482	51,565	6,279	-12,960
6,905	4,940	1,053	45,877	49,165	10,020	-6,663
5,428	3,869	1,138	44,459	47,379	15,146	828
8,373	5,213	(938)	(51,620)	(56,191)	(21,859)	(5,211)
6,905	4,940	1,053	45,877	49,165	2,386	-935
5,527	4,304	1,296	42,069	47,271	3,421	-1,318
5,609	4,437	1,155	47,830	50,353	3,792	-62
4,881	3,395	1,145	42,931	46,726	3,953	1,227
5,428	3,869	1,138	44,459	47,379	3,980	981
6,510	4,668	1,243	48,332	50,861	4,828	1,313
7,911	5,457	1,013	51,628	53,964	5,940	1,788
8,199	5,622	1,126	51,918	55,337	5,251	1,341
8,373	5,213	(938)	(51,620)	(56,191)	(5,840)	(769)
5,428	3,869	1,138	44,459	47,379	1,108	138
5,498	3,925	1,263	43,073	46,714	1,350	-15
5,998	4,216	1,195	45,493	49,379	1,639	619
6,510	4,668	1,243	48,332	50,861	1,839	709
6,989	4,985	1,090	49,428	51,723	1,676	472
7,515	5,269	937	51,350	53,365	2,054	504
7,911	5,457	1,013	51,628	53,964	2,210	812
7,969	5,502	1,197	51,203	54,509	2,235	704
8,155	5,558	1,241	51,901	55,275	1,583	616
8,199	5,622	1,126	51,918	55,337	1,433	21
8,438	5,523	981	51,748	55,653	2,142	282
8,210	5,197	1,043	51,723	55,844	2,086	305
8,373	5,213	(938)	(51,620)	(56,191)	(1,612)	(182)



Table a36

## Net issues of securities

*(billions of lire)*

	ISSUERS			Total bonds and government securities	INVESTORS					Shares
	Public sector	Special credit institutions	Public agencies and firms		BI-UIC	Deposits and Loans Fund	Banks	Investment funds	Other	
1986 .....	97,740	6,805	6,071	110,616	9,309	830	11,618	(27,866)	(60,994)	18,872
1987 .....	85,628	11,012	4,038	100,677	-3,085	485	5,975	(-2,971)	(100,274)	10,432
1988 .....	103,850	7,966	709	112,525	-1,050	252	-10,918	(-9,555)	(133,795)	9,697
1989 .....	108,588	8,205	35	116,828	4,975	-6	-9,060	-4,168	125,087	18,370
1990 .....	116,753	5,985	-2,592	120,147	-1,873	-577	-8,900	3,776	127,720	21,246
1991 .....	127,115	(15,572)	4,134	(146,821)	(15,720)	-344	....	6,722	....	(11,037)
1989-4th qtr. ...	34,721	2,544	408	37,674	7,875	93	17,390	-686	13,003	8,937
1990-1st qtr. ...	19,257	629	-448	19,438	-2,490	-221	-36,850	-1,857	60,856	3,112
2nd " ...	33,863	1,644	370	35,878	-3,671	-50	3,530	3,571	32,497	4,960
3rd " ...	19,525	1,036	-1,607	18,955	-6,502	-221	9,080	98	16,500	5,725
4th " ...	44,108	2,676	-907	45,877	10,791	-85	15,340	1,964	17,867	7,451
1991-1st qtr. ...	25,648	2,215	2,460	30,323	2,833	-167	(-39,460)	2,827	(64,290)	(2,580)
2nd " ...	33,902	(4,197)	403	(38,501)	-2,590	-33	(11,020)	2,169	(27,934)	(2,142)
3rd " ...	31,900	(1,861)	-205	(33,556)	-5,067	-95	(8,460)	1,029	(29,229)	(2,524)
4th " ...	35,665	(7,299)	1,476	(44,440)	(20,544)	-50	....	697	....	(3,792)
1990-Dec. ....	15,389	969	-584	15,775	4,521	-28	24,160	672	-13,550	4,050
1991-Jan. ....	3,905	507	107	4,519	2,077	-27	(-33,530)	-556	(36,555)	(1,506)
Feb. ....	11,513	1,482	2,359	15,354	6,411	-117	(-9,860)	1,007	(17,913)	(885)
Mar. ....	10,230	226	-6	10,451	-5,655	-23	(3,930)	2,376	(9,822)	(188)
Apr. ....	12,519	2,289	-296	14,512	-6,715	..	(3,100)	1,058	(17,069)	(654)
May ....	13,758	643	-61	14,340	-1,065	-8	(1,530)	867	(13,016)	(658)
June ....	7,625	(1,265)	760	(9,649)	5,191	-25	(6,390)	244	(-2,151)	(830)
July ....	7,805	(247)	-926	(7,126)	2,391	-68	(-10,020)	-105	(14,927)	(833)
Aug. ....	10,493	(564)	-260	(10,797)	39	-27	(4,660)	878	(5,246)	(341)
Sept. ....	13,603	(1,050)	981	(15,634)	-7,497	..	(13,820)	257	(9,055)	(1,349)
Oct. ....	15,472	(2,301)	-264	(17,509)	3,461	-48	(4,140)	161	(9,795)	(458)
Nov. ....	17,148	(1,761)	502	(19,410)	8,821	-3	(1,350)	398	(8,844)	(1,717)
Dec. ....	3,045	(3,237)	1,238	(7,521)	(8,261)	..	....	138	....	(1,617)

Table a37

## Issue conditions of Treasury bonds

ABI number	Maturity	Date of issue	Price at issue	Yield at issue		Amount taken up (lire bn.)	Coupon		
				gross	net		gross	net	
12679	BTP	1.6.01	3.6.91	99.15	12.52	10.87	2,500	6.00	5.2500
12679	BTP	1.6.01	1.7.91	95.35	13.24	11.53	2,000	6.00	5.2500
12679	BTP	1.6.01	2.8.91	94.20	13.48	11.72	2,000	6.00	5.2500
12680	BTP	1.6.96	5.6.91	100.35	12.27	10.60	2,000	6.00	5.2500
12680	BTP	1.6.96	3.7.91	96.45	13.40	11.65	3,000	6.00	5.2500
12680	BTP	1.6.96	1.8.91	96.10	13.52	11.73	3,000	6.00	5.2500
12681	BTP	20.6.98	20.6.91	95.90	13.30	11.60	2,500	6.00	5.2500
12681	BTP	20.6.98	18.7.91	96.25	13.22	11.50	1,500	6.00	5.2500
12681	BTP	20.6.98	19.8.91	95.95	13.30	11.54	1,500	6.00	5.2500
12682	BTP	1.9.96	3.9.91	97.20	13.18	11.48	4,000	6.00	5.2500
12682	BTP	1.9.96	3.10.91	98.40	12.81	11.09	4,000	6.00	5.2500
12683	BTP	1.9.01	4.9.91	95.90	13.15	11.46	2,000	6.00	5.2500
12683	BTP	1.9.01	1.10.91	98.00	12.72	11.04	3,000	6.00	5.2500
12683	BTP	1.9.01	4.11.91	98.30	12.66	10.96	4,000	6.00	5.2500
12683	BTP	1.9.01	3.12.91	97.50	12.82	11.09	1,500	6.00	5.2500
12684	BTP	18.9.98	18.9.91	97.80	12.86	11.18	2,500	6.00	5.2500
12684	BTP	18.9.98	18.10.91	99.65	12.42	10.74	2,500	6.00	5.2500
12684	BTP	18.9.98	18.11.91	99.20	12.52	10.81	3,000	6.00	5.2500
12684	BTP	18.9.98	16.12.91	98.10	12.78	11.03	1,500	6.00	5.2500
12685	BTP	1.11.96	5.11.91	99.45	12.52	10.85	4,000	6.00	5.2500
12685	BTP	1.11.96	4.12.91	98.20	12.87	11.15	1,500	6.00	5.2500
12687	BTP	1.1.02	7.1.92	98.25	12.71	11.05	3,500	6.00	5.2500
12687	BTP	1.1.02	4.2.92	99.60	12.41	10.75	4,000	6.00	5.2500
12686	BTP	1.1.97	8.1.92	99.05	12.68	10.98	3,500	6.00	5.2500
12686	BTP	1.1.97	5.2.92	99.45	12.49	10.77	3,000	6.00	5.2500
12688	BTP	17.1.99	17.1.92	99.60	12.44	10.78	2,000	6.00	5.2500

## Issue conditions of Treasury certificates in ecus

ABI number	Maturity	Date of issue	Price at issue	Yield at issue		Amount taken up (ecu mill.)	Lira/ecu exchange rate at issue	Coupon		
				gross	net			gross	net	
13087	CTE	26.9.95	26.9.90	101.15	11.57	10.10	1,000	1,543.10	11.90	10.4125
13087	CTE	26.9.95	26.11.90	102.25	11.24	9.71	800	1,548.88	11.90	10.4125
13087	CTE	26.9.95	13.12.90	102.00	11.30	9.75	700	1,547.95	11.90	10.4125
13203	CTE	16.7.96	16.7.91	102.50	10.32	8.97	1,000	1,529.00	11.00	9.6250
13203	CTE	16.7.96	23.9.91	104.15	9.85	8.45	700	1,532.25	11.00	9.6250
13209	CTE	22.11.96	22.11.91	101.95	10.07	8.77	700	1,541.10	10.60	9.2750

Table a37 cont.

## Issue conditions of Treasury option certificates

ABI number	Maturity	Date of issue	Price at issue	Yield at issue		Amount taken up (lire bn.)	Coupon		Date of prepayment	
				gross	net		gross	net		
13201	CTO	19.6.97	19.6.91	98.90	12.62	11.00	2,500	6.00	5.2500	19.6.94
13201	CTO	19.6.97	17.7.91	98.80	12.65	11.00	2,000	6.00	5.2500	19.6.94
13201	CTO	19.6.97	21.8.91	98.55	12.71	11.03	1,000	6.00	5.2500	19.6.94
13206	CTO	19.9.97	19.9.91	99.15	12.56	10.95	2,000	6.00	5.2500	19.9.94
13206	CTO	19.9.97	21.10.91	100.45	12.22	10.59	2,500	6.00	5.2500	19.9.94
13206	CTO	19.9.97	19.11.91	100.00	12.33	10.67	2,500	6.00	5.2500	19.9.94
13212	CTO	20.1.98	20.1.92	100.45	12.24	10.63	2,000	6.00	5.2500	20.1.95

## Issue conditions of Treasury credit certificates

ABI number	Maturity	Date of issue	Price at issue	Yield at issue		Amount taken up (lire bn.)	Spread	First coupon		
				gross	net			gross	net	
13204	CCT	1.8.98	1.8.91	97.50	13.59	11.85	5,500	0.50	6.00	5.2500
13204	CCT	1.8.98	16.8.91	97.50	13.82	12.04	2,500	0.50	6.00	5.2500
13205	CCT	1.9.98	2.9.91	97.65	13.77	12.01	7,000	0.50	6.00	5.2500
13205	CCT	1.9.98	17.9.91	98.60	13.74	11.95	2,500	0.50	6.00	5.2500
13207	CCT	1.10.98	2.10.91	98.40	13.78	12.00	8,500	0.50	6.00	5.2500
13207	CCT	1.10.98	17.10.91	99.75	13.27	11.52	2,500	0.50	6.00	5.2500
13208	CCT	1.11.98	4.11.91	99.75	13.09	11.37	6,500	0.50	6.00	5.2500
13208	CCT	1.11.98	15.11.91	99.45	13.25	11.51	3,000	0.50	6.00	5.2500
13210	CCT	1.12.98	2.12.91	98.35	13.89	12.10	6,000	0.50	6.00	5.2500
13210	CCT	1.12.98	16.12.91	98.40	13.88	12.07	1,500	0.50	6.00	5.2500
13211	CCT	1.1.99	2.1.92	98.05	14.24	12.41	7,500	0.50	6.00	5.2500
13211	CCT	1.1.99	16.1.92	99.15	13.78	11.97	2,000	0.50	6.00	5.2500
13213	CCT	1.2.99	3.2.92	99.15	13.13	11.42	8,000	0.50	6.00	5.2500
13213	CCT	1.2.99	17.2.92	99.00	13.17	11.44	3,000	0.50	6.00	5.2500

Table a38

## Securities market: expected yields and total return indices

	Expected yields						Total return indices					
	Treasury credit certificates	Treasury certificates in ecus	Treasury discount certificates	Index-linked Treasury certificates	Treasury bonds	Other bonds	Treasury credit certificates	Treasury certificates in ecus	Treasury discount certificates	Index-linked Treasury certificates	Treasury bonds	Investment funds
1986 .....	12.41	8.52	—	4.49	11.47	10.56	259.08	187.57	—	117.76	146.91	161.60
1987 .....	10.66	8.44	—	4.57	10.58	10.13	289.14	207.29	—	132.34	163.43	169.68
1988 .....	11.25	8.11	11.67	5.39	10.54	10.87	316.26	233.11	101.02	141.33	180.86	167.63
1989 .....	12.71	9.32	12.96	6.65	11.61	11.61	348.83	238.78	108.48	148.24	198.46	189.77
1990 .....	12.31	9.99	12.41	6.87	11.87	12.03	397.58	255.49	124.16	164.87	221.95	201.58
1991 .....	11.78	9.02	11.51	5.50	11.37	11.63	450.78	280.71	141.56	193.75	250.71	207.27
1989—4th qtr. ..	13.36	9.70	13.65	7.52	12.22	11.82	363.99	241.78	112.33	150.10	205.74	196.43
1990—1st qtr. ..	12.99	9.94	13.39	7.82	12.37	12.00	376.32	245.54	116.21	153.24	211.50	199.79
2nd " ..	12.37	10.13	12.36	7.10	11.83	12.12	391.55	248.80	122.55	161.23	219.04	208.07
3rd " ..	11.79	9.97	11.77	6.45	11.55	11.92	405.41	259.30	127.40	168.88	225.71	204.42
4th " ..	12.08	9.93	12.14	6.12	11.74	12.07	417.03	268.31	130.49	176.13	231.57	194.06
1991—1st qtr. ..	12.55	9.48	12.37	6.27	11.91	12.28	428.89	274.31	134.28	182.00	237.94	197.88
2nd " ..	11.35	8.70	11.02	5.40	11.13	11.51	445.84	281.12	140.51	190.76	248.23	209.38
3rd " ..	11.58	9.00	11.41	5.33	11.33	11.45	457.18	283.83	143.43	197.54	254.17	210.93
4th " ..	11.64	8.92	11.24	5.01	11.11	11.29	471.21	283.61	148.02	204.70	262.51	210.87
1991—Jan. ....	12.61	9.73	12.60	6.25	12.04	12.28	424.10	273.01	132.46	180.37	235.05	191.89
Feb. ....	12.58	9.54	12.42	6.35	12.00	12.38	428.51	273.70	134.16	181.70	237.66	197.96
Mar. ....	12.45	9.16	12.08	6.22	11.69	12.16	434.07	276.21	136.23	183.94	241.12	203.80
Apr. ....	11.69	8.75	11.54	5.87	11.34	11.85	440.08	279.92	138.17	187.15	245.01	207.32
May ....	11.28	8.61	10.84	5.29	10.99	11.43	446.86	281.75	140.96	191.22	248.90	208.78
June ....	11.09	8.74	10.69	5.03	11.06	11.24	450.57	281.68	142.40	193.93	250.77	212.05
July ....	11.38	8.93	11.20	5.06	11.33	11.37	453.25	282.76	142.54	196.11	251.75	210.33
Aug. ....	11.62	9.07	11.51	5.53	11.41	11.46	456.71	284.31	143.12	197.07	253.79	210.83
Sept. ....	11.73	8.99	11.51	5.39	11.24	11.51	461.57	284.41	144.63	199.46	256.97	211.62
Oct. ....	11.53	8.85	11.24	5.12	11.02	11.24	467.36	282.93	146.57	202.40	260.65	211.82
Nov. ....	11.48	8.98	11.03	4.92	11.06	11.21	471.81	283.35	148.48	205.05	262.79	211.07
Dec. ....	11.92	8.93	11.46	5.00	11.25	11.43	474.46	284.55	149.02	206.65	264.08	209.73
1992—Jan. ....	11.72	8.51	10.97	4.90	10.98	11.14	481.27	288.27	151.88	209.12	268.28	215.93

Table a39

## Liquid assets held by the non-state sector

*(end-of-period amounts outstanding in billions of lire; % changes on corresponding period)*

	End-of-period amounts				Percentage changes			
	M1	M2A	M2	M3	M1	M2A	M2 (averages)	M3
1983 .....	239,210	444,264	447,521	536,580	12.8	11.4	....	13.6
1984 .....	269,575	495,010	502,557	613,241	12.7	11.4	....	14.3
1985 .....	297,951	545,205	558,514	684,579	10.5	10.1	11.2	11.6
1986 .....	331,039	590,655	612,120	742,069	11.1	8.3	11.5	8.4
1987 .....	357,151	632,794	664,762	828,394	7.9	7.1	8.2	11.6
1988 .....	386,037	667,746	723,675	931,290	8.1	5.5	8.6	12.4
1989 – Nov. ....	376,993	653,661	739,863	993,655	8.0	5.5	8.7	12.7
Dec. ....	433,334	719,410	805,503	1,054,142	8.9	5.8	9.5	11.8
1990 – Jan. ....	404,482	694,125	787,175	1,053,941	11.3	7.7	10.3	13.3
Feb. ....	395,555	681,018	778,063	1,048,926	10.4	7.0	10.9	12.2
Mar. ....	396,924	680,216	780,264	1,055,255	9.8	6.5	10.0	12.0
Apr. ....	405,923	687,769	789,005	1,065,079	9.6	6.3	9.9	11.1
May ....	392,936	672,493	776,055	1,057,860	8.9	5.8	9.4	10.9
June ....	405,550	684,999	790,965	1,069,404	8.4	5.8	8.8	11.0
July ....	408,523	691,452	798,882	1,076,511	7.6	5.5	8.5	10.6
Aug. ....	401,278	684,550	793,823	1,072,163	7.3	5.2	8.3	9.9
Sept. ....	411,851	695,202	806,571	1,088,182	9.0	6.3	9.1	10.6
Oct. ....	415,296	698,838	815,830	1,098,198	9.2	6.4	10.0	10.9
Nov. ....	409,733	696,309	815,408	1,099,545	8.7	6.5	9.8	10.7
Dec. ....	467,463	765,098	885,054	1,165,846	11.2	8.3	9.9	12.0
1991 – Jan. ....	429,825	727,716	852,271	1,148,299	6.3	4.8	8.3	9.0
Feb. ....	424,136	720,914	848,140	1,146,132	7.2	5.9	8.3	9.3
Mar. ....	429,541	725,110	854,581	1,155,333	8.2	6.6	8.8	9.5
Apr. ....	431,815	724,306	855,150	1,157,403	6.4	5.3	8.0	8.7
May ....	423,133	716,663	850,526	1,155,223	7.7	6.6	8.0	9.2
June ....	438,983	736,218	871,514	1,172,491	8.2	7.5	8.7	9.6
July ....	438,077	744,564	882,480	1,187,498	7.2	7.7	8.6	10.3
Aug. ....	432,802	745,174	885,513	1,189,531	7.9	8.9	8.4	10.9
Sept. ....	446,333	754,552	898,708	1,201,709	8.4	8.5	7.7	10.4
Oct. ....	449,314	768,139	916,701	1,219,453	8.2	9.9	7.8	11.0
Nov. ....	448,582	770,501	921,452	1,224,088	9.5	10.7	8.1	11.3
Dec. ....	513,992	826,423	979,974	1,277,980	10.0	8.0	8.9	9.6

Table a40

## Financial assets held by the non-state sector and their counterparts

(changes in billions of lire)

	Financial assets	Financing of the non-state sector						State sector	Foreign sector	Unclassified	
		Banks	Special credit institutions	Bonds	State sector	Shares	Other domestic liabilities				Foreign sector
1986 .....	168,078	23,951	16,896	5,120	9,216	20,534	5,217	-1,797	97,480	-1,311	-7,228
1987 .....	168,151	22,318	20,161	3,640	8,489	7,422	4,839	3,331	102,277	-3,144	-1,182
1988 .....	192,823	53,750	24,196	233	10,705	-1,921	1,839	12,735	111,002	-12,285	-7,432
1989 .....	218,970	76,949	30,366	-454	12,675	3,659	1,841	21,618	118,148	-25,709	-20,123
1990 .....	236,965	73,222	35,737	-3,488	9,594	5,023	4,759	34,100	126,476	(-29,233)	-19,225
1991 .....	....	81,065	33,521	4,271	....	11,037	....	....	138,511	....	....
1989 - Nov. ....	18,057	14,825	3,005	-337	1,206	352	-194	2,809	17,989	-2,493	-19,105
Dec. ....	65,840	17,459	5,212	599	583	-406	-710	1,182	17,860	-1,236	25,298
1990 - Jan. ....	10,566	6,443	1,618	-793	1,559	-1,331	831	3,898	-6,449	(302)	4,488
Feb. ....	12,839	-2,206	3,580	-159	230	1,643	1,521	1,480	12,059	(-3,821)	-1,487
Mar. ....	17,271	-4,932	3,759	170	2,824	245	-199	7,991	13,181	(-2,451)	-3,316
Apr. ....	19,278	7,298	2,405	28	210	1,422	725	5,486	16,072	(-3,657)	-10,712
May ....	5,671	8,379	2,940	543	-370	685	-598	-36	13,347	(-1,850)	-17,370
June ...	14,918	6,308	-1,454	-71	1,036	-203	828	3,835	-10,213	(-2,494)	17,345
July ....	18,068	15,615	4,032	-1,587	-1,404	2,894	-84	1,410	6,150	(-1,517)	-7,439
Aug. ....	6,848	-10,638	3,229	-165	1,144	-189	-32	3,324	9,344	(111)	721
Sept. ...	19,000	-3,357	1,358	-343	852	629	524	6,588	17,855	(-1,887)	-3,219
Oct. ....	26,946	13,100	3,938	-181	1,150	814	73	2,200	23,047	(-4,145)	-13,051
Nov. ....	17,159	10,788	3,427	-305	1,637	-1,487	338	-74	15,165	(-3,165)	-9,165
Dec. ....	68,399	26,424	6,907	-626	726	-99	831	-2,001	16,919	(-4,659)	23,978
1991 - Jan. ....	7,513	-5,536	678	94	1,147	1,506	-241	....	4,414	(-3,442)	....
Feb. ....	19,129	-772	2,519	2,359	965	885	1,474	....	7,567	(-4,226)	....
Mar. ....	20,963	-2,994	3,855	9	949	188	571	....	18,110	(-3,469)	....
Apr. ....	....	7,634	2,711	-168	1,183	654	301	....	15,720	(-3,935)	....
May ....	....	8,215	4,035	-61	835	658	173	....	14,464	(-3,246)	....
June ...	....	14,363	-1,388	760	652	830	1,423	....	-8,573	(-3,272)	....
July ....	....	19,367	4,556	-910	105	833	-8	....	11,741	(-2,738)	....
Aug. ....	....	-9,165	3,269	-260	887	341	1,199	....	10,787	(-1,000)	....
Sept. ...	....	1,590	166	980	623	1,349	1,392	....	22,171	(-5,152)	....
Oct. ....	....	12,708	3,715	-265	766	458	175	....	19,544	....	....
Nov. ....	....	5,405	5,031	502	689	1,717	....	....	12,919	....	....
Dec. ....	....	30,250	4,376	1,231	....	1,617	....	....	9,647	....	....

Table a41

## Total domestic credit

*(changes in billions of lire; % changes)*

	Total domestic credit	Loans to the non-state sector	State sector borrowing requirement	Total domestic credit		Loans to the non-state sector	
				3-month	12-month	3-month	12-month
1986 .....	152,676	45,967	106,710	-	15.1	-	11.3
1987 .....	151,991	46,119	105,872	-	13.0	-	10.2
1988 .....	197,171	78,181	118,990	-	15.0	-	15.7
1989 .....	229,557	106,862	122,695	-	15.2	-	18.5
1990 .....	229,896	105,472	124,425	-	13.2	-	15.4
1991 .....	264,614	118,857	145,757	-	13.4	-	15.2
1989 - Nov. ....	38,532	17,493	21,039	4.4	14.0	3.7	17.5
Dec. ....	41,579	23,269	18,309	4.4	15.2	3.8	18.5
1990 - Jan. ....	968	7,268	-6,300	3.6	14.4	4.1	18.0
Feb. ....	12,003	1,214	10,789	2.8	13.8	3.9	17.1
Mar. ....	17,097	-1,003	18,100	2.8	13.9	3.8	16.8
Apr. ....	22,570	9,732	12,838	3.9	13.8	3.7	16.6
May ....	23,734	11,862	11,872	3.9	13.6	3.7	16.3
June ....	-4,742	4,784	-9,526	2.2	13.8	3.5	16.0
July ....	18,810	18,060	750	1.4	13.1	3.2	16.0
Aug. ....	1,464	-7,574	9,039	1.2	12.9	3.0	15.3
Sept. ....	16,308	-2,343	18,651	2.6	12.7	2.7	14.8
Oct. ....	39,581	16,858	22,723	4.0	13.7	3.1	15.5
Nov. ....	31,581	13,910	17,671	4.4	13.0	3.1	14.5
Dec. ....	50,523	32,705	17,818	4.7	13.2	4.1	15.4
1991 - Jan. ....	62	-4,764	4,826	3.2	13.1	2.6	13.5
Feb. ....	10,168	4,106	6,062	3.0	12.9	3.8	13.9
Mar. ....	16,414	871	15,543	2.8	12.8	3.7	14.2
Apr. ....	26,954	10,176	16,778	3.9	12.9	4.9	14.1
May ....	28,910	12,190	16,720	4.0	13.0	3.8	13.9
June ....	6,027	13,734	-7,707	2.9	13.6	4.1	15.1
July ....	34,904	23,013	11,891	2.7	14.3	4.1	15.5
Aug. ....	5,493	-6,157	11,650	2.5	14.5	4.3	15.8
Sept. ....	25,525	2,735	22,790	3.6	14.9	3.5	16.6
Oct. ....	36,181	16,158	20,023	3.9	14.4	3.4	16.1
Nov. ....	24,910	10,937	13,973	3.8	13.8	2.8	15.4
Dec. ....	49,067	35,857	13,210	3.3	13.4	2.9	15.2

## Notes to the Tables

### Table a1

Sources: National bulletins, IMF and OECD.

**Real GNP:** Japan and Germany: GNP; the United States, France, the United Kingdom, Italy and Canada: GDP.

For Italy the quarterly statistics of the GDP deflator are not available owing to the revision of the quarterly national accounts that Istat is conducting.

From July 1990 onwards the current balance of Germany includes the transactions of the former German Democratic Republic.

### Table a2

Sources: National bulletins, BIS and OECD.

### Table a3

Sources: National bulletins and OECD.

### Table a4

Sources: National bulletins and OECD.

**Wholesale prices:** the United States and Italy: total producer prices; France: producer prices of intermediate goods; the United Kingdom and Canada: prices of manufactured goods.

### Table a5

Sources: National bulletins, BIS, IMF and OECD.

**Official reference rates:** France: intervention rate; the United Kingdom: base rate; all other countries: discount rate.

**Money market rates:** the United States: 3-month Treasury bill rate; Japan: rate on 2-month private sector securities; Germany, France and the United Kingdom: 3-month interbank rate; Italy: net annual yield on 6-month Treasury bills on a deferred basis, weighted according to the amounts sold to the market; Canada: end-of-period rate on 3-month Treasury bills.

### Table a6

Sources: National bulletins, BIS, IMF and OECD.

**Bond yields (gross):** the United States: 10-year securities and Treasury bonds (secondary market); Japan: 10-year government bonds (secondary market); Germany: public sector bonds with a maturity of more than 4 years (secondary market); France: long-term government bonds; the United Kingdom: 20-year government bonds securities; Italy: average yield, net of 12.5 per cent withholding tax, of Treasury bonds listed on the Milan stock exchange with a residual maturity of more than 12 months (weighted according to the amount outstanding); Canada: end-of-period yield of public sector securities with a maturity of more than 10 years.

**Share indices:** the United States: Standard and Poor's composite index; Japan: Topix; Germany: FAZ Aktien; France: CAC Général; the United Kingdom: FT All-Share Index; Italy: MIB; Canada: composite index of the Toronto stock exchange (closing prices).

### Table a7

Source: BIS.

**The United States dollar forward premiums and discounts:** the differences between the rates shown in the upper part of the Table.

### Table a8

Sources: IMF for the prices of gold. Period averages except for gold prices, which are end-of-period values.

### Table a9

**Nominal effective exchange rates:** calculated for each country with reference to the currencies of Italy's 14 main trading partners. For the method of calculation, see the article "New Indices of Real and Effective Exchange Rates" in Banca d'Italia, *Economic Bulletin*, no. 8, February 1989.

### Table a10

Sources: Based on IMF, Istat and OECD data.

**Real effective exchange rates:** based on the wholesale prices of manufactures of Italy's 15 main trading partners.



For the method of calculation, see the article "New Indices of Real and Effective Exchange Rates" in Banca d'Italia, *Economic Bulletin*, no. 8, February 1989.

#### Table a11

Sources: Based on IMF, Istat and OECD data.

The countries included in the EC aggregate are Belgium, France, Germany, the United Kingdom, the Netherlands, Italy, Ireland, Denmark and Spain. For the method of calculation, see the article "New Indices of Real and Effective Exchange Rates" in Banca d'Italia, *Economic Bulletin*, no. 8, February 1989.

#### Table a12

**Italian credit system:** for the purposes of the Table, comprises the operational units of banks and special credit institutions (branches in Italy and abroad) and the Italian branches of foreign banks; "Foreign position" comprises all claims on non-resident operators except loans granted by branches abroad to local operators in the currency of the host country.

**Country grouping:** that adopted by the BIS.

#### Table a13

Source: Istat.

Seasonally adjusted data: "Other domestic uses" comprises government consumption and change in stocks.

The data at current prices and corresponding deflators are not available owing to the revision of the quarterly national accounts that Istat is conducting. The quarterly data shown are provisional.

#### Table a14

Sources: Based on Istat and Isco data.

**Industrial production:** the indices are first adjusted for variations in the number of working days. The seasonal adjustment of the general index of production is distinct from that of the indices of production by user sector, with the result that the aggregate index may differ from the weighted average of the disaggregated indices.

**Stocks of finished goods:** raw data.

#### Table a15

Source: Based on Istat data.

Since January 1991 Istat has related the sample results to the total population with account also being taken of

registry data on the age-group composition of the latter. This has caused a break in the series.

**Unemployment rate:** the annual figures, except for the unemployment rate adjusted to take account of workers on wage supplementation, are the average of raw quarterly data and may not coincide with the seasonally adjusted annual averages.

#### Table a16

Source: Istat.

Both the wholesale price indices and the consumer price indices have been rebased (1990=100, whereas they had previously been based respectively 1989=100 and 1985=100).

#### Table a17

**Bank capital flows:** includes those of special credit institutions from 1989 onwards.

**Change in official reserves:** net of exchange rate adjustments and the revaluation of gold; a minus sign indicates an increase in net assets.

#### Table a18

**Balances:** may not coincide with the sum of the component items owing to rounding.

#### Table a19

**State sector:** the Treasury (budget and other operations) the Deposits and Loans Fund, autonomous government agencies and the like, and the Southern Italy Development Agency.

**Borrowing requirement:** obtained as the sum of the budget deficit and the balance of other Treasury operations and of the other entities included in the sector. The budget deficit excludes accounting items that are offset under other Treasury operations, loan proceeds and repayments and settlements of debts incurred by state sector bodies.

**Other operations:** includes the balance of other Treasury operations, the expenditure of autonomous government agencies and the State Railways not financed out of revenues or with funds provided by the Treasury or the Savings and Loans Fund, the deficit of the Southern Italy Development Agency and the lending of the Deposits and Loans Fund (excluding that to the Treasury and autonomous government agencies).

Rounding may cause discrepancies in the totals. The figures for the last year are provisional.

#### Table a20

The figures for central bank financing and banks' holdings of securities are based on balance sheet data.

**Foreign loans:** includes only those raised by the Italian state and state sector entities that are denominated in foreign currency; it does not include loans contracted indirectly via credit institutions, which are included under "Other", or the Treasury bills and other government securities denominated in lire acquired by non-residents, which are included in the respective categories of domestic debt. The item also includes Treasury credit certificates in ecus stamped as being for circulation abroad.

Rounding may cause discrepancies in the totals. The figures for the last year are provisional.

#### Table a21

**State sector debt:** the changes in this item do not coincide with the flows shown in Table a20 since the debt is stated at face (or redemption) value and that denominated in foreign currency is translated at year-end exchange rates.

**Medium and long-term securities:** includes bonds issued by Crediop on behalf of the Treasury, autonomous government agencies and the State Railways. The amount of these bonds is deducted from the lending of credit institutions to these entities.

Treasury credit certificates in ecus that are not stamped as being for circulation abroad and Treasury bills in ecus are included in the appropriate domestic debt items.

**PO deposits:** comprises current accounts, net of "service" accounts and the proceeds of payments by the Treasury to municipalities and provinces that are held with the PO.

**Lending by credit institutions:** based on Bank of Italy Central Credit Register data and prudential returns.

Rounding may cause discrepancies in the totals. The figures for the last year are provisional.

#### Table a22.1

**Treasury:** comprises the Bank of Italy's net purchases of government securities at issue, drawings by the Treasury on its account with the central bank and other minor items.

**Open market:** excludes the securities sold in connection with advances granted under the Ministerial Decree of 27.9.1974.

**Deposits with BI:** until September 1990 comprises the compulsory reserves, free reserves and deposits against overshoots of the ceiling on lending and as collateral for banker's drafts. Since October 1990, the item comprises the reserve account, compulsory reserves on net foreign currency fund-raising, the free deposits of the banks not subject to the compulsory reserve requirement and deposits

against overshoots of the ceiling on lending and as collateral for banker's drafts.

**Compulsory reserves:** since October 1990 comprises the average reserve requirement in the maintenance period (from the 15th of one month to the 14th of the next) and compulsory reserves on net foreign currency fund-raising.

**Other items:** comprises cash on hand and undrawn ordinary advance facilities; until December 1988 the item also includes deposits with the Treasury and compulsory stockpiling bills not discounted with the Bank of Italy.

**Monetary base financing of the Treasury:** the last few months' figures for the borrowing requirement and its non-monetary financing are provisional.

**Net sales of securities at issue:** comprises total net subscriptions excluding those of BI-UIC.

**Other forms of financing:** comprises PO deposits, foreign loans, deposits of social security institutions with the Treasury, surety deposits with the Savings and Loans Fund, and bank and special credit institution loans to autonomous government agencies.

Rounding may cause discrepancies in the totals.

#### Table a23

**BI-UIC financing of the Treasury:** includes the direct creation of liquidity by the Treasury.

**Government securities and Treasury c/c:** this item differs from the BI-UIC accounts because it includes securities sold in connection with advances granted under the Ministerial Decree of 27.9.1974. The year-end figures include the unrealized capital losses on securities.

**Deposits with BI:** until September 1990 comprises the compulsory reserves, free reserves and deposits against overshoots of the ceiling on lending and as collateral for banker's drafts. Since October 1990 the item comprises the reserve account, compulsory reserves on net foreign currency fund-raising, the free deposits of the banks not subject to the compulsory reserve requirement and deposits against overshoots of the ceiling on lending and as collateral for banker's drafts.

Rounding may cause discrepancies in the totals.

#### Table a24

Estimates of the average of the daily data in the maintenance period (from the 15th of one month to the 14th of the next).

**Deposits with BI:** until September 1990 comprises the compulsory reserves, free reserves and deposits against overshoots of the ceiling on lending and as collateral for

banker's drafts. Since October 1990 the item comprises the reserve account, compulsory reserves on net foreign currency fund-raising, the free deposits of the banks not subject to the compulsory reserve requirement and deposits against overshoots of the ceiling on lending and as collateral for banker's drafts.

**Cash:** estimated average based on banks' ten-day returns.

**Twelve-month changes:** in "Bank reserves" and "Repurchase agreements" are adjusted for the change in the average compulsory reserve ratio.

**Repurchase agreements:** include those with primary dealers in the screen-based secondary market for government securities.

**Purchases:** include finance granted in connection with Treasury bill auctions.

Rounding may cause discrepancies in the totals.

#### Table a25

**Other operations:** comprises finance granted to primary dealers on the screen-based secondary market for government securities; those consisting of Treasury bills include finance granted in connection with auctions.

Rounding may cause discrepancies in the totals.

#### Table a26

Competitive bid auctions. Prices are expressed in percentages.

Withholding tax is levied on gross yields at the rate of 12.5 per cent. The "Total" yields are averages weighted on the basis of the quantities sold.

#### Table a27

Competitive bid auctions. The marginal yield is the minimum tender rate.

#### Table a28

**Maximum amount:** refers to the Treasury bills purchased at auction by the syndicate of banks that the Bank of Italy is prepared to finance.

The rate applied is that of the auction corresponding to the date of the transaction.

#### Table a29

Competitive bid auctions. The marginal yield is the maximum tender rate.

#### Table a30

**Base rate:** end-of-period figures.

**Rate on fixed-term advances:** until April 1991 the average of the rates on new operations; subsequently, end-of-period figures. Until 12 May 1991 the base rate was increased by 2.25, 1.25 and 0.5 percentage points for operations undertaken within respectively 5, 15 and 30 days of the preceding one. Since 13 May 1991 a single penalty rate is applied that the Bank of Italy is empowered to fix up to 1.75 points.

**Repurchase agreement rates:** simple averages of those on the operations concluded during the month.

**Treasury bill yields:** are given before tax. The "Average" yield refers to the average of the gross auction rates weighted according to the quantities sold to the market.

#### Table a31

**Interbank sight deposit rate:** weighted monthly average of rates reported at 10-day intervals. The rates reported are the maximum rates applied to the lira sight deposits of resident credit institutions with a debit balance of more than 1 billion lire.

**3-month Eurolira rate:** monthly average of the bid rates recorded daily on lira interbank deposits in London.

**Other interbank rates:** monthly average of the rates recorded daily on the screen-based interbank deposit market.

**Bank rates:** weighted monthly average of rates reported at 10-day intervals.

**ABI prime rate:** based on the figures collected by the Italian Bankers' Association on unsecured overdraft facilities granted to prime customers. It does not include the maximum overdraft commission of 1/8 of a percentage point per quarter.

#### Table a32

**Loans from BI-UIC:** based on the accounts of the Bank of Italy.

**Bank reserves:** also partly based on the accounts of the Bank of Italy. This item comprises lira liquidity (excluding deposits with the PO and the Deposits and Loans Fund), compulsory reserves, collateral for banker's drafts and the non-interest-bearing deposit against overshoots of the ceiling on loans.

**Securities:** stated at book value.

**Bad debts:** includes protested bills.

**Capital and reserves:** as defined for supervisory purposes; includes certain unencumbered provisions.

**Interbank accounts:** includes the liquid balances on correspondent accounts.

**Interest-earning external assets and liabilities:** refers to aggregates that do not coincide exactly with those included in the foreign exchange statistics. For the definition of these two items, see the Glossary published in the appendix to the *Relazione annuale della Banca d'Italia*.

Annual figures refer to the month of December.

#### Table a33

**Securities:** includes those denominated in ecus, while those issued by non-residents denominated in foreign currencies are included among the "Other assets" under the heading "Foreign assets".

#### Table a34

Source: Bank of Italy Central Credit Register.

**Loans:** includes the financing of compulsory stockpiling, bad debts and overdue and protested bills, but not positions of less than 80 million lire.

**Producer households:** comprises one-man businesses and unincorporated enterprises with less than 20 employees, most of which engage in the production of goods and non-financial market services.

#### Table a35

**Foreign currency securities:** includes government securities denominated in foreign currencies and Eurolira bonds.

**Other financial assets:** includes CDs, banker's acceptances and commercial paper.

The difference between "Total securities portfolio" and "Total net assets" consists of other net assets (mainly liquidity).

#### Table a37

**Yield at issue (Treasury credit certificates):** the expected yield before and after tax in the months the first coupon matures, on the assumption that rates are unchanged over the period.

#### Table a38

**Expected net yields:** calculated with reference to securities listed on the Milan stock exchange. The Treasury

bond sample comprises listed securities with a residual maturity of more than one year.

The expected yield on Treasury credit certificates and Treasury discount certificates assumes no change in interest rates. That on Treasury credit certificates in ecus is not comparable with the expected yields on lira investments. The expected yield on Treasury index-linked certificates is the real yield to maturity, calculated measuring inflation by the deflator of GDP at factor cost; the yield so obtained makes the sum of the present values of the real payments foreseen equal the security's deflated cum-coupon price.

**Total return indices:** refer to securities listed on the Milan stock exchange and are based as follows:

- 31 December 1980 for Treasury credit certificates
- 26 January 1983 for Treasury credit certificates in ecus
- 14 April 1988 for Treasury discount certificates
- 2 May 1984 for Treasury index-linked certificates
- 30 December 1983 for Treasury bonds
- 31 December 1984 for investment funds.

#### Table a39

For the definition of the various monetary aggregates, see "The Revision of the Monetary Aggregates", Banca d'Italia, *Economic Bulletin*, no. 1, October 1985.

The percentage changes are calculated net of the effects of the December 1989 bank strikes.

#### Table a40

**Foreign sector:** current account balance on a settlement basis.

**Bank financing:** adjusted for securities issued to fund debts; foreign currency loans are adjusted for exchange rate variations.

**State sector borrowing requirement:** net of the loans and equity participations of the Ministry of the Budget, the lending of the Deposits and Loans Fund, and the funding of the debts of health and social security institutions.

**State sector financing:** includes the loans and equity participations of the Treasury and the lending of the Deposits and Loans Fund. Net of the funding of the debts of municipalities and state-controlled enterprises.

**Financial assets:** until 1983 includes government securities held by the foreign sector.

**Other domestic liabilities:** includes claims of BI-UIC, banker's acceptances held by the non-state sector, estimated "atypical securities" and credit institutions' bad debts.

**Table a41**

**Total domestic credit:** comprises bank lending in lire and foreign currency (adjusted for exchange rate variations and for bank loans used to finance non-interest-bearing deposits on payments abroad), special credit institution loans, bond issues by companies and local authorities, the state sector domestic borrowing requirement (the Treasury, the Deposits and Loans Fund, the Southern Italy Development Agency and the autonomous government

agencies), net of Treasury credit to credit institutions, debt funding operations and foreign debt.

**Loans to the non-state sector:** includes debt funding operations and, since September 1984, banks' securities repurchase agreements with customers.

**3-month growth rates:** calculated on the basis of seasonally adjusted data for loans by banks and special credit institutions.

## Statistical aggregates

### Autonomous government agencies

- railways (FS), roads (ANAS), post and telecommunications (PT), state monopolies (MS), telephone service (ASST), state forests, and agricultural market intervention (AIMA).

### Deposits and Loans Fund

- run by the Treasury, its resources consist of funds placed with the PO and its lending is almost all to local authorities.

**M1:** *currency in circulation, bank and PO current accounts (the latter net of "service" accounts) and sight deposits with the Treasury.*

**M2A:** *M1 + savings deposits and banks' securities repurchase agreements with customers.*

**M2:** *M2A + banks' CDs conforming with the Ministerial Decree of 28.12.1982.*

**M3:** *M2 + bankers' acceptances and Treasury bills.*

### Monetary base

- notes and coin held by the non-state sector and banks
- deposits of the non-state sector and banks with the Bank of Italy
- deposits of banks with the Treasury
- banks' unused overdraft facilities with the Bank of Italy
- bills and current account overdrafts in respect of the financing of compulsory stockpiling and of corn marketing campaigns (until 1963-64)
- banks' liquid foreign assets (sight deposits and short-term investment in respect of the part freely available and convertible into lire under the regulations governing borrowing from abroad and convertibility) (until 1983)

- Treasury bills used to meet banks' reserve requirement (until February 1976).

### Non-state public bodies

- local authorities and social security institutions.

### Non-state sector

- households
- firms (including public enterprises)
- insurance companies
- non-state public bodies.

### Private sector

- households
- firms (including public enterprises).

### Public enterprises

- ENEL and the state-controlled companies
- autonomous government agencies producing market goods and services
- municipal companies.

### Public sector

- state sector
- local authorities
- social security institutions.

### State sector

- the Treasury
- Deposits and Loans Fund
- Southern Italy Development Agency
- autonomous government agencies.

### Total domestic credit

- bank lending in lire and foreign currency
- lending of the special credit institutions
- domestic bonds of firms and local authorities
- state sector borrowing requirement net of borrowing abroad and Treasury lending to credit intermediaries.

## Statistical aggregates cont. (Labour market)

### Labour force

- *employed persons (excluding conscripts) plus job seekers (unemployed workers, first job seekers and other job seekers).*

### First job seekers

- *persons who have never worked or who have voluntarily not worked for over a year and who are looking for a job, have a job starting subsequently or plan to start a business and have the means to do so.*

### Other job seekers

- *persons who declare they are of non-working status (housewives, students and pensioners, etc.) but also declare that they are seeking employment. This category also includes unemployed persons and first job seekers who plan to start a business but have not yet the means to do so.*

### Unemployed workers

- *persons who have previously been in employment and who are seeking a job, have a job starting subsequently or plan to start a business and have the means to do so.*

### Under-employed persons

- *persons working less than 26 hours in the survey week owing to lack of demand for labour.*

### Unemployment

- *Unemployed workers + First job seekers + Other job seekers.*

### Unemployment rate

- *ratio of unemployment to the labour force.*

### Unemployment rate adjusted for Wage Supplementation

- *ratio of unemployment plus equivalent full-time workers on Wage Supplementation to the labour force.*

### Scala mobile

- *Italian system of wage indexation. The mechanism, reformed in 1986 and in force until 1991, was based on the trade union cost-of-living index and half-yearly adjustments. It provided for:*

- 1) *100% indexation of a minimum amount (itself fully indexed) for all workers;*
- 2) *25% indexation of a second wage component equal to industry-wide contractual base pay plus cost-of-living allowance less the fully indexed portion of point 1).*

*The residual wage component (including overtime, production and seniority bonuses, individual and company increments, etc.) was not indexed.*

*In the event of an increase in indirect taxes, unions, employers and the Government could agree to exclude a portion of the effect from the reference price index.*

### Wage Supplementation Fund

- *a fund administered by INPS to supplement the wages of workers in industry who have been temporarily laid off or put on short time without termination of employment. INPS (with a nominal contribution from firms) pays such workers up to about 80 per cent of their gross standard hourly rate. "Ordinary" payments cover short-term layoffs (up to three months), "extraordinary" payments cover long-term layoffs (normally limited to two years).*

## List of abbreviations

ABI	— <i>Associazione bancaria italiana</i> Italian Bankers' Association
AIMA	— <i>Azienda di stato per gli interventi sul mercato agricolo</i> Government Agency for Intervention in the Agricultural Market
BI-UIC	— <i>Banca d'Italia – Ufficio italiano dei cambi</i> Bank of Italy – Italian Foreign Exchange Office
CICR	— <i>Comitato interministeriale per il credito e il risparmio</i> Interministerial Committee for Credit and Savings (Credit Committee)
CIP	— <i>Comitato interministeriale prezzi</i> Interministerial Committee on Prices
CIPE	— <i>Comitato interministeriale per la programmazione economica</i> Interministerial Committee for Economic Planning
Confindustria	— <i>Confederazione generale dell'industria italiana</i> Confederation of Italian Industry
Consob	— <i>Commissione nazionale per le società e la borsa</i> Companies and Stock Exchange Commission
EAGGF	— <i>European Agricultural Guidance and Guarantee Fund</i>
EFIM	— <i>Ente partecipazioni e finanziamento industria manifatturiera</i> Shareholding and Financing Agency for Manufacturing Industry
ENEL	— <i>Ente nazionale per l'energia elettrica</i> National Electricity Agency
ENI	— <i>Ente nazionale idrocarburi</i> National Hydrocarbon Agency
Iciap	— <i>Imposta comunale per l'esercizio di imprese e di arti e professioni</i> Municipal tax on businesses and the self-employed
Ilor	— <i>Imposta locale sui redditi</i> Local income tax
INAIL	— <i>Istituto nazionale per l'assicurazione contro gli infortuni sul lavoro</i> National Industrial Accidents Insurance Institute
INA	— <i>Istituto nazionale delle assicurazioni</i> National Insurance Institute
INPS	— <i>Istituto nazionale per la previdenza sociale</i> National Social Security Institute
INVIM	— <i>Imposta sull'incremento di valore degli immobili</i> Capital gains tax on property <sup>4</sup>
IRI	— <i>Istituto per la ricostruzione industriale</i> Institute for Industrial Reconstruction
Irpef	— <i>Imposta sul reddito delle persone fisiche</i> Personal income tax
Irpeg	— <i>Imposta sul reddito delle persone giuridiche</i> Corporate income tax
Isco	— <i>Istituto nazionale per lo studio della congiuntura</i> National Institute for the Study of the Economic Situation
ISPE	— <i>Istituto di studi per la programmazione economica</i> Research Institute for Economic Planning
Istat	— <i>Istituto centrale di statistica</i> Central Institute for Statistics
SACE	— <i>Sezione per l'assicurazione dei crediti all'esportazione</i> Insurance Department for Export Credits
UIC	— <i>Ufficio italiano dei cambi</i> Italian Foreign Exchange Office



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## MANAGEMENT OF THE BANK OF ITALY

at 29 February 1992

### THE DIRECTORATE

Carlo Azeglio CIAMPI	— Governor
Lamberto DINI	— Director General
Antonio FAZIO	— Deputy Director General
Tommaso PADOA-SCHIOPPA	— Deputy Director General

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### CENTRAL MANAGERS

Giorgio SANGIORGIO	— Chief Legal Adviser
Vincenzo DESARIO	— Central Manager for Banking Supervision
Antonio FINOCCHIARO	— Secretary General
Pierluigi CIOCCA	— Central Manager for Economic Research
Luigi GIANNOCCOLI	— Accountant General
Giorgio MAYDA	— Inspector General
Luigi SCIMIA	— Central Manager for Bank Property and Special Projects
Alfio NOTO	— Central Manager with responsibility for the Milan Branch
Roberto MORI	— Central Manager for Information Systems and Organization
Carlo SANTINI	— Central Manager for Central Bank Operations