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Economic Developments and Policies

The international economy

The economic situation in the industrial countries

Events in the Persian Gulf cast their shadow over the world economic scene in the second half of 1990. The climate of uncertainty had adverse repercussions on a world economy that was already losing momentum. The marked slowdown in the United States, Canada and the United Kingdom in the second half of the year contrasted with continued rapid growth in output in Japan and Germany.

At the Annual Meeting of the International Monetary Fund held in Washington at the end of September, the industrialized countries had expressed their intention to maintain monetary policies oriented towards price stability and rigorous fiscal policies to tackle the dual danger of inflation and a slowdown in growth. Their monetary policies diverged in the months that followed in view of cyclical differences between their economies.

The growth in output in the main industrial countries is estimated to have fallen from 3.3 per cent in 1989 to 2.8 per cent last year, slowing down from an annual rate of 3.4 per cent in the first half to one of 1.7 per cent in the second.

In the United States GNP remained unchanged between the first and second halves of the year owing to a contraction of 2 per cent at an annual rate in the fourth quarter. The growth in output for the year as a whole was less than 1 per cent (Table 1), the lowest rate since 1982. At the end of 1990 industrial production fell to a level close to that recorded two years earlier (Figure 1). The crisis of confidence associated with the events in the Gulf exacerbated the slowdown in the US economy that has been under way for almost two years, as the leading economic indicators show (Figure 2). The structural fragility of the financial system and the persistent budget deficit, which made it difficult to ease the restrictive stance of monetary policy, had the same effect.

Table 1

Gross product, domestic demand and net exports in the leading industrial countries

(constant prices; annualized percentage changes on preceding period)

	1989	1990	199	0 (3)
		(1)	H1	Q3
United States				
GNP	2.5	0.9	1.0	1.4
Domestic demand	1.9	0.5	0.3	1.6
Change in net exports (2)	0.5	0.4	0.8	-0.2
Japan				
GNP	4.9	5.5	7.4	4.1
Domestic demand	5.8	5.8	7.1	3.3
Change in net exports (2)	-0.9	-0.3	0.2	0.7
Germany				
GNP	3.9	4.6	7.5	7.0
Domestic demand	2.7	4.6	6.8	1.9
Change in net exports (2)	1.2	0.1	1.0	5.0
France				
GDP	3.6	2.8	2.1	4.5
Domestic demand	3.1	3.2	2.4	5.0
Change in net exports (2)	0.4	-0.4	-0.3	-0.6
Italy				
GDP	3.2	2.0	2.0	2.7
Domestic demand	3.3	2.4	3.9	4.5
Change in net exports (2)	-0.3	-0.4	-2.0	-2.0
United Kingdom				
GDP	2.2	1.1	2.6	5.1
Domestic demand	3.1	0.5	3.1	5.1
Change in net exports (2)	1.0	0.6	-0.6	0.3
Canada				
GDP	3.0	1.0	1.2	-1.2
Domestic demand	4.2	-	-0.2	-1.2
Change in net exports (2)	-1.3	1.0	1.4	_

Sources: IMF, OECD and national bulletins; for Italy: Istat and Isco. (1) Provisional figures for the United States and Germany, estimates for the other countries. Isco provisional outturn for Italy. – (2) As a percentage of GNP/GDP in the preceding period. – (3) For Italy: Istat quarterly economic accounts.



The sharp slowdown in growth in Canada and the United Kingdom was due to a tightening of monetary conditions to curb inflation. In the United Kingdom GDP declined at an annual rate of 5.1 per cent in the third quarter as a result of the fall in private consumption and investment, with the latter contracting by 14 per cent after falling by 12 per cent in the second quarter. Industrial output for the period from July to November was 2.6 per cent below the average for the first half of the year. Other economic indicators confirm the accentuation of the slowdown in overall activity that began in the middle of 1988.

The Japanese economy, by contrast, continued to show vigorous growth estimated at 5.5 per cent for the year as a whole, supported by a brisk expansion in investment and private consumption. In the Western part of Germany GNP continued to grow rapidly in the second half of 1990; the 4.6 per cent increase for the year as a whole was higher than any of the forecasts. National accounts data for the Eastern part of the country are not yet available, but according to official statistics the region's industrial output in the third quarter was 50 per cent lower than in the same period of 1989. Other indicators are more encouraging, however; 200,000 new enterprises were registered in the first nine months of the year, half of them between July and September and two thirds of them in the services and craft sectors.

Although their economies were also slowing down, Italy and France were positioned mid-way between these two groups of countries as far as growth is concerned, with GDP probably increasing by between 2 and 3 per cent in the year as a whole. In France the slackening of economic activity can be attributed mainly to slower growth in investment and a deterioration in foreign demand, whose net contribution became negative.





Sources: OECD and Survey of Current Business. (1) Composite leading indices calculated by the Department of Commerce for the United States and by the OECD for the other countries; they are obtained by aggregating 11 basic indices relating to average weekly hours worked in manufacturing, the number

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.

Labour market conditions reflected the cyclical developments in the various economies. In December unemployment reached 6.1 per cent in the United States, the highest rate for three years and almost one point above the average for the first half of the year (Figure 3); in Canada it stood at 9.3 per cent, compared with 7.5 per cent in the first half, while in the United Kingdom it rose to 6.2 per cent in November, compared with 5.7 per cent in the first half. There was only a very small increase in France and Italy. In the Western part of Germany, on the other hand, the rate fell to 6.2 per cent in October, its lowest level since 1981; the slight rise in the last two months of the year was due to layoffs in residential construction due to climatic factors. This improvement contrasts sharply with the situation in the Eastern part of the country, where official figures show that unemployment rose from 270,000 in July to 640,000 in December.



Energy costs contributed to the acceleration in inflation in the industrial countries, although only marginally. The price of crude oil rose from \$20 a barrel at the end of July to \$40 in late September and the first half of October. It then steadily fell again to below \$27 at the end of December and around \$20 at the beginning of February. Inflation in the leading economies rose from a twelve-month rate of 4.5 per cent in July to one of 5.5 per cent in December, owing mainly to the acceleration in prices in Japan and the United States from rates of 2.2 and 4.8 per cent respectively in July to 3.8 and 6.1 per cent in December (Figure 4).



In Japan the acceleration in inflation was due to the pressure of demand on productive capacity and on the labour market; in the United States it was caused by a more rapid increase in unit labour costs coupled with a worsening of the terms of trade. The weakness of the dollar helped limit the acceleration in prices in the group of countries belonging to the European exchange rate mechanism, where inflation rose from 5.1 per cent in July to 6 per cent in October before falling back to 5.3 per cent in December. The inflation rate in the United Kingdom fell from 10.9 per cent in October to 9.3 per cent in December; in the Western part of Germany it came down from 3.3 to 2.8 per cent over the same period.



The uncertainty associated with the Gulf crisis accentuated the volatility of share markets (Figure 5). After declining between August and October, share prices in the United States began to show signs of recovery in November, although they were subject to fluctuations; in December they returned on average to the level recorded in August. The other leading exchanges also staged a limited recovery in the last month of the year. The performance of the various stock markets may have been partly affected by differences in the degree of commercial and financial integration between the industrial countries and those in the Middle East, although the ties between the two groups of countries as a whole are relatively modest.

Economic policies

In the fourth quarter of 1990 the monetary policy stance in the United States was eased in response to the weakening of economic activity, which was sharper than had been expected. The growth in the monetary aggregates M2 and M3 slowed down from 5.0 and 2.2 per cent respectively in September to 3.3 and 1.5 per cent in December. The deceleration in M2 was attributable partly to switching from deposits to other forms of investment as a consequence of a loss of confidence in the banking system, but the primary factor influencing the monetary aggegates was the restriction of lending associated with the fragility of some sections of the financial system. The growth in credit to the private sector was the smallest recorded since the end of 1975.

The US monetary authorities lowered the federal funds rate in several steps from 8.4 per cent in the first week of October to 7.6 per cent in the last week of December, despite the pronounced weakness of the dollar. In December they also reduced the official discount rate to 6.5 per cent and, for the first time since 1983, relaxed reserve requirements on part of banks' liabilities, partly in order to improve bank profitability. The reduction in official rates was reflected in a fall in short-term market rates, which closed the year at the levels recorded in the spring of 1988; long-term rates also came down, partly in response to the slowdown in economic activity (Figure 6).



was maintained. After the last increase in the discount rate in August, short-term interest rates remained at the high level of 8.1 per cent, whereas long-term rates declined appreciably, signaling expectations of lower inflation. The M2+CD aggregate slowed down sharply, from 13.1 per cent in September to 8.6 per cent in December; the growth in credit to the private sector decelerated as a result of the high interest rates and the restrictions imposed by the authorities to ensure that the banks adjusted their capital ratios and to curb property-related lending.

In Japan the restrictive monetary policy stance

The German authorities encouraged strengthening of the Deutschemark by tightening monetary conditions in response to domestic demand pressures and the effects of unification on the budget and on the money supply. Lombard rate was raised by half a point to 8.5 per cent at the beginning of November, the fifth increase since January 1989. Short-term interest rates rose to 9.2 per cent in the last week of December; long-term rates remained broadly unchanged. The growth in M3 in the Western part of the country accelerated from 3.9 to 5.5 per cent between July and October owing to the effects of unification and then stabilized at that rate for the next two months. The broader measure of M3, which includes Eurocurrency deposits held by German residents and short-term bank bonds, grew more rapidly. Official estimates indicate that the money supply in the former German Democratic Republic contracted by DM 17 billion between July and November, reflecting outflows of liquidity to purchase goods produced in the Western regions of the country and the shifting of assets into long-term forms of investment.

In France, where official rates were reduced slightly at the end of October, short-term interest rates remained more or less stable at around 10 per cent, while long-term rates fell by 0.6 percentage points between October and December. The growth in M2 turned negative in the final quarter of the year, after having remained below the target range of 3.5-5.5 per cent for several months previously as a result of portfolio adjustment stimulated by the creation of new long-term savings instruments and a large shift of deposits into the Euromarket. The latter development prompted the French monetary authorities to lower the compulsory reserve ratios in October.

In the United Kingdom short-term interest rates decreased significantly in the second week of October following the reduction in base rate that accompanied sterling's entry into the exchange rate mechanism of the EMS. Subsequently, however, the depreciation of the currency prevented any further easing of monetary conditions, despite the deterioration in the economic situation. Short-term rates remained broadly stable until the end of December; long-term rates declined in the final quarter, signaling the containment of inflation expectations. The growth in the M0 aggregate slowed down from 4.7 per cent in September to 2.7 per cent in December. Here too, lending to the private sector decelerated significantly, affected by high interest rates and in part by greater caution on the part of financial intermediaries in granting loans.

The public sector deficit for the leading industrial countries as a group rose from 1 per cent of GDP in 1989 to 1.5 per cent in 1990. Budgetary policy had a stimulatory effect on economic activity, even after adjustment for cyclical factors. However, the growth in the combined deficit conceals differences between the various countries. There was a sharp deterioration in the budget outturn in the United States, Germany (which had recorded a small surplus in 1989) and the United Kingdom, where the public sector surplus was almost wiped out. In Japan, by contrast, the surplus increased; the deficits in France, Canada and Italy decreased slightly in relation to GDP.

The US federal budget deficit, which includes expenditure in connection with the crisis in savings and loan associations, came to \$220 billion, equal to 4 per cent of GNP. At the end of October approval was given to a package of measures aimed at reducing the deficit by \$42 billion in the current fiscal year and by a total of \$500 billion over the five years from 1991 to 1995. Important amendments were introduced to sharpen the effect of the Gramm-Rudman-Hollings Act, but the target date for achieving a budget surplus was postponed from 1993 to 1996. The large budget deficit in Germany reflects the cost of restructuring and assistance to the Eastern regions of the country. It is estimated that the public sector borrowing requirement for the unified Germany, which excludes the social security surplus, was in excess of DM 100 billion in the financial year that has just ended. The increase over the preceding year was equal to more than 4 per cent of GNP; the only previous occasion on which a deterioration of this order had occurred was in 1975 following the first oil shock. The deficit, which consists primarily of the deficits of central and local authorities and funds raised to finance unification, would have been even larger but for higher than expected tax receipts and the slowness of spending procedures in the new Länder.

In the United Kingdom the budget surplus recorded in recent years is likely to be wiped out during 1990 owing to overshooting of the limits set for the growth in public spending and reduced receipts from privatizations.

In Japan the public sector recorded a surplus equal to 3.1 per cent of GNP last year, compared with 2.7 per cent in 1989, thanks partly to the substantial financial assets of the social security funds. The medium-term adjustment programme adopted in 1983, which provided for eliminating the central government's current account deficit (excluding the social security surplus), has been completed during the present financial year, which ends in March 1991.

In France the public sector deficit declined from 1.5 per cent of GDP in 1989 to 1.2 per cent in 1990.

Within the European Community, considerable progress was made towards unification. In October the European Council decided that the second stage of Economic and Monetary Union (EMU) would begin on 1st January 1994; in December the Intergovernmental Conferences on EMU and on Political Union began their work to amend the Treaty establishing the Community in preparation for the final stages of EMU. The Committee of Governors of the EEC Central Banks submitted to the Intergovernmental Conference on Economic and Monetary Union a draft statute for the new monetary institution that will have the task of formulating and implementing the single monetary policy of the Community in the final stage of EMU.

The balance of payments and exchange rates

In the second half of 1990 the balances of payments of the industrial countries were affected to differing degrees by the rise in the price of oil and the depreciation of the dollar (Table 2). Overall, however, current account imbalances were reduced.

The United States' current account deficit had contracted substantially in the first half of the year. In the third quarter an improvement in investment income was outweighed by a sharp worsening of the trade deficit, which reflected a deterioration in the terms of trade, caused in turn by the depreciation of the dollar and the rise in oil prices. Nevertheless, the slowdown in economic activity and the further decline in the real exchange rate probably reduced the deficit again towards the end of the year. The current account deficit for 1990 as a whole is likely to have fallen below \$100 billion, equal to 1.8 per cent of GNP, and the trade deficit probably did not exceed \$110 billion.

In the second half of 1990 Japan's current account surplus amounted to less than \$30 billion on an annual basis, far less than that recorded in the previous half-year. The change can be attributed entirely to the larger deficit on services and transfers due to the substantial increase in spending on foreign travel; the improvement in the terms of trade induced by the appreciation of the yen more than offset the adverse effects of the rise in the price of oil and the unfavourable trend in relative demand, causing a slight increase in the trade surplus. Japan's external imbalance was reduced considerably over the year as a whole: the current account surplus was equal to little more than 1 per cent of GNP, compared with 2 per cent in 1989 and a peak of 4.4 per cent in 1986, while the trade surplus, which had stood at 4.8 per cent of GNP in 1986, came down from 2.7 to 2.2 per cent.

In the second half of last year Germany's current account surplus, including transactions in goods and services by residents of the former German Democratic Republic, fell to less than \$40 billion on an annual basis, the equivalent of 3.3 per cent of GNP; the trade surplus amounted to \$58 billion on the same basis (4.8 per cent of GNP), around \$20 billion less than in the preceding half-year. The vigorous growth in domestic demand and capacity constraints led to an increase of 10 per cent in the value of imports for the year as a whole. The main beneficiaries were Italy, France and the Netherlands, whose exports to Germany increased by 16, 12 and 10 per cent respectively in the first ten months of the year, with their balances vis-à-vis Germany improving by a total of DM 13 billion (Table 3).

Table 2

								Trade ba	lances			
	Cı	urrent acco	unt baland	ces		Total	(1)			with United Sta	the ites (2) (3)	
	1989	1990	19	90	1989	1990	19	90	1989	1990	199	90
			H1	H2			H1	H2		•	H1	H2
Industrial countries	-79.2	-111.0	-91.8	-130.0	-37.1	-53.0	-25.6	-82.0	55.3	40.5	30.8	50.2
of which: United States	-110.0	95.2	-88.3	-102.0	114.9	-108.0	98.8	-117.0			-	
Japan	57.6	35.8	44.7	26.9	77.4	63.8	61.4	65.0	49.1	41.1	<i>39.2</i>	43.0
EEC	6.1	-10.0	-6.9	-13.0	3.3	2.0	6.2	-4.0	-1.2	-6.1	-10.7	1.5
of which: Germany (3)(4)	55.6	46.2	54.5	37.9	71.8	67.6	77.2	58.0	8.0	9.4	8.7	10.1
France	-4.0	-8.0	-3.4	-12.5	-10.7	-12.2	-9.4	-15.0	1.4	-0.5	-0.6	-0.4
Italy	-10.6	-15.3	-16.2	-14.4	-2.0	0.4	1.0	-0.2	4.7	4.7	4.3	5.1
UK	-32.2	-28.3	-31.9	24.7	-39.1	-30.8	-36.6	-25.0	2.5	-3.2	-5.4	-0.6

Current account and trade balances (billions of dollars on an annual basis, seasonally adjusted)

Sources: OECD and national bulletins. The figures for the second half of 1990 are partly estimated for the United States, France and Italy and provisional for the other countries. (1) Fob-fob. – (2) Not seasonally adjusted. – (3) Cif-fob. – (4) From July 1990 onwards the figures include transactions by the former German Democratic Republic.

Table 3

		1987	1988	1989	1989 Jan Oct.	1990 (1) Jan Oct.
EEC	Exports	278	308	352	293	294
	Imports	216	227	259	213	232
	Balance	62	81	93	80	62
Belgium and Luxembourg	Exports	39	42	46	39	40
	Imports	29	31	35	29	31
	Balance	10	11	11	10	9
Denmark	Exports	11	11	12	10	10
	Imports	8	8	9	7	9
	Balance	3	3	3	3	1
France	Exports	63	71	84	70	72
	Imports	47	53	60	49	55
	Balance	16	18	24	21	17
Greece	Exports	5	6	6	4	3
	Imports	3	3	4	3	2
	Balance	2	3	2	1	1
United Kingdom	Exports	47	53	59	49	46
	Imports	29	30	35	29	31
	Balance	18	23	24	20	15
Ireland	Exports	2	2	3	3	2
	Imports	4	4	4	4	3
	Balance	–2	_2	–1	–1	1
italy	Exports	46	52	60	50	52
	Imports	39	40	45	37	43
	Balance	7	12	15	13	9
Netherlands	Exports	46	49	54	45	44
	Imports	45	45	52	42	46
	Balance	1	4	2	3	–2
Portugal	Exports	4	5	6	5	5
	Imports	3	3	4	3	3
	Balance	1	2	2	2	2
Spain	Exports	15	17	22	18	20
	Imports	9	10	11	10	9
	Balance	6	7	11	8	11

Germany's trade with the countries of the European Community (flows in hillions of Deutschemarks)

(1) FIOITI Suly 1990 Oliwalus

In the United Kingdom the marked slowdown in domestic demand helped reduce the current account deficit from 3.5 to 2.2 per cent of GDP and the trade deficit from 4 to 2.4 per cent between the first and second halves of the year.

The foreign exchange markets behaved rather erratically in the final quarter of 1990, primarily as a result of uncertainty about economic developments in the three major economies. Overall, however, movements in the exchange rates of the leading currencies were consistent with the objective of reducing external imbalances. Within the EMS the more restrictive monetary policy stance in Germany had very little effect on the currencies belonging to the European exchange rate mechanism; central bank intervention to defend central rates was sporadic and limited.

The weakness of the dollar that has been evident since last spring became more pronounced (Figure 7). In mid-December the currency was 20 per cent below the high levels recorded at the beginning of April against the yen and 15 per cent lower against the

Deutschemark. Its effective depreciation over the same period was around 12 per cent. Market reaction to the tensions in the Gulf produced only a slight and temporary strengthening of the dollar. It therefore remained fundamentally weak, affected by the large negative differentials between US short-term rates and those in Japan and Germany, which amounted to 1.6 and 2.7 percentage points respectively at the end of December.

The effective appreciation of the Deutschemark between the beginning of April and the end of December was around 1.2 per cent, that of the yen 11.5 per cent. Over the same period the ERM currencies appreciated by an average of 5 per cent against those outside the area.

The relative positions of the currencies subject to the narrow ERM margins of fluctuation progressively changed from November onwards (Figure 8). The movements in official reference rates reported above led to an appreciation of the Deutschemark, the Belgian franc and the Dutch guilder and to a weakening of the French franc, which gradually descended towards the lower part of the band. It depreciated further in December under the influence of the Deutschemark, which continued to strengthen against all currencies except the Dutch guilder.

Figure 7

Figure 8

Bilateral exchange rates against the dollar (1) and nominal effective rates of leading currencies (2)









Divergence of market rates from EMS central rates

(1) Realignment of the central rate of the lira on 8 January 1990 in connection with adherence to the narrow fluctuation band. - (2) Entry of the pound sterling into the ERM on 8 October 1990.

The weakening of the lira within the narrow fluctuation band, which had begun in August and continued in the two following months, became more pronounced in November after the rise in interest rates in Germany. The tightening of monetary conditions in Italy helped the Italian currency to rise gradually towards the centre of the band by contributing to a widening of the short-term interest rate differential against the Deutschemark.

Within days of entering the European exchange rate mechanism the pound sterling came under downward pressure, so that by the beginning of November it was the weakest currency in the EMS. The United Kingdom's decision to join the ERM, which was aimed at enhancing the credibility of economic policy, failed to curb expectations of a relaxation of monetary conditions in view of the sharp downturn in the economy. The slowdown in inflation and the improvement in the balance of payments towards the end of the year were not sufficient to sustain the British currency. In December sterling stabilized almost 2 per cent below the centre of the fluctuation band.

Activity picked up slightly on the international capital markets in the second half of 1990, especially in the syndicated loans sector (Table 4). Over the year as a whole, gross lending declined by 7 per cent as a result of the erratic movements in exchange rates and share prices and uncertainty about cyclical developments in the leading economies. Despite a slight reduction in their share of total lending, the OECD countries continued to be the main borrowers. Whereas the Japanese became less prominent, European borrowers increased their recourse to the market.

Table 4

Gross lending in international capital markets

(billion:	(billions of dollars)						
		-		90			
	1989	1990	H1	H2 (1)			
Gross bond issues (2)	255.8	229.7	113.2	116.5			
of which: floating rate	17.8	39.7	17.9	21.8			
Syndicated loans (3)	121.1	116.3	54.3	62.0			
Back-up facilities (4)	8.4	12.3	5.6	6.7			
Total gross lending (5)	385.3	358.3	173.1	185.2			

	pe	rcentage breakdow	n by borrower	
OECD countries	90.2	86.8	86.6	86.9
of which: United States	12.9	11.1	10.6	11.0
Italy	4.4	8.6	8.7	8.4
OPEC countries	1.3	2.4	1.5	2.8
Other developing countries	3.8	4.2	4.4	4.7
Eastern Europe	1.2	1.9	2.1	1.5
Other	3.5	4.7	5.4	4.1

Source: OECD.

(1) Estimated on data for the first four months of the year. – (2) Euromarket issues plus foreign issues in domestic markets. – (3) Announced medium and long-term Eurocredits and foreign loans. – (4) Lines of credit granted in connection with the issue of securities. – (5) Rounding may cause discrepancies in totals.

The economic situation in the developing countries and Eastern Europe

Countries that have undertaken programmes of internal and external economic adjustment financed by the IMF continued to make progress in recent months; they also achieved better results in terms of growth.

In Argentina the authorities launched a new package of stabilization measures at the beginning of September, after the previous programme had fallen short of the objectives. In October prices rose by 7.7 per cent over the month, compared with average increases of 14 per cent in the three preceding months. GDP probably remained more or less unchanged last year, after declining by more than 5 per cent in 1989. The privatization operations carried out so far have consisted in debt/equity swaps, which have made it possible to reduce the country's bank debt from \$64 billion at the end of 1989 to \$57 billion.

In Venezuela favourable external developments and further corrective measures led to a significant acceleration in economic activity in the third quarter, especially in industry, and to an improvement in financial conditions. GDP rose by 2.3 per cent in the year as a whole and the official reserves increased substantially. In September prices rose at an annual rate of 20 per cent, compared with average annual increases of about 50 per cent between June and August. There was an appreciable inflow of capital from abroad. Moreover, negotiations aimed at reaching agreement with creditor banks were concluded in October.

In response to recommendations from the Interim Committee at its meeting in September 1990, the Executive Board of the IMF has approved a number of changes in the criteria for the use of the Fund's own financial resources in order to provide more effective assistance to the countries harmed by the Gulf crisis; these include in particular Egypt, Jordan and Turkey, but also Sri Lanka, Bangladesh, Morocco, Pakistan and India. The decisions make it possible to extend the term of assistance granted under the Enhanced Structural Adjustment Facility (ESAF) from three to four years and to increase disbursements under existing ESAF programmes. Until the end of 1991 the Compensatory and Contingency Financing Facility (CCFF) can be used to meet the additional cost of oil and oil products, provided the recipient country takes adequate energy policy measures. In addition, the World Bank has agreed to increase the proportion of fast disbursing loans granted by the International Development Association from 30 to 35 per cent of total lending.

In Central and Eastern Europe, by contrast, the general tendency for economic activity to decline was confirmed.

The downturn was particularly acute in Poland, where output was affected not only by policies aimed at curbing domestic demand but also by the difficulty enterprises had in adapting to the large adjustments in relative prices, the reduction in state subsidies and the liberalization of imports. In October industrial production was 20 per cent lower than in the same month of 1989; it is estimated that output declined by between 10 and 15 per cent in the year as a whole.

In Yugoslavia the combination of a highly restrictive monetary policy and exchange rate stabilization caused industrial production to contract by 10 per cent in the first half of last year by comparison with the same period of 1989. However, inflation slowed down abruptly in both Poland and Yugoslavia, falling from a monthly rate of between 60 and 70 per cent at the beginning of 1990 to 5 per cent in the second half of the year.

In Hungary, where measures to liberalize prices and foreign trade were introduced more gradually, output contracted less sharply, by around 6 per cent. Despite restrictive fiscal and credit policies, consumer prices rose by an annual average of 30 per cent, compared with 17 per cent in 1989. The fall in output was also modest (3 per cent) in Czechoslovakia, where the authorities turned their attention to creating the legislative and institutional framework for reform of the economic system and the containment of macroeconomic disequilibria. At the beginning of this year a programme was launched with IMF support to bring about a rapid liberalization of prices and introduce internal currency convertibility along the lines of the Polish model. It also provides for the swift privatization of state enterprises.

In Bulgaria and Romania the burgeoning macroeconomic disequilibria threaten to trigger rapid inflation. Both countries saw output decline by around 10 per cent in 1990.

In the Soviet Union it is officially estimated that retail prices rose by 5 per cent in 1990 and gross material product declined by 2 per cent. Shortages of consumer goods became more acute, owing mainly to the increasingly serious dislocation of internal trade and distribution but also to speculative hoarding. With the pricing system remaining under state control, inflation expectations are being fueled by the excessive volume of money in circulation and the dearth of obtainable goods, and attempts to contain the large budget deficit have had little success so far. The authorities recently eliminated some of the economy's monetary balances by declaring that large-denomination banknotes were no longer legal tender and offering only limited scope for conversion. However, the measure appears to be insufficient to eliminate the excess liquidity and to stabilize the consumer goods market.

In 1990 the multilateral institutions increased their support for stabilization and structural reform programmes in Eastern European countries. The IMF approved loans totaling some \$1.5 billion to Yugoslavia, Poland and Hungary; in the course of the year these three countries received disbursements totaling \$1.1 billion from the IMF and credits amounting to \$0.6 billion from the World Bank. At the beginning of 1991 the IMF approved loans totaling \$1.8 billion to Czechoslovakia; around half of this will be provided via the CCFF to cover the additional costs stemming from the rise in oil prices. From mid-1989 onwards the 24 OECD countries and the European Community (drawing on its own budget resources) have undertaken to provide financial assistance totaling ECU 22.9 billion to countries in Central and Eastern Europe (excluding the Soviet Union); this consists of bilateral or multilateral loans (ECU 9.1 billion), grants (ECU 5.7 billion) and subscriptions to the share capital of the EBRD. More than 65 per cent of the financial assistance is coming from the European Community and its member countries. The largest share, 20 per cent of the total, is being provided by Germany. Germany also accounts for a large proportion of the bilateral financial assistance totaling ECU 17.5 billion pledged to the Soviet Union. In addition, the Community has decided to grant the Soviet Union ECU 1.1 billion in food and medical aid, export credit guarantees for agricultural exports and technical assistance.

In the medium term, the growth prospects for Central and Eastern Europe and, more generally, for developing and industrial countries alike depend crucially on the growth in world trade being sustained by increasing liberalization. The recent suspension of the Uruguay Round of negotiations gives cause for serious concern from this point of view.

The Italian economy and the balance of payments

The Italian economy continued to expand in 1990, but at a much slower pace than in the previous three years. Annual GDP growth fell from 3.2 per cent in 1989 to around 2 per cent, a rate that put Italy in a middle position among the main industrial countries.

The first signs of the slowdown had emerged in the first half of the year with the slackening of world demand, the downturn in spending on consumer durables and the paring of corporate investment plans. In August, the outbreak of the Gulf crisis made operators even more prudent and inclined to postpone spending decisions.

Export growth in volume terms, which had remained buoyant in the first half of the year, weakened in the second half as the deceleration of world demand became more pronounced. Import growth also fell back as total demand slackened, although the pace of imports was sustained by losses in Italian producers' competitiveness on the domestic market. Thanks to an improvement in the terms of trade, the trade account on an *fob-fob* basis was broadly in balance in 1990, marking a 3 trillion lira improvement from 1989.

The slowdown in demand had its greatest impact on industrial output, which on average was virtually the same as in 1989. Industrial production declined by one percentage point between the first and second halves of the year. By contrast, available data on employment indicate that market services (which account for 50 per cent of GDP, as against manufacturing's 24 per cent share) were unaffected by the slowdown in activity.

The growth of employment outpaced that of the labour force, so that the unemployment rate fell significantly from 12 to 11 per cent after having remained stationary for three years (Table 5). In the second half of the year the deterioration in the business cycle put an end to the growth of employment in industry and slowed the rise in total employment. The year-on-year average rise in consumer prices again exceeded 6 per cent despite the decline in the prices of imported inputs and an average effective appreciation of the lira of 1.4 per cent. In the second half of the year the temporary rise in energy prices and the widening of mark-ups reversed the downward trend of inflation witnessed in the first half; in November the twelve-month inflation rate rose to 6.8 per cent, higher than the rate recorded at the start of the year (6.6 per cent).

Table 5

Unemployment and participation rates by region

(percentages)

ployment rat	
	e
.9 20.6	12.0
.6 21.1	12.0
.8 19.7	11.0
.8 20.1	11.5
.5 19.7	10.9
ipation rate (*	1)
.2 38.5	42.3
.9 38.5	42.0
.0 38.6	42.0
1 38.6	41.9
.8 38.7	42.1
•	.1 38.6 .8 38.7

Source: Istat's labour force survey. (1) Labour force/population.

Domestic demand and industrial output

The slowdown in private sector domestic demand that had emerged in the first half of the year continued in the second and involved both investment and consumer goods, primarily consumer durables.



Industrial output, demand and stocks

(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.

Uncertainty about cyclical developments both at home and abroad led firms to adopt a more cautious attitude towards planned investment from the beginning of 1990 onwards. Consequently, there was a sizable decline in the rate of growth of gross fixed capital investment at constant prices, which Isco estimates at 2.4 per cent for 1990, compared with 5.1 per cent in 1989. The deceleration in the transport equipment component was particularly pronounced, with outlays in the first three quarters at the same level as a year earlier. Spending on construction and public

Figure 9

works also slowed sharply: the year-on-year growth rate was 4.4 per cent in the first quarter but turned negative in the fourth. One likely cause was the completion of the construction projects associated with last summer's World Cup football competition.

The deterioration in income expectations, the erosion of purchasing power as a result of accelerating inflation in the second half and the virtual completion of the adjustment of stocks of consumer durables affected the pattern of consumer spending. In the third quarter, the growth rate of private consumer spending compared with the year-earlier period dipped below 3 per cent for the first time since mid-1985.

The behaviour of total consumption reflected changes in expenditure on consumer durables, especially in the second half of the year. New car deliveries in the second half were down by 3.5 per cent on the corresponding period of 1989; the decline for the year as a whole amounted to almost one percentage point, compared with an increase of 8.1 per cent in 1989. By contrast, spending on nondurables and services rose by 2.7 per cent on average in the first three quarters (2.9 per cent in 1989).

The Isco-Mondo Economico surveys of business opinion confirmed the downturn in both current and expected demand from May onwards (Figure 9). Beginning in the second quarter, a growing proportion of businessmen considered stocks of finished goods to be higher than normal. Isco's monthly indicators of the household sector's confidence and economic prospects show a clear worsening in the second half of the year in connection with the outbreak of the Gulf crisis (Figures 10 and 11).



Figure 10

(1) Centred moving averages (three terms). No survey is taken in August.





The pace of industrial production was particularly sensitive to the slackening of demand. The index of average daily output, which permits periods to be compared on the basis of an equal number of working days, declined by 0.8 per cent for the year as a whole. It fell by nearly 2 per cent between the final quarter of 1989 and the first quarter of 1990, was unchanged in the second and third quarters and then fell by a further 2.6 per cent in the fourth.



With the weakening of demand-side stimulus, the capacity utilization rate came down from the peak it had reached at the end of 1989 but remained at a high level, as measured by both the Wharton index and the qualitative indicator based on Isco surveys (Figure 12). The slowdown in demand was less marked in services, as the uninterrupted expansion of employ- ment in this sector shows.

Employment and the labour market

Labour force surveys show that the average number of employed workers increased by 300,000 in 1990, or by 1.4 per cent, the largest percentage increase since 1980. This was the result of three distinct developments: a rise of 2.1 per cent in employment in services (higher than the average increase in recent years), a notable recovery in employment in construction (3.2 per cent) after 8 consecutive years of decline, and a slight increase in the number employed in industry excluding construction.

The rise in employment occurred entirely in the early months of the year. During the year as a whole, the employment curve reflected cyclical developments in the economy; according to seasonally adjusted data, total employment remained constant between the first and third quarters.

The halt in employment growth in the second half of the year was due to a more rapid contraction in agricultural employment, a stabilization of the number of jobs in construction in connection with the slowdown in investment in the sector and a fall in employment in industry excluding construction. The ending of the expansion in industrial employment that had been under way since 1988 was corroborated by the more pronounced tendency of firms with more than 500 employees to shed labour in the second half, as well as by a halt in the decline in recourse to ordinary benefits from the Wage Supplementation Fund. After three consecutive quarters in which recourse had been lower than in the year-earlier period, the number of full-time equivalent workers receiving benefit in industry as a whole rose by 9,000 in the third quarter to around 185,000, with the construction sector accounting for 8,000 of the increase.

The services sector moved against the general trend; in October employment was 288,000 higher than a year earlier, part of the growth being attributable to general government.

With the size of the labour force remaining virtually constant, the halt in employment growth meant that in the second half of the year the unemployment rate stabilized at roughly the level recorded in the first half. The rate adjusted to include workers receiving wage supplementation, which has been declining since 1988, fell to below the level recorded in 1984.

Regional statistics show a sizable increase in employment in the South (2.1 per cent) as a result of particularly positive developments in agriculture and construction. Regional disparities, as reflected in unemployment rate differentials, remained unchanged, however.

Intense negotiations were conducted last year to renew many labour contracts. The first half saw renewals in both the public sector (for the employees of the health service, autonomous government agencies, local authorities, the universities and the railways) and the private sector (banking, tourist services, paper and chemicals). Another two important contracts, covering the engineering industry and the distributive trades, were signed in December.

The settlement in the engineering industry covers around 1.5 million workers and provides for monthly pay increases averaging 250,000 lire over the three and a half years of the contract, equivalent to around 12.3 per cent of average gross earnings in 1989. Almost half of the increase will be paid during 1991. A one-off payment of 840,000 lire was agreed for 1990, the previous contract having expired in 1989. In addition, the number of working hours per year will gradually be reduced by 16. However, the duration of the contract was extended by another three months (from March to June 1994) and a freeze was placed on company-level bargaining until May 1992.

The contract in the distributive trades, which affects around 900,000 workers, provides for pay increases totalling about 17 per cent of 1989 average gross earnings over the life of the agreement; 40 per cent of the increase will be paid this year, 35 per cent in July 1992 and the remaining 25 per cent in October 1993. It also provides for a 750,000 lira one-off payment in 1991.

In the industrial sector, the national labour contracts in construction, textiles, food processing, wood and wood products, and electricity expired between August and December. Including the farm workers, whose contract expired a year ago, some 4 million workers will be involved in contract renewals in the next few months.

Inflation, costs and productivity

The annual average rate of consumer price inflation in 1990 was 6.5 per cent, compared with 6.3 per cent the previous year.

Until the middle of the year progress continued to be made in offsetting the acceleration that had occurred during 1989: in January the twelve-month rate of increase was 6.6 per cent, but by May it had fallen to 6 per cent. The appreciation of the lira reinforced the anti-inflationary effect of the fall in raw material prices on world markets and thereby countered the inflationary pressure exerted by the rise in domestic costs that had already begun to develop in 1989.

Figure 13

Consumer and output prices (percentage changes on year-earlier period)

7



The slow downward trend of inflation reversed in June. The outbreak of the Gulf crisis and the prompt adjustment of the prices of oil products to the higher price of crude resulted in the latter being reflected in consumer prices as early as August, when the rate of inflation rose to 6.7 per cent.

Inflation was being fueled by the persistence of domestic price pressures even before the increase in energy prices made itself felt. The reversal of the downward trend of consumer price inflation occurred before the summer, at a time when oil prices were still falling. Net of the direct effect of the rise in energy prices, the twelve-month rate of increase in consumer prices shadowed movements in the general index until August, after which it remained stable at around 6 per cent (Figure 13).

Analysis of the expenditure items included in the general index of consumer prices shows that the upturn in inflation concerned both goods and services, and especially those whose prices are not subject to public control. As in the last few years, the prices of services rose faster than those of goods, increasing at a rate of 8 per cent, which was about one and a half points above the average for the index as a whole. The index excluding indirect taxes and the prices of tobacco products shows that tax measures were not to blame for the mid-year upturn in the twelve-month inflation rate, although they did contribute to the acceleration in the annual average rate (Figure 14).



The contrast between the slowdown in the prices of industrial products in 1990 and the acceleration in those of non-food and non-energy consumer goods suggests that part of the inflationary pressure was due to a widening of margins in the distributive trades.

Table 6

Unit variable costs and final output prices in manufacturing

(percentage changes on year-earlier period)

		1989			1990	
-	Year	H1	H2	Year (1)	H1	H2 (1)
Input prices (2)	6.4	7.3	5.6	3.9	3.5	4.5
Domestic (3)	6.0	5.4	6.6	8.8	8.3	9.4
of which:energy	9.3	7.0	11.4	15.6	14.6	16.6
services	6.2	5.6	6.8	8.5	8.1	8.9
agricultural products	3.5	3.8	3.3	5.8	4.8	6.9
Imported	7.3	11.0	3.7	-4.7	-4.7	-4.8
of which:energy	20.2	17.2	23.2	7.4	-3.7	18.1
industrial raw materials	12.0	21.3	3.6	-12.5	-12.8	-12.1
semi-finished products	6.0	8.7	3.4	-2.4	-1.8	-3.0
Unit labour costs	7.7	6.8	8.6	7.0		
Unit variable costs	7.1	7.0	7.1	5.5	4.8	6.3
Output prices	5.6	6.3	4.9	2.7	3.1	2.4
Domestic (3)	5.2	5.4	5.0	3.0	3.5	2.5

(1) Partly estimated. - (2) Domestic inputs account for 60.5 per cent of total inputs; the incidence of the latter with respect to total unit variable costs is 48.9 per cent. - (3) Weighted, net of intrasectoral transactions; domestic output prices account for 71.9 per cent of the total.

The rise in the price of oil in the second half of the year increased the pressure on costs, despite being partly offset by the simultaneous strengthening of the lira against the dollar. The sharp slowdown in the rate of increase in the prices of inputs in the first part of the year – due primarily to the fall in the prices of those from abroad – was reversed in the second half, particularly in manufacturing industry. Compared with the year-earlier period, the prices of total inputs rose by 3.5 per cent in the first half of 1990 and by 4.5 per cent in the second, primarily in connection with the upturn in energy prices (Table 6). The rise in the latter was also fueled by increases in tax rates. The fall in the prices of directly imported inputs (mostly non-energy raw materials and intermediate goods), which had begun during the first half of the year, continued in the second half.

The stagnation of industrial production was accompanied by a further slowdown in the sector's annual average rise in productivity. The increase in value added per employee is not expected to have exceeded 1 per cent, compared with a gain of 2.6 per cent in 1989. The slowdown was entirely attributable to cyclical factors which caught firms in the process of adjusting their labour forces to the larger stock of capital they had accumulated after a long period of reorganization, directed first at rationalization and then at expansion. Unit labour costs are estimated to have risen by 7 per cent in manufacturing industry and by slightly more in the private sector as a whole.

Earnings per employee in the public sector grew at the exceptionally rapid rate of around 14 per cent, more than five points faster than in the private sector.

The slackening of demand and the appreciation of the lira limited the ability of firms to pass the larger rises in unit labour costs on to prices. The twelve-month rate of increase in output prices decreased by about half a point between the first and second halves of the year. The difference between the rates of increase of input and output prices led to a further narrowing of profit margins, which had already contracted slightly in 1989.

The rapid acceleration in price increases in the other countries participating in the Exchange Rate Mechanism led to a small reduction in Italy's average inflation differential in 1990, from 1.6 to 1.4

percentage points (Table 7). Vis-à-vis the other EMS countries adhering to the narrow band, however, the differential widened slightly, from 3.3 to 3.5 points. In the last quarter of the year the differential vis-à-vis France increased by half a point (from 2.9 to 3.4 points) and that vis-à-vis Germany by three tenths of a point (from 3.7 to 4.0 points).

Table 7

Inflation differentials between Italy and the other ERM countries

(consumer prices; percentage changes on the year-earlier period)

	Average vis-à-vis the other ERM countries (1)	Average vis-à-vis other narrow-band EMS countries (2)
1988	2.1	3.2
1989	1.6	3.3
1990	1.4	3.5
1990 - 1st qtr	1.8	3.4
2nd "	1.2	3.4
3rd "	1.3	3.5
4th "(3).	1.5	3.5

(1) Belgium, Denmark, France, Germany, Ireland, the Netherlands, the United Kingdom and Spain. – (2) The countries listed in footnote 1 except for the United Kingdom and Spain. – (3) Partly estimated for November and December.

The balance of payments on current account

According to provisional and partly estimated data, there was a current account deficit of nearly 4 trillion lire on a transactions basis in the second half of 1990, over 2 trillion more than in the same period of the previous year (Table 8). The entire increase was ascribable to invisibles, since the *fob-fob* trade balance was virtually unchanged. In the first half of the year, by contrast, a sharp deterioration in the invisible items had been partly offset by a substantial narrowing of the trade deficit.

In the second half of 1990 the trade deficit, *cif-fob*, was practically the same as a year earlier, at around 3 trillion lire. The improvement recorded during the first half was halted by the jump in oil prices and the widening of the growth differential between import and export volumes. For the year as a whole the deficit narrowed by about 3 trillion lire.

Table 8

Current account of the balance of payments on a transactions basis

		1989				
	H1	H2	Year	H1	H2	Year
Goods (<i>fob-fob</i>)	-6,870	4,158	-2,712	-3,700	4,200	500
Goods (<i>cif-fob</i>)	-14,293	-2,783	-17,076	-11,273	2,830	-14,103
Invisibles	-5,756	-5,984	11,740	-10,900	8,100	-19,000
Foreign travel	3,077	4,074	7,151	2,800	3,900	6,700
Investment income	-5,471	5,895	-11,366	-7,500	8,300	-15,800
Other services, income and transfers	-3,362	-4,163	-7,525	-6,200	-3,700	-9,900
Total	-12,626	-1,826	-14,452	-14,600	-3,900	-18,500

(balances in billions of lire)

(1) Provisional and partly estimated, except for the figures on goods trade *cif-tob*.

	Table 9
Foreign trade: values. prices. volumes	
(cif-fob; percentage changes on year-earlier pe	eriod)

			1990	
	1989	H1	H2 (1)	Year (1)
Exports:				
Value	15.9	7.6	3.7	5.6
Average unit value	6.3	1.9	2.2	2.1
Volume	9.0	5.6	1.5	3.5
Imports:				
Value	16.6	3.8	3.5	3.7
Average unit value	7.6	-2.0	1.4	-0.3
Volume	8.3	5.9	2.1	4.1
Export-import growth				
differential, volume	0.5	-0.3	-0.6	-0.6
Terms of trade	-1.2	4.0	0.8	2.4
World demand (2)	7.0	5.7	5.3	5.5
Real effective exchange rate (3)	2.4	5.9	3.1	4.5

Sources: IMF, Istat.

(1) Partly estimated. – (2) Exports of the industrial countries, volume. – (3) Based on the prices of manufactures; a minus sign indicates an improvement in competitiveness.

The growth in the volume of exports in relation to the year-earlier period slowed down from 5.6 per cent in the first half to about 1.5 per cent in the second (Table 9). The slowdown was due both to the slackening of world demand and to the lagged effect of Italy's loss of competitiveness; the real effective exchange rate of the lira in the first half was 5.9 per cent higher than in the corresponding period of 1989 (Figure 15). The annual average growth in the volume of exports was probably no more than 3.5 per cent, 2 points less than the increase in world demand, despite the powerful stimulus provided by the acceleration in economic activity in Germany. In value terms, Italian exports to Germany rose by 17 per cent in the first eleven months of the year, compared with an 8 per cent growth in exports to the EEC as a whole. Germany thus took 19 per cent of total Italian exports (Table 10).

In 1990 as a whole the current account deficit grew by some 4 trillion lire to 18.5 trillion, or 1.5 per cent of GDP. The improvement in the trade account, which returned to a small surplus after three years of deficits, offset less than half of the increase in the deficit on invisibles from 11.7 to 19 trillion lire. The



(1) Real exchange rates are based on the wholesale prices of manufactures. A rise in the index indicates an appreciation (for real rates, a loss in competitiveness). balance on invisibles turned negative in 1986, and the deficit has grown steadily ever since. This reflects the continuing erosion of net earnings from tourism as well as the increasing size of the deficit on investment income. The latter is at once the cause and the effect of the expansion in Italy's net external debt, which stood at 94 trillion lire at the end of 1989 following the persistent current account deficits registered in the past decade.

The share of Italian exports going to EEC countries increased, partly because in real terms the lira appreciated much less against their currencies than against Italy's trading partners as a group.

Table 10

Italian merchandise trade by country and area (January-November: cif-fob)

	Exports			Imports				
-	Billions	of lire	Percentage change	Percentage share	Billions	s of lire	Percentage change	Percentage share
	1989	1990			1989	1990		
OECD countries	139,856	148,379	6.1	80.5	146,620	153,223	4.5	76.5
EEC	99,482	107,887	8.4	58.5	109,519	115,127	5.1	57.4
France	28,735	30,549	6.3	16.6	28,271	28,651	1.3	14.3
Belgium-Luxembourg	5,776	6,322	9.5	3.4	9,588	10,112	5.5	5.0
Netherlands	5,462	5,777	5.8	3.1	10,593	11,538	8.9	5.8
Germany	29,917	35,017	17.0	19.0	40,988	42,781	4.4	21.4
United Kingdom	14,007	13,223	-5.6	7.2	9,362	10,318	10.2	5.1
Ireland	531	526	-0.9	0.3	1,246	1,359	9.1	0.7
Denmark	1,329	1,412	6.2	0.8	1,814	2,013	11.0	1.0
Greece	3,203	3,312	3.4	1.8	2,274	1,782	-21.6	0.9
Portugal	2,170	2,650	22.1	1.4	750	700	-6.7	0.3
Spain	8,352	9,099	8.9	4.9	4,633	5,873	26.8	2.9
Other Western European								
countries	16,479	17,187	4.3	9.3	17,510	18,737	7.0	9.4
United States	15,086	14,188	-6.0	7.7	10,576	10,336	-2.3	5.2
Canada	1,935	1,637	-15.4	0.9	1,421	1,611	13.4	0.8
Japan	4,031	4,352	8.0	2.4	4,474	4,696	5.0	2.3
Other OECD countries	2,843	3,128	10.0	1.7	3,120	2,716	-12.9	1.4
Central and Eastern Europe	5,253	5,336	1.6	2.9	7,890	7,402	-6.2	3.7
of which: USSR	3,061	2,805	-8.4	1.5	4,517	4,471	-1.0	2.2
OPEC countries	8,312	7,451	-10.4	4.0	11,812	13,594	15.1	6.8
Other	21,980	23,110	5.1	12.6	26,537	26,153	-1.4	13.0
of which: China	1,586	1,010	-36.3	0.5	2,175	2,069	-4.9	1.0
Treat	175 401	184 276	51	100.0	102 850	200 272	20	100.0

Import growth also decelerated perceptibly during the second half of the year. Tempered by the slowdown in domestic demand, the volume of imports was probably only just over 2 per cent larger than in the second half of 1989, compared with 5.9 per cent growth in the first half and an average of 4 per cent for the year as a whole. The deceleration involved almost all product groups but was particularly pronounced in the case of metal products and machinery, mirroring the slowdown in domestic investment in machinery and equipment.

The improvement in the terms of trade registered in the first six months (4 per cent in relation to the first half of 1989) was sharply reduced in the second half. The jump in energy prices in the wake of the Iraqi invasion of Kuwait (the *cif* price of oil imports rose from \$15 a barrel in July to \$37 in October before easing to \$30 in December), was only partly offset by decreases in the prices of non-energy raw materials and the depreciation of the dollar (Figure 16). Nevertheless, on average for the year the terms of trade improved by over 2 points.



Export unit values rose by 2 per cent in 1990, the increase being evenly distributed between the first and second halves of the year. The export prices of manufactures rose by just over 1 per cent, while domestic producer prices increased by 3 per cent. The disparity was largely due to a loss of competitiveness, which led exporters to defend their foreign market

shares more tenaciously by further reducing their profit margins.

Italy's trade deficit with the rest of the EEC was more than 2.5 trillion lire lower for the first eleven months of the year on a cif-fob basis (Figure 17). This was due above all to a narrowing of the deficit vis-à-vis Germany from 11 to 7.8 trillion lire, accompanied by larger surpluses with France, Greece and Portugal, which more than outweighed the reduction in the surplus with the United Kingdom stemming from the sharp contraction in British domestic demand. The surplus with the United States also diminished, in connection with the depreciation of the dollar and slackening US demand. The deficit vis-à-vis the OPEC countries rose from 3.5 to 6 trillion lire as a result of the jump in oil prices. The deficit on trade with Eastern Europe and the Soviet Union narrowed slightly, owing to a small reduction in Italian imports.



Italian merchandise trade balance with selected countries and areas January-November 1989 and 1990 (billions of lire, cif-fob)



The narrowing of the *cif-fob* trade deficit for the year as a whole was the result of an appreciable increase of 5.2 trillion lire in the surplus on trade in non-energy goods (more than 3 trillion of the improvement occurring in the first half), set against a 2.3 trillion lira rise in the deficit on fuel and power products owing to the crisis in the Gulf. There was a significant reduction in the deficits on trade in agricultural products and metallic ores, the latter mostly in the first half. The surplus on traditional

Table 11

Merchandise	trade	bv	product	group
merchanaloc	nauc	wy.	product	givup

(balances in billions of lire, cif-fob)

	1989					
	H1	H2	Year	H1	H2	Year
Agricultural, forestry and fishery products	5,450	-4,686	-10,136	-4,904	-4,043	-8,947
Fuel and power products	-9,997	-10,602	20,599	~10,082	-12,793	-22,875
Ferrous and non-ferrous ores and metals	-7,372	-5,547	12,919	6,202	-4,999	-11,201
Non-metallic minerals and mineral products	1,966	2,304	4,270	2,151	2,144	4,295
Chemical products	6,369	-4,170	-10,539	6,612	-4,900	-11,512
Metal products and machinery	8,268	11,078	19,346	8,238	11,304	19,542
Transport equipment	-2,085	-1,743	-3,828	-2,227	-1,985	-4,212
Food, beverages and tobacco products	-4,549	-4,641	-9,190	-4,284	-4,336	-8,620
Textiles, leather products and clothing	9,157	11,742	20,899	10,449	12,957	23,406
Other	2,138	3,482	5,620	2,200	3,821	6,021
Total	-14,293	-2,783	-17,076	-11,273	-2,830	-14,103
Source: Istat.						

consumer products, namely textiles and footwear, widened by 2.5 trillion lire. However, the deficit on chemical products increased by 1 trillion lire (Table 11).

Data on invisible items are available only for the first three quarters; the deficit in this area in the second half is estimated to have been some 2 trillion lire larger than in the same period of 1989. The deterioration in the first half amounted to 5 trillion lire, so that the invisibles deficit for the year as a whole is likely to be about 19 trillion lire.

The further increase in the net outflow on investment income in the second half of the year was due to the growth in Italy's external debt and a slight rise in international interest rates.

In both halves of the year net earnings from foreign travel remained about the same as in the year-earlier period. The surplus for 1990 as a whole came to 6.7 trillion lire, only slightly lower than the figure for 1989. As the underlying causes of the sharp contraction of recent years do not appear to have been eliminated (see insert), the smallness of the reduction in 1990 is explained by earnings connected with the World Cup football matches and a recent improvement in the price competitiveness of Italian tourist services compared with those of the countries to which Italians most commonly travel.

The surplus on income from labour and emigrants' remittances continued to decline. There was a particularly large deterioration in the deficit on "other services", especially in the first half of the year; this item presumably includes part of the remittances of immigrant workers in Italy, which cannot be distinguished at present.

Istat data on official transfers show that the outflow in the first nine months was about 1 trillion lire less than in the same period of 1989. The improvement, which occurred entirely in the third quarter, reflected larger receipts from the EEC and a decrease in payments to non-Community countries.

Foreign travel and world tourism

The surplus on the item "foreign travel" in the Italian balance of payments declined steadily during the second half of the eighties. Receipts abruptly stopped growing in 1986 but increased again subsequently at very slow rates, while Italian expenditure on foreign travel expanded by over 26 per cent a year. Net earnings from tourism thus declined from 3.2 per cent of GDP, a ratio maintained almost unchanged from 1974 to 1985, to 0.6 per cent for the first three quarters of 1990 (Table 1). This is close to the figure for France, the only other leading industrial country that regularly records a surplus on tourism.

The contraction in net earnings from tourism can be traced to a number of causes. One, which affects both receipts and expenditure, is the Italian tourist industry's loss of competitiveness in terms of both service quality and price. The industry has been slow to adapt to the ever more marked differentiation of international tourist demand, and the recent problems in preserving the artistic heritage and protecting the natural environment have also played a part in the declining overall quality of Italian tourist services. Specially constructed indices reveal that from 1985 to 1989 the Italian tourist industry suffered losses in price competitiveness for foreign and Italian travellers alike, at average rates of 2 and 2.5 per cent a year respectively (Figure 1). However, partly estimated data for 1990 indicate a substantial improvement as regards Italian tourists, owing entirely to price and exchange rate movements in Yugoslavia, Spain and Greece, which together account for more than 40 per cent of Italian tourist expenditure abroad.

In 1970 Italy's share of the world market in tourist services stood at 8.8 per cent, not much below the figures for the United States and Spain and greater than the shares of France, Germany and the United Kingdom (Table 2). International tourism grew rapidly during the seventies, slowing down only in the immediate aftermath of the first oil shock. Italy's share increased slightly, thanks in part to substantial gains in competitiveness (averaging 2.2 per cent a year between 1970 and 1979) and despite a rapid rise in the share of the LDCs, particularly those in Asia. Over the following decade the United States gradually increased its share (to 18 per cent in 1989) at the expense of the LDCs and, to a lesser extent, the EEC.¹ Among European Community countries, Italy suffered the sharpest decline, seeing its share fall to 6.3 per cent in 1989; the deterioration was continuous, occurring not only during the downturn in international tourism from 1980 to 1983 but also during the strong recovery that followed. Other countries, such as Spain and Portugal, maintained their shares.

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



(1) An increase indicates a loss of competitiveness. For the methodology used in constructing the indicators, see the insert in *Economic Bulletin* No. 7, pp. 20-21. The data for the fourth quarter of 1990 are partly estimated.

Table 1

Foreign travel in the Italian balance of payments Average Average 1968-73 Average 1974-85 1960-67 1986 1987 1988 1989 1990(1) Receipts from foreign travellers in Italy Percentage of current account receipts 11.3 8.7 7.8 7.9 7.4 6.9 6.0 6.9 Percentage of world demand for international tourism (2) 7.7 7.8 6.9 8.8 8.4 6.3 Expenditure by Italian travellers abroad Percentage of current account expenditure 23 3.4 1.5 22 27 3.2 3.2 4.1 Percentage of Italian final national consumption 0.5 1.0 0.6 0.8 1.0 1.2 1.3 1.7 Balance Percentage of current account items (receipts + expenditure) 4.9 2.8 3.1 2.6 2.3 1.8 1.3 1.2 Percentage of GDP 5.1 2.9 3.2 2.7 2.3 1.9 1.3 0.6 Source: Based in part on IMF and Istat data. (1) January-September; provisional seasonally adjusted data. - (2) Ratio of Italy's tourist receipts, expressed in dollars, to the total for all countries in the IMF sample.

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The growth in Italians' spending on tourism occurred after the removal of foreign exchange restrictions on foreign travel from 1984 onwards. It is only partly ascribable to the unfavourable trend of relative prices and has resulted in a rise in the share of spending on foreign travel in national consumption.

This development would appear to be a secular trend. In the sixties expenditure on foreign travel amounted to about 0.5 per cent of national consumption. Around the turn of the decade the share rose sharply, reaching 1.2 per cent in 1973, but the data are probably distorted by concealed exports of capital, which the statistics of the time were unable to identify completely. Between 1974, when the restrictions on exports of banknotes by tourists were made more stringent, and the early eighties the ratio fell back to the levels of the early sixties. In the second half of the eighties, however, expenditure on foreign travel rose more quickly than national consumption, so that the share rapidly increased to 1.7 per cent in 1990 (Figure 2).

The share of national consumption devoted to foreign travel nonetheless remained lower in Italy in 1989 than in other affluent countries that can boast a wealth of natural and cultural tourist attractions, such as France (1.8 per cent). In the last few years the Italian figure has been about the same as that for Spain, with the difference that Spain has succeeded in retaining its share of the world market in international tourism.

Figure 2

Table 2



1. The growth in the US surplus on tourism was already evident in the early eighties. However, the magnitude of the increase has been amplified by the recent upward revision of the official data for 1984-87. See US Department of Commerce, Survey of Current Business, June 1989 and June 1990.

Shares of the world market in international tourist services (1) (percentages)

	11	0			
	1970	1975	1980	1985	1989
OECD countries	79.4	75.6	74.2	77.0	77.8
- EEC countries	46.8	45.2	45.6	42.5	40.9
Italy	8.8	7.7	9.2	8.0	6.3
France	7.0	7.9	8.5	7.7	8.5
Germany	7.1	5.8	5.1	4.6	4.5
United Kingdom	5.5	6.3	7.1	6.9	5.8
Greece	1.0	1.5	1.8	1.4	1.0
Portugal	1.6	0.8	1.2	1.1	1.3
Spain	9.0	8.2	7.2	7.8	8.5
- United States (2)	12.4	11.1	10.9	16.9	18.0
- Japan	1.2	0.6	0.7	1.1	1.6
Other	18.8	22.5	23.5	21.5	20.3
Total	100.0	100.0	100.0	100.0	100.0

(1) Ratio of each country's tourist receipts, expressed in dollars, to the total for all countries in the IMF sample. - (2) New series from 1984 onwards.

Capital movements and the exchange rate

The continuing rapid international integration of the Italian financial system was underscored in 1990 by a further very substantial intensification of both inward and outward capital flows. Provisional estimates put total gross inflows and outflows at over 800 trillion lire (against 530 trillion in 1989), more than one third greater than total gross current account flows.

There was a net capital inflow of 33.7 trillion lire gross of errors and omissions in 1990. Given the current account deficit of 18.5 trillion lire and a restrictive monetary stance aimed at maintaining exchange rate stability, the official reserves increased by 15.2 trillion lire (Table 12).

The second half of the year saw net capital outflows of 2.3 trillion lire, after inflows of 36 trillion in the first six months, and the official reserves diminished by more than 6 trillion lire. Net inflows from loans and through banking channels slowed down sharply, and there was an increase in net outflows for investment abroad and trade credits gross of errors and omissions. The reversal of net capital flows was connected with the appreciation of the Deutschemark from August onwards and the rise in German interest rates in the autumn, particularly those at short term. At the same time the lira depreciated against the other EMS currencies, having remained at the top of the narrow fluctuation band until the summer.

In the fourth quarter the restrictive monetary policy caused the differential between Italian and German interest rates to increase to almost the level recorded at the beginning of the year. This helped limit net capital outflows, which amounted to 3.4 trillion lire (gross of errors and omissions), and strengthened market confidence in the Bank of Italy's determination to keep the exchange rate stable.

There was a net inflow of 10 trillion lire through banking channels in the same period. A large part of this was attributable to the special credit institutions, which are not subject to reserve requirements in respect of fund-raising abroad. Net inflows through the banking system amounted to 22 trillion lire for the year as a whole (as against 15 trillion in 1989), and to 7.4 trillion in the second half.

Table 12

Net capital movements (billions of lire)								
		1989			1990 (1)			
	H1	H2	Year	H1	H2	Year		
Foreign investment in Italy	8,351	11,757	20,108	16,000	14,870	30,870		
Italian investment abroad	-4,777	-10,518	-15,295	-12,390	-21,070	-33,460		
of which: portfolio	-3,667	-7,073	-10,740	-9,682	-14,710	24,392		
Foreign loans	12,659	7,194	19,853	25,980	12,370	38,350		
Italian loans	-621	-1,087	-1,708	-4,500	-2,200	-6,700		
Trade credits, other items and errors and omissions	-2,265	-5,834	-8,099	3,838	13,663	-17,501		
Non-bank capital flows and errors and omissions	13,347	1,512	14,859	21,252	-9,693	11,559		
Bank capital flows (2)	10,429	4,550	14,979	14,714	7,387	22,101		
Total	23,776	6,062	29,838	35,966	-2,306	33,660		
					• • • • • • • • • • • • • • • • • • • •			
Memorandum item: Change in official reserves (3)	11,150	-4,236	-15,386	-21,366	6,206	-15,160		
(1) Provisional and partly estimated - (2) Via resident bankir	a institutions – (3	Net of exchange-	ate adjustments an	d the reveluation of	cold			

Net Italian investment abroad came to 21 trillion lire in the second half of 1990, but the outflow slowed down sharply in the fourth quarter, when net portfolio investment was almost 2 trillion lire less than in the third. Net outward investment totaled 33.5 trillion lire in the year as a whole, some 18 trillion higher than in 1989, with portfolio investment alone accounting for 13.5 trillion of the increase. The expansion reflected the growing internationalization of Italian firms and portfolio diversification, which intensified in the wake of the removal of the remaining restrictions on capital movements. The net flow of funds to residents' bank accounts abroad increased but remained modest in absolute terms.

The international integration of the Italian financial market is further corroborated by the volume of net investment from abroad, which came to almost 15 trillion lire in the second half and 30.9 trillion in the year as a whole, almost 11 trillion more than in 1989. However, net portfolio investment in the first three quarters (more recent data are not yet available) declined by 1.5 trillion lire to just over 10.2 trillion. Net foreign purchases of government securities in ecus, which remain by far the largest component of non-residents' Italian portfolios, were substantially lower in the third quarter than in the third quarter of 1989.

In the first three quarters there was a net inflow of loans totaling almost 40 trillion lire, distributed quite evenly over the period, but this was followed by a net outflow of 1.4 trillion in the fourth quarter. The reversal was presumably due to the liquidation of short-term speculative positions created in September in view of tensions in the exchange markets, and to a lesser extent to a sharp reduction in net inflows stemming from government bond issues, which had amounted to nearly 5 trillion lire in the first three quarters. For the year as a whole, the net loan inflow came to over 38 trillion lire, almost 20 trillion more than in 1989.

The greater substitutability between Italian and foreign financial assets was also reflected in the pattern of Italian lending abroad, which until a few years ago had been almost entirely official. The net outflow of loan capital, which jumped from 1.7 trillion lire in 1989 to 6.7 trillion lire last year, consisted mostly of private sector lending in lire.

Official reserves contracted by 900 billion lire in January, signaling an easing of the upward pressure on the strong EMS currencies, and the lira edged closer to its central parity with the Deutschemark.

Public finances

The 1990 state sector borrowing requirement amounted to 141.30 trillion lire, net of settlements of past debts (Table 13). This was 8 trillion more than the objective the Government had fixed in the September 1989 Forecasting and Planning Report and over 5 trillion more than predicted in the May 1990 Economic and Financial Planning Document.

The overshoot of the objective set in the Forecasting and Planning Report was almost entirely attributable to interest payments, which were 7.6 trillion lire more than the projected figure of 118.40 trillion. This was based on interest rate forecasts that were made unrealistic by the failure to achieve the planned slowdown of inflation. The success in keeping the primary borrowing requirement close to the forecast figure of 15 trillion was due to the budget having been made more rigorous at the end of 1989 and to the adoption of additional measures between May and July 1990.

The mid-year budget revision was presented at the same time as the Economic and Financial Planning Document and intended to reduce the primary deficit to 10.45 trillion lire, or about 5 trillion lire less than the actual outcome. The failure to achieve this more demanding objective was primarily due to the nearly 8 trillion shortfall in revenue compared with the forecast, in which some items were somewhat optimistically estimated. The lower-than-expected level of receipts was attributable both to the attenuation in Parliament of some of the May measures and to some tax bases expanding more slowly than forecast, partly as a result of the slower growth in economic activity.

The difficulty of remaining within the limits fixed for the total borrowing requirement emerged clearly in the first few months of 1990: the divergence of the macroeconomic variables from the planned course had obvious repercussions on the budget, especially as regards interest payments; in addition, the new wage agreements covering public sector employees brought larger-than-expected financial needs, partly to pay amounts attributable to prior years. The aim of gradually stabilizing the public debt to GDP ratio, which the Government had forecast would peak in 1992, made it necessary to offset the interest payment overshoot by lowering the limit set for the primary borrowing requirement in the Forecasting and Planning Report for 1990.

It also began to appear doubtful whether the correction likely to be produced by the budget measures announced at the end of 1989 would be sufficient. The streamlining of the Finance Bill since 1988 has made it easier to obtain Parliamentary approval of the budget as a whole, but has made the achievement of the planned results depend crucially on the full implementation of the accompanying provisions. The changes these underwent before they were approved by Parliament made it necessary to introduce additional measures during the year. Those presented in May brought an increase in revenue and a reduction in expenditure totaling around 8 trillion lire. Official estimates indicate that the combined effect of all the 1990 budget measures was to reduce the primary borrowing requirement by around 26 trillion.

The ratio of the total borrowing requirement to GDP remained virtually unchanged (11.2 per cent, as against 11.3 per cent in 1989). Net of settlements of past debts amounting to 4.8 trillion, the ratio fell from 11.1 to 10.8 per cent (Table 13). Net of interest payments, the fall was much sharper, from 2.3 to 1.2 per cent. These results were achieved primarily by way of discretionary increases in revenue, which led to the ratio of fiscal revenue to GDP rising by nearly one percentage point. The curb on outlays brought a reduction of only just over 5 trillion lire, most of which was obtained, moreover, by curbing purchases of goods and services and capping loans to local authorities. No changes were made to the

Table 13

(bittions of tire)						
		1989			1990	
	H1	H2	Year	H1	H2	Year
State sector:						
Borrowing requirement, net of settlements of past debts as a % GDP	42,549	89,789	132,338 (11.1)	48,220	93,115	141,335 (10.8)
Settlements made in cash	950	115	1,065	145	104	249
Settlements made in securities	454	-	454	-	4,582	4,582
Total borrowing requirementas a % of GDP	43,953	89,904	133,857 (11.3)	48,365	97,801	146,166 (11.2)

Selected public finance balances

mechanisms that cause expenditure to rise faster than GDP. Instead of declining, as had been forecast in May, state sector expenditure increased by one percentage point in relation to GDP.

The increase in state sector debt in relation to GDP continued, albeit at a slower pace: the ratio rose from 93.5 per cent in 1988 to 96.5 per cent in 1989 and to 98.6 per cent last year, when the debt exceeded 1,290 trillion lire.

The borrowing requirement followed a similar course to that recorded in 1989, with about one third of the total being recorded in the first half of the year (Table 13 and Figure 18). The state sector's financing needs accelerated in the last few months of the year, fueled both by the slowdown in fiscal receipts and by a higher level of outlays. The effect on the borrowing requirement for the year was attenuated by the regions temporarily depositing about 2 trillion lire of loans raised for the settlement of past debts on their Treasury accounts.

Compared with 1989, a larger proportion of the borrowing requirement was financed by market sales of medium and long-term securities (the share of which rose from 38 to 53 per cent) and by foreign borrowing (up from 6 to 10 per cent of the total). This enabled the decline in the average maturity of the debt to be halted, and at the end of the year it was about two and a half years, as in December 1989. By contrast, the share of Post Office funds in the financing of the state sector dropped, primarily owing to a 340 billion lira fall in current account deposits.



The main items of the public accounts

According to the provisional statement of general government income (Table 14), the net borrowing of general government remained virtually unchanged in relation to GDP (10.3 per cent, as against 10.2 per cent in 1989); net of interest payments, the borrowing requirement fell from 1.2 to 0.6 per cent of GDP. By contrast, after five years in which the public sector's absorption of national saving had fallen without interruption, the deficit on current account rose from 5.4 to 5.7 per cent of GDP.

Table 14

Gener	al gover	nment	income	statement
	(billions	of lire;	% chan	ges)

	1000	1000	1989	1990
	1969	1990	1988	1989
EXPENDITURE				
Wages and salaries	143,351	164,000	8.6	14.4
Intermediate				
consumption	58,705	63,900	7.7	8.8
Social services	210,803	233,000	11.2	10.5
Production subsidies	29,093	31,400	8.4	7.9
Debt interest	106,950	127,000	20.6	18.7
Other	22,463	24,300	29.7	8.2
Total current	E71 26E	643 600	10.0	10.6
	071,000 40 4	643,600	12.3	12.0
as a % of GDP	40.1	49.3	11.0	7.0
	42,140	45,100	11.9	7.0
Other expitel expenditure	15,516	10,000	-1.0	7.0
Total capital expenditure	/40 50 /10	62 500	10.0	7.0
	56,412	62,500	0.0	7.0
Total expenditure	629,777	706,100	11.9	12.1
as a % of GDP	53.0	54.1		
REVENUE				
Direct taxes	173,146	194,700	17.9	12.4
Indirect taxes	123,726	140,900	13.4	13.9
Social security				
contributions	167,517	186,100	12.2	11.1
Other	42,345	47,700	10.9	12.6
Total current revenue .	506,734	569,400	14.3	12.4
Capital revenue	1,901	2,000	20.4	5.2
Total borrowing	508,635	571,400	14.3	12.3
as a % of GDP	42.8	43.8		
Net borrowing	121,142	134,700	2.7	11.2
as a % of GDP	10.2	10.3		
Borrowing net of debt interest	14,192	7,700	-51.5	45.7
as a % of GDP	1.2	0.6		
Total fiscal revenue (1)	464,389	521,700	14.6	12.3
as a % of GDP	39.1	39.9		
Deficit on current				
account	64,631	74,200	-1.3	14.8
as a % of GDP	5.4	5.7		

Source: Isco. (1) Direct and indirect taxes and social security contributions. General government expenditure on current account increased by 12.6 per cent and rose in relation to GDP by more than one percentage point, from 48.1 to 49.3 per cent. There were particularly large increases in the three most important expenditure items: wages and salaries, social services and interest payments.

Spending on wages and salaries went up by 14.4 per cent, as against 8.6 per cent in 1989. More than ten percentage points of the increase were due to the implementation of the wage agreements for the three years 1988-90, which covered general government employees other than school staff. The rise in this item was boosted by the disbursement of back pay and curbed by the late definition of some agreements and the payment of wage and salary increases in instalments, with the result that a part of the burden was shifted to 1991. Another three points of the total increase were attributable to wage indexation. Istat labour force estimates indicate that the increase in general government employment was larger than the 0.3 per cent recorded in 1989.

Social security benefits rose by 10.5 per cent, as against 11.2 per cent in 1989. As in previous years, pensions grew especially fast, primarily because it was necessary to make good the shortfall between the revisions made during 1989 on the basis of the planned rate of inflation and that made at the end of the year on the basis of the actual rate. This led to an increase of around 3 per cent in pensions at the beginning of 1990 and to back pay amounting to nearly 1.5 per cent of total annual pension payments. In addition, from 1 January 1990 the pension bill was increased by the improvements Law 544/1988 provided for in the minimum pensions paid to some persons over 65 and in those paid to persons with more than fifteen years of contributions. Another expansionary factor was the revision, with effect from the same date, of pensions which had been capped by the limit on eligible earnings. Spending on unemployment benefits, which had declined since the mid-eighties, was boosted by the increase in the ordinary rate from 15 to 20 per cent of beneficiaries' earnings from 1 January 1990 and by industry making greater recourse to the Wage Supplementation Fund.

Interest payments recorded an increase of 18.7 per cent, about two thirds of which was attributable to the growth of the debt itself and the rest to the rise in nominal interest rates in the second half of 1989. In view of the lag with which floating rates are adjusted, the effects were felt in the medium and long-term segment of the market in 1990. The interest paid on Treasury bills went up by 13.7 per cent, which was a little less than the growth in such paper (14.2 per cent) owing to the fall in short-term real interest rates on average over the year.

The increase in purchases of goods and services was kept down to 8.8 per cent by the restrictions on allocations imposed by the Finance Law for 1990 and the directive issued by the Prime Minister in January. Expenditure on capital account rose by no more than 7 per cent (8 per cent in 1989) as a result of the capping of loans from the Deposits and Loans Fund to local authorities.

The ratio of fiscal revenue to GDP rose from 39.1 to 39.9 per cent (Table 14), which was nearly half a percentage point less than the Government had planned in May as a result of tax revenue being less than expected. The shortfall reflected the reductions made in the taxes on oil products to offset higher crude prices, the deferment of wage and salary increases in some branches of industry and, more generally, the attenuation of the May budget measures and the slowdown in economic activity.

Tax revenue expanded by 13 per cent and rose from 25 to 25.7 per cent of GDP, largely as a result of the increases in indirect taxes. The most important of these was the 19 per cent rise in the excise taxes on oil products. The higher rates yielded an additional 4.5 trillion lire, which was reduced by more than 0.9 trillion as a result of the tax relief granted to offset part of the rise in crude oil prices caused by the Gulf crisis. Among the other tax measures regarding energy products, an additional 3.3 trillion was generated by the sales taxes on methane and liquified petroleum gas and the surtax on electricity consumption, which is transferred to local authorities.

Business taxes and duties were only marginally affected by the 1990 budget measures and were

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influenced both by revenue attributable to 1989 having been collected in 1990 and by the erroneous recording of some VAT receipts. Ministry of Finance figures, adjusted for the above-mentioned delays in collection, show a 9.6 per cent increase in domestic VAT revenue. The small, 3.7 per cent, increase in the VAT assessed by the customs authorities reflected the slower growth in imports in nominal terms. The increase in actual receipts was slightly smaller (3.1 per cent), because operators made greater use of the right to withhold payment up to the amount of their exports in the previous year.

The 12.4 per cent increase in direct tax revenue benefited from the good performance of personal income tax and the withholding tax on interest income. The tax levied at source on wages and salaries rose by 14 per cent, despite income brackets and tax allowances having been automatically adjusted for inflation for the first time. The withholding tax on the incomes of the self-employed rose by 14.8 per cent, though the reliefs granted in 1989 resulted in the balance paid for 1989 being 2.7 per cent down on that for 1988 and a loss of revenue officially estimated at 2.5 trillion lire.

The revenue from corporate taxes stagnated. The balance of corporate basic and local income taxes for 1989 was unchanged, though the total amount of these taxes (including the instalments paid in 1989) rose by 14 per cent. Net of the effect of the restrictions introduced on accelerated depreciation, which are officially estimated to have boosted revenue by 2 trillion lire, the increase indicates that taxable income grew at a rate of just over 6 per cent. The instalments paid in 1990 suggest that this rate fell sharply last year, and the ratio of the instalments paid to the previous year's total tax liability fell from 79 per cent in 1989 to 71 per cent last year. Many taxpayers appear to have availed themselves of the right to determine their instalments in the light of the estimated total tax liability for the year instead of the tax paid for 1989. Expectations that the yield of corporate income taxes will fall in 1991 reflect the less promising outlook for company profits and the replacement of government securities exempt from the withholding tax on interest income with others subject to it. The second of these factors has led to an increase in the share of this tax in total corporate income tax.

The 21.7 per cent rise in the withholding tax on interest income was largely due to the increases, of respectively 13.7 and 34.7 per cent, in the withholding tax levied on the interest earned on bank deposits and government securities. The growth in deposits accounted for most of the former, while the growth in the public debt and the replacement of tax-exempt securities contributed equally to the latter. Among the other types of financial asset, the withholding tax on the interest earned on convertible bonds nearly quadrupled. Social security contributions went up by 11.1 per cent. The increase in those actually paid amounted to 10.7 per cent and was primarily attributable to the rise in the payments in respect of employees, which exceeded the growth in the base by about one and a half percentage points. This result was influenced both by the regulations adopted in 1989 on minimum earnings and voluntary contributions and by the payment of the first instalment under the condonation scheme provided for by Decree Law 338/1990. Revenue was also boosted by the increases of respectively 30 and 20 basis points in the contribution rates payable by local authority and health service employees and by central government employees.

The money and financial markets

Monetary policy

There were two phases in the conduct of monetary policy in 1990. In the first, which lasted until the summer, monetary policy had to reconcile the objective of curbing inflation with the need to cope with the expansionary effects of foreign exchange inflows. From the autumn onwards, the change in expectations and the tighter monetary conditions in the other European countries made it necessary for the authorities not only to counter stronger inflationary pressure owing to the rise in energy prices, but also to ensure the stability of the lira within the EMS. During the year the restrictiveness of the monetary stance was evident mainly in the appreciation and subsequent steadiness of the lira in the exchange market, against the background of a rising deficit on the current account of the balance of payments (Figure 19). Real interest rates declined appreciably in the middle part of the year and then rose again, with the average for the year working out slightly lower than the 1989 figure.

In the fourth quarter the lira remained stable against the other European currencies despite the exchange rate pressures that had been triggered by the Gulf crisis and then reinforced by the appreciation of the Deutschemark. The absence of economic policy measures fully consistent with the commitment implicit in the lira's adherence to the narrow EMS fluctuation band contributed to the deterioration in expectations, making it necessary to raise short-term interest rates significantly. The differential between Italian and German interest rates rose to almost the level that had been recorded in the early months of the year as the beneficial effect of the adherence to the narrow band gradually diminished (Figure 20). This effect nevertheless persisted and helped to confine the increase in the interest rate differential to the short-term segment. The market in longer-term

government securities remained broadly stable and the average maturity of new Treasury issues lengthened.



⁽¹⁾ Interest rates in percentages. Effective exchange rates and M2/GDP ratio; indices 1989=100. – (2) 6-month Treasury bills. – (3) The deflator is the effective change in prices over the six months following the observation period on an annual basis and is based on the consumer price index. – (4) The deflator is the expected change in prices calculated by the Bank of Italy on *Mondo Economico* data (expected inflation in the six months following the observation of the interest rate, calculated on the basis of quarterly inflation expectations).

Money market conditions changed at the end of September, after a brief period in which expansionary liquidity conditions had been required to permit the securities market to overcome the turbulence originating abroad. At the beginning of October the Bank of Italy undertook a large volume of matched sale repurchase agreements, and short-term rates promptly rose (see insert). The effects on the securities market were limited: yields on 6 and 12-month Treasury bills remained stable, while for longer paper the rates on Treasury bonds rose moderately and those on Treasury credit certificates were driven downwards by particularly strong demand at the auctions.
Bank of Italy intervention in the money market

In the fourth quarter of 1990 Bank of Italy intervention in the foreign exchange market and the domestic money market led to a significant tightening of monetary conditions.

In October there was a net foreign exchange outflow of 2.3 trillion lire despite the placement of a 1 billion ecu bond issue abroad. The central bank counteracted a substantial creation of liquidity through the Treasury's current account by making temporary securities sales of 13.1 trillion lire at rates of around 11 per cent, appreciably higher than the rates prevailing in September. The differential between Italian and German short-term interest rates began to increase again; that on 3-month interbank deposits, which had narrowed from 5 percentage points in February to barely 2 points in September, rose to 3 percentage points (see the figure).

The Treasury borrowing requirement was financed principally through issues of Treasury bills and credit certificates, with net subscriptions amounting to 13.1 trillion lire in the month, while there were net redemptions of fixed rate securities totaling 4 trillion lire. The rate on 3-month Treasury bills rose by about one point from its September low to over 10 per cent.

The pressures on the lira increased in the first three weeks of November, especially in the days following the half-point rise in the German lombard rate and the simultaneous depreciation of the dollar. The outflow of reserves amounted to 5 trillion lire in the month. Towards mid-month, when the first reserve maintenance period under the new average reserve requirement ended, the Bank of Italy conducted two repurchase operations totaling 2 trillion lire, at 11.8 and 13.4 per cent, sending an unmistakably restrictive signal to the market. The banking system responded by increasing its recourse to ordinary advances to more than 2 trillion lire. Money market rates rose above the discount rate. In the second half of the month the overnight rate averaged 14 per cent, as against 10.9 per cent in October, while the 3-month interbank rate rose to 13 per cent, widening the differential with respect to German rates by more than a point. Thanks to the high yields on short-term funds, the lira regained ground against the Deutschemark and the French franc in the last ten days of the month.

Money market rate, the position of the lira within the EMS and bank liquidity (1)



(1) Except for 3-month Treasury bills and temporary operations, 15-day averages of daily figures. – (2) Arithmetic mean of marginal rates on repurchase agreements during the 15-day period. – (3) Simple gross interest rates at auction. – (4) Weighted average of bid-asked prices. – (5) The difference between the Italian 3-month interbank rate and the equivalent German rate. – (6) Balance on reserve account less average reserve requirement plus deposits with the Bank of taly held by banks not subject to reserve requirements; before the introduction of reserve mobilization arrangements, excess deposits with the Bank of Italy. – (7) Net position of the banking system vis-à-vis the central bank in respect of temporary operations.

The effects of the tight liquidity conditions were felt chiefly in the short-term segment of the securities market. The net yield on 3-month Treasury bills rose to 11.7 per cent at the end-month auction. The demand for fixed rate securities strengthened substantially, and medium-term yields were unaffected by the upward pressure on short-term rate, despite sizable net issues. The resumption of issues of seven-year Treasury bonds after a three-month pause was well received. Issues of 3.5 trillion lire in two tranches met with subscription demand for over 8 trillion lire and were allocated at a rate of 12.4 per cent. Despite the lively investor interest in Treasury paper and the large volume of net issues, an unexpected increase in the borrowing requirement obliged the Treasury to overdraw its current account with the Bank of Italy by 1.4 trillion lire at the end of the month.

In the first three weeks of December the increases in interest rates in Germany – by almost 1 percentage point on 1-month funds and 30 basis points on 3-month funds from the end-November level – generated further upward pressure on the Deutschemark. The action of the Bank of Italy resulted in tighter monetary conditions, assisted by a sharp increase in the demand for cash, a much lower than expected borrowing requirement and substantial placements of securities on the primary market. The central bank provided only limited liquidity to the system through securities repurchase agreements, inducing banks to have large-scale recourse to fixed-term advances; at the end of the year the banking system's indebtedness with the central bank, including both repurchase agreements and fixed-term advances, amounted to 10.3 trillion lire. The overnight rate rose to over 15 per cent. The yield differential between deposits in lire and those in other major currencies increased further, reaching its maximum for the year vis-à-vis the French franc, which continued to depreciate against the lira. In the last ten days of the month the pressure exerted by the Deutschemark on the other EMS currencies eased perceptibly as the dollar began to recover.

The demand for short-term securities slackened, and the Bank of Italy purchased Treasury bills at issue worth 3.2 trillion lire. Reflecting the exceptionally tight monetary conditions, the tender rate on 3-month bills rose by half a point to a peak of 12.2 per cent. However, the demand for medium-term paper remained buoyant, making possible net issues far in excess of the borrowing requirement, so that the Treasury was able to close the year with a credit balance of 6.3 trillion lire on its account with the Bank of Italy. In January the appreciation of the dollar and the weakening of the Deutschemark in connection with worsening international political tensions helped to improve the position of the lira, which remained above the centre of the EMS band, despite a reduction in the differential between domestic interest rates and those in Germany and France by about one percentage point on 1-month funds and 50 basis points on 3-month funds in relation to the end-December figure.

Very substantial liquidity creation by the Treasury during the first half of the month enabled the banks to eliminate their indebtedness with the Bank of Italy. The central bank offered securities repurchase agreements for a total of 6.8 trillion lire at average yields of just over 12 per cent, one point less than at the end of December. The undrawn margin for ordinary advances increased to an average of 1.3 trillion lire in the first half of the month, compared with 600 billion at the end of December, and the overnight rate came back down to close to the discount rate. In the second half of the month monetary conditions became tighter and very short-term money market rates rose by an average of one point.

In early February the increase in official German rates and the lowering of the US discount rate caused the Deutschemark to appreciate again against the dollar. Immediately following these decisions the Bank of Italy made temporary sales totaling 2 trillion lire, accepting bids at rates of up to 15 per cent and sending a signal of firmness to which the markets responded. While short-term interest rates remained virtually unchanged in Germany and declined by about half a percentage point in France, Italian interbank rates rose by some 50 basis points on 1-month funds and 30 basis points on 3-month funds, so that the interest rate differential widened again. The lira depreciated marginally against the Deutschemark but continued to appreciate against the French franc and remained above its EMS central rate.

A ten-year government Eurobond issue in dollars was very well received, and it proved possible to increase the volume of the issue from the original \$1.5 billion to \$2 billion.





The Bundesbank's decision to raise lombard rate by half a percentage point at the beginning of November and similar adjustments in other European countries stimulated outflows of foreign exchange; the Bank of Italy chose to refrain from compensatory open market operations, thus letting the restrictive effect come through. The mobilization of compulsory reserves, which was permitted from 15 October onwards, facilitated the action of monetary policy in this period by preventing the considerable and largely unforeseen amount of liquidity created through the Treasury's current account with the Bank of Italy at the start of November from forcing short-term rates downwards at a time of exchange rate pressures. Yields rose only on short-term government paper: whereas the yield on 3-month Treasury bills increased by nearly 2 percentage points, yields on Treasury credit certificates remained almost constant and those on 4-year Treasury bonds diminished. It thus became possible to resume the issue of 7-year government securities, which met with success.

In October and November outflows of foreign exchange drained off a total of 7.3 trillion lire of liquidity, compared with inflows of 23.8 trillion in the first nine months of the year. After having traded at the upper limit of the EMS fluctuation band until July, the lira moved below its central rate at the end of September and stayed there until mid-November. The pronounced rise in short-term rates and the partial recovery of the dollar against the Deutschemark bolstered the lira in the second half of November and in December. The outflows almost ceased and the lira rose back above its central rate, while the French franc became the weakest EMS currency.

The methods for calculating the statistics on the monetary aggregates have been revised in the light of the changes in the regulations on banks' compulsory reserves. The statistics are now based on monthly averages of daily data rather than end-of-month data. This is important primarily for monetary base, which may fluctuate more erratically from day to day now that banks are permitted to mobilize a part of their compulsory reserves, but it has a bearing on bank deposits as well. In 1990 the end-of-year figure for bank deposits was influenced to a much greater extent than in the past by window dressing on the part of banks, since calculating the reference aggregate on the basis of monthly average data makes such operations less costly in terms of compulsory reserves.

Table 15

Monetary variables (percentage changes on year-earlier period) (1)

	Dec.	1989	Dec. 1	990 (2)
	end of month	aver- age (3)	end of month	aver- age (3)
Bank reserves (4)	9.2	9.2	8.3	9.7
Monetary base (4)	9.4	9.5	10.0	10.4
Bank deposits	8.0	8.0	10.8	8.9
Money supply net of CDs (M2A)	5.7	5.4	7.8	5.8
Money supply (M2)	9.4	9.4	11.3	9.6

(1) Stocks at December 1989 corrected to eliminate the effects of strikes in the banking sector. (2) Provisional. (3) Bank reserves and monetary base calculated as averages for the mid-month to mid-month maintenance period, bank deposits and the money supply as calendar month averages. The figures on the money supply are net of securities repurchase agreements. – (4) Corrected for the change in the compulsory reserve ratio.

Monetary base, calculated as the average of the daily data in the reserve maintenance period from mid-month to mid-month, grew by 10.4 per cent in 1990, compared with 9.5 per cent in 1989 (Table 15). This faster growth stemmed largely from demand for notes and coin, which rose considerably in the final days of the year; unlike the bulge recorded towards the end of 1989, the acceleration at the close of last year appears to have been due to a change in seasonal factors. The rate of growth in bank reserves alone, computed by the same method, rose from 9.2 per cent in 1989 to 9.7 per cent last year. The total increase in monetary base amounted to 13.7 trillion lire, smaller than the amount created by the external sector alone (15.4 trillion lire); the Treasury's contribution to monetary base creation was modest, at 700 billion lire (Table 16).

Table 16

Monetary base (changes in billions of lire)

	1989	199	0 (1)
	Year (2)	OctDec.	Year (2)
Sources			
Foreign sector	14,971	-8,360	15,440
Treasury	6,346	15,670	695
of which:			
Borrowing requirement .	133,857	61,640	146,166
(excluding settlements of past debts)	(132,339)	(57,023)	(141,335)
Outstanding securities excluding BI	-95,784	-47,933	-114,758
Other financing (3)	-31,727	1,963	-30,713
Refinancing of banks	1,203	2,641	1,270
Other sectors	-2,015	771	-3,726
Total	20,505	10,722	13,679
Uses			
Currency in circulation	10,507	7,021	2,793
Bank reserves	9,998	3,701	10,886
of which:			
Deposits with Bank of Italy	9,746	2,725	10,746
Other items (4)	252	975	140
Memorandum item: compulsory reserves (5)	9,746	4,684	13,026

(1) Provisional. – (2) The data reflect the abnormal expansion of monetary base resulting from strikes in the banking sector at the end of 1989. – (3) Includes PO deposits, foreign loans and other items. – (4) Vault cash and undrawn margin of ordinary advances; to December 1988, includes deposits with the Treasury and unrediscounted stockpling bills with the Bank of Italy. – (5) From October 1990 onwards, includes the average reserve requirement and the compulsory reserve on net foreign currency deposits.

The growth in the M2 money supply, based on end-of-month data, remained within the target range in the first eight months of the year (Figure 21). It then accelerated owing to three factors: the lagged effect of the reduction in the differential between securities yields and bank deposit rates in the middle months of the year, the higher level of prices, which stimulated an increase in the demand for money, and the increase in the Treasury's borrowing requirement, which led to the holding of larger liquid balances, as it normally does in the short term. The rate of growth in December was exceptionally rapid, owing to the window dressing operations mentioned above; the random nature of the year-end figure is borne out by the fact that the overshooting was eliminated in the course of January 1991.



Based on the average figure for December, which is partly estimated because of gaps in data on certain components, the growth in M2 was 9.6 per cent last year, similar to the rate of 9.4 per cent recorded in 1989 and around half a point above the target range of 6-9 per cent. A larger overshoot was averted by the tightening of monetary conditions in the closing months of the year, which restored the differential between securities yields and bank deposit rates. As in 1989, the average ratio of M2 to GDP remained close to that prevailing in the second half of the eighties.

The growth in bank deposits, the main component of the money supply, rose from 8 per cent in 1989 to 8.9 per cent last year calculated on the basis of average monthly data for December. Within this aggregate there was a further shift towards certificates of deposit; the money supply net of CDs (M2A) expanded by 5.8 per cent, as against 5.4 per cent in 1989.

The liquidity of domestic financial assets diminished, continuing a tendency that has been under way for several years. In the twelve months ending in November, the share of M2 in the total of such assets declined further to 46 per cent, while that of medium and long-term securities rose, thanks to the market's good overall response to issues (Table 17).

Financial assets (1) (percentage composition)

Table 17

	Stoc	ks	Flows		
-	Nov. 1989	Nov. 1990	12 months in Nove 1989	ending mber 1990	
Money (M2)	47.4	46.0	34.9	36.2	
of which: bank deposits	37.2	35.9	24.1	27.2	
Treasury bills and acceptances	16.3	16.3	24.8	16.7	
Special credit institution CDs	3.1	3.5	4.9	6.8	
Medium and long-term					
securities	30.0	31.5	39.1	40.0	
Investment fund units	3.1	2.6	3.8	0.1	
Total	100.0	100.0	100.0	100.0	

(1) Domestic financial assets of the non-state sector, excluding direct holdings of shares. Inclusion of minor items may cause discrepancies in the totals.

The growth of credit to the non-state sector was again high, at 15.6 per cent. This was three percentage points less than in 1989, but an equal amount above the forecast contained in the October Economic Bulletin. The slowdown in relation to 1989 is clearest in the aggregate measuring only domestic credit, but it is also discernible if foreign loans are included. In December the pace of lending was sustained mainly by bank loans in lire. In the final months of the year the restrictive monetary conditions encouraged borrowing from banks to take advantage of positive interest rate differentials between money market rates and the cost of credit. The scale of such borrowing was more than enough to offset the slackening of the demand for loans caused by the slowdown in productive activity. The special credit institutions also contributed to the expansion in credit, increasing their lending by 16.2 per cent. Towards the end of the year the growth was particularly strong in short-term industrial credit, which is a close substitute for bank credit. On the other hand, the contraction of 10.6 per cent in net bond issues had a dampening effect on the growth in the aggregate.

Reflecting the slowdown in credit to the non-state sector and the smaller growth in the state sector borrowing requirement, total domestic credit increased by 13.4 per cent during the year, as against 15.2 per cent in 1989 (Table 18).

Table 18

Total domestic credit (percentage changes)

	1989	1990 (1)
Bank lending (2)	22.1	17.4
Special credit institution lending	15.7	16.2
Net bond issues	-1.4	-10.6
Non-state sector financing	18.6	15.6
State sector domestic borrowing		
requirement (3)	13.1	12.0
Total domestic credit	15.2	13.4

(1) Provisional. – (2) Corrected for exchange rate variations and the funding of past debts. – (3) Net of contributions to financial intermediaries' endowment funds and of funding operations.

The activity of credit intermediaries

The last part of the year saw a continuation of the shift in the composition of banks' balance sheets. On the liabilities side CDs continued to grow faster than the traditional forms of fund-raising, while on the assets side the share of securities in total lira credit business declined further.

The yields on Treasury bills fell by nearly 2 percentage points in the first half of 1990 and then rose by almost the same amount in the second, but

deposit rates remained virtually unchanged, except for the adjustment made when the discount rate was lowered in May. The differential between Treasury bill yields and the average rate on customer deposits declined in the middle of the year to the level recorded in 1988, but then rose again to nearly seven points in December (Figure 22). Lending rates moved downwards for most of the year, with an especially sharp fall in the period following the reduction in the discount rate (Figure 23). Tight liquidity conditions at the end of the year led to an upturn in lending rates, though they remained below the level recorded before the cut in the discount rate. The lending rates of large banks proved the most responsive to changes in money market conditions; these institutions have smaller securities portfolios, participate more actively in the interbank market and mobilize their reserves to a greater extent. For the banking system as a whole, however, the flexibility of lending rates is still limited, especially insofar as minimum rates are concerned.



(1) Rate on 6-month bills less average rate on savings and current account deposits, net of withholding tax. – (2) Average bank lending rate less yield on 6-month bills. – (3) Rate on 6-month bills less rate on 6-month CDs, net of withholding tax.

The share of CDs in total deposits rose over the year from 13.8 to 17.5 per cent. There was also a further increase in the proportion of CDs with maturities of more than eighteen months, which enjoy more favourable tax treatment.

After the liberalization of short-term capital movements in May, fund-raising by the foreign branches of Italian banks increased, in part through the issue of Eurolira CDs, which are taxed less heavily than their Italian equivalents and are subject to less demanding reserve requirements (see insert). These instruments were also supplemented by others with similar features offered by foreign banks, for which complete statistics are not available. Banks further diversified their domestic fund-raising, in part by broadening the range of instruments denominated in foreign currencies.



The share of securities in total lending fell over the year from 33 to 28 per cent. The rapid pace at which banks have continued to run down their portfolios, coupled with the large volume of securities they still own, suggests that the shift in the composition of their assets still has some way to go, at least at the aggregate level. However, the availability of securities has already become a factor influencing the lending and fund-raising policies of some banks, especially some of the large ones.

The slowdown in the growth of loans granted by resident banks, from 21.7 per cent in 1989 to 17.5 per cent last year, was partly offset by the expansion in lending by foreign branches, which rose from 3.8 to 6 per cent of their loan portfolios. The growth in loan portfolios, led by the lira component, was probably attributable in part to financial factors: lending to financial and insurance companies expanded rapidly, while that to non-financial companies slowed down.

Banks' treasury operations were boosted by their being able to mobilize a part of their reserves (see the article on "The Mobilization of Compulsory Reserves" in this issue). The new regulations, which came into force at a time when monetary conditions were extremely tight, allow banks to economize

Residents' foreign and foreign currency deposits and the fund-raising of the foreign branches of Italian banks

As regards the demand for financial instruments, the process of liberalizing capital movements was completed with the issue of the Ministerial Decree of 27 April 1990, which made it legal for Italian residents to hold deposits with banks abroad as well as foreign currency deposits with banks in Italy. In the months that followed Italian residents intensified the diversification of their portfolios of short-term assets. At the same time the fund-raising of the foreign branches of Italian banks increased significantly.

The statistics collected on foreign exchange transactions indicate that between May and December there was an outflow of 5.4 trillion lire of non-bank residents' funds, matched by a 4.6 trillion inflow. According to information contained in supervisory returns, residents' foreign currency deposits with banks in Italy rose from 3 to 3.7 trillion lire between March and September.

The foreign branches of the fifteen Italian banks with networks abroad benefited considerably from the

opportunities opened up for Italian residents by the above-mentioned April Decree. The BIS has estimated that in the second and third quarters of 1990 they received about half the total funds that residents moved out of Italy into foreign banks. Consisting mostly of tied foreign currency deposits, this form of fund-raising increased from 1.1 trillion lire in March to 2.7 trillion in September (see table). Italian residents' share of the total customer deposits of these banks rose over the same period from 3.3 to 6.2 per cent.

These developments occurred in parallel with a general strengthening of the position of Italian banks' foreign branches. Though they still raise most of their funds in the interbank market, they have now built a sizable customer deposit base. This expanded from 33 trillion lire in March 1990 to 43.5 trillion in September, with strong growth in both tied deposits, up from 30.7 to 41.3 trillion, and the component denominated in lire, which rose from 3.1 to 5.6 trillion in connection with the good results achieved by issues in London of Eurolira CDs.

	Deposits of Italian residents			Dep	Total deposits		
-		of which:			of w		
	Total	Foreign currency	Tied	Total	Foreign currency	Tied	
989 – March	700	400	_	26,200	22,100		26,900
September	1,000	700	-	28,300	25,800	_	29,300
990 – March	1,100	950	700	31,900	28,950	30,000	33,000
September (1)	2,700	2,400	2,350	40,800	35,500	38,950	43,500

Customer deposits with Italian banks' foreign branches

(end-of-period amounts in billions of lire)

on the excess reserves they hold with the Bank of Italy, which earn a return of only 0.5 per cent, and to optimize their liquidity management during the interval between successive calculations of their reserve requirements by operating on the recently created screen-based market for interbank deposits. The mobilization of reserves has led to a sharp reduction in the variability of short-term interbank rates, especially at the lower end of the range. The banking system has responded positively and rapidly to the new system; the larger banks, in particular, have made considerable use of the possibility of redistributing the daily balances on their reserve accounts while complying with the average requirement.

The activity of the special credit institutions slowed considerably between August and November 1990: the rate of increase in their loan disbursements fell from 18.8 per cent in the first eight months of the year to 9.9 per cent in the following three. The slowdown was especially pronounced in the case of industrial credit institutions, while business held up better for real estate credit institutions, which engage mainly in mortgage lending to households. Lending to the productive sector (non-financial companies and "producer" households) reflected the steady deterioration in the economic outlook, and the rate of growth fell from 18.2 per cent in June to 14.5 per cent in November. By contrast, the flow of finance to the market services sector remained strong, with the annual rate of growth rising from 20.8 to 22.8 per cent. Lending by the special credit institutions accelerated again in December; in view of the simultaneous sharp rise in money market rates, this may have been partly due to arbitrage operations, as in the case of bank lending.

In the second half of 1990 there was a further shift away from bonds towards CDs and foreign markets as a source of special credit institution funds, confirming the trend of the last two years. Between August and November, net issues of bonds amounted to 2.6 trillion lire, compared with 2.2 trillion raised with CDs and 4 trillion in foreign currency. Substantial recourse was also made to floating rates, which were a feature of half the bond issues made in the third quarter and of a quarter of the CD issues. All the categories of special credit institution contributed to the rise in foreign currency liabilities, with a leading role being played by real estate credit institutions, which increased their borrowings of this kind from 14.2 to 16 trillion lire between September and November.

The institutions' deposit and lending rates both followed a rising trend after bottoming in the third quarter. The rates on long-term floating rate loans and short-term credit rose by half a point and two thirds of a point respectively between September and November. The increase in CD rates was less pronounced, on the order of twenty basis points.

The financial market

After rising for more than six months with almost no interruption, the market in government securities was affected in August by the uncertainty caused by the outbreak of the Gulf crisis and the related weakness of the lira. The fall in prices was accompanied by a substantial widening of bid-ask spreads (Figure 24), and the slope of the Treasury bond yield curve increased temporarily. The rigorous monetary policy pursued in the last quarter and the stability of the exchange rate nonetheless created the conditions for a recovery in prices that was all the more significant in view of the intervening sharp rise in short-term interest rates.



The slope of the yield curve decreased after August, since the yields on securities with maturities of less than two and a half years rose while those on longer-term paper fell (Figure 25). This development, which was partly due to expectations of a slowdown in economic activity, was fostered by the greater depth of the screen-based secondary market as far as medium and long-term securities were concerned (see insert). The increased liquidity of the market helped to limit the variability of interest rates, which also made it easier to place new issues.



⁽¹⁾ Yields on zero-coupon bonds net of withholding tax, plotted against their maturity in years

Net issues of government securities rose by 4.3 trillion lire to 115.1 trillion (Table 19); funding issues totaled 4.6 trillion. Net issues of Treasury bills increased by 39.8 trillion to 44.6 trillion. A particularly large volume of Treasury bonds was redeemed: 87.8 trillion lire, as against 14.1 trillion the previous year. Redemptions exceeded new issues by 13.5 trillion, whereas in 1989 there had been net issues amounting to 27 trillion. This contraction was offset, however, by a large increase in net issues of Treasury option certificates, which rose from 15.3 to 26.7 trillion. Net issues of Treasury credit certificates also increased, from 20.9 to 54.2 trillion. The large issues of medium-term securities made it possible to halt the shortening of the average maturity of the public debt, although this achievement was accompanied by a substantial fall in the share of medium-term fixed rate securities in total net issues, from 45 to 18 per cent.

Net issues of Treasury bonds, credit certificates and option certificates financed 46 per cent of the Treasury borrowing requirement, compared with 47 per cent in 1989. However, when net disinvestment by the Bank of Italy is excluded, the proportion rises

T	a	b	le	1	9
-	-	~			~

	Bills	Ecu bills	Credit certificates	Bonds	Option certificates	Ecu credit certificates	Other	Total
				Gross issues				
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	74,294	27,161	8,017	4,582	754,897
			N	let issues (1)				
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	-13,509	26,678	7,262	-113	115,101

Government securities

Figure 25

from 44 per cent in 1989 to 52 per cent last year, reflecting the market's appreciation of this form of investment. The composition of the Bank of Italy's portfolio of government securities – net of those held under repurchase agreements, which declined by 4.9 trillion lire – underwent a substantial change, especially in the last quarter, with the share of Treasury bills rising from 12 to 20 per cent over the year.

Banks continued to run down their securities portfolios; the disinvestment amounted to 10.7 trillion lire, compared with 4.4 trillion the previous year, and the share of securities in total credit business fell by 5 points to 28 per cent. Other financial institutions returned to the new issue market, though on a limited scale: special credit institutions invested 2.3 trillion after disinvesting 2.8 trillion the previous year, while investment funds increased their holdings by 3.9 trillion after reducing them by 3.6 trillion in 1989. As in the previous year, the securities subscribed by households and enterprises equaled the total taken up by the market. The proportion of government securities held outside the banking system, which had risen from 40 to 76 per cent between 1980 and 1989, rose further to reach 82 per cent at the end of last year.

Share prices rose on average in the first half of the year, but the prospect of a slowdown in economic activity, coupled with increases in interest rates and raw material prices, subsequently caused investors to revise their expectations, with the result that share prices fell by 25 per cent over the year (Figure 26). The fall on the Milan Stock Exchange between end-July and end-December was the largest recorded by a major market and amounted to 30 per cent, as against 27 per cent in Frankfurt and 23 per cent in Tokyo. The greater weakness of Italian share prices was attributable both to the fears generated by the Gulf crisis, which was expected to affect Italy's economy more seriously than others, and, in October and November, to the difficulties encountered with the Decree Law on the taxation of capital gains.

Turnover also dropped sharply in the last part of the year. This was due not only to the factors mentioned above but also to strikes by stockbrokers' agents, which closed the Milan Stock Exchange for one day in October and for four days in November. In the last four months of the year daily turnover averaged around 120 billion lire, half that of the preceding months.

Figure 26

Securities market: indices of capitalization (31 December 1987=100; end-of-week figures)



Trading in 14 leading Italian shares on London's SEAQ International market increased further in October and November. Despite the difficulty of comparing data collected using different methods, it is significant that in these two months the business transacted in Italian shares by SEAQ dealers was 65 per cent of the turnover of the same shares on the Milan Stock Exchange, a large jump compared with the 18.7 per cent recorded in 1989 and the 38.8 per cent of the first nine months of the year. Notwithstanding the increase in trading volumes, the lowest bid-ask spreads on the London market remained at the level they reached in August, when they doubled after the outbreak of the Gulf crisis. Another six leading Italian ordinary and savings shares have recently been listed on the SEAO market. The process of removing the technical and administrative obstacles to the listing of foreign securities on Italian stock exchanges is nearing completion, and a number of foreign companies have applied for listing.

Net fund-raising by Italian investment funds turned positive again in 1990, totaling 800 billion lire. In line with the pattern observed in 1989, redemptions outweighed subscriptions in the first five months, but the situation was reversed for the rest of the year.

Medium and long-term interest rates on the screen-based market for government securities

In the last quarter of 1990 and the early part of this year the variability of short-term interest rates caused by international developments and domestic monetary policy measures has been accompanied by considerable stability in the markets for medium and long-term government securities.

This result has been fostered by two factors. In the first place, the stability of the exchange rate and fear of a slowdown of economic activity have lowered the expected future level of interest rates. Secondly, the development of the screen-based secondary market has both created a channel permitting operators' expectations about the fundamentals to be reflected in prices and reduced the liquidity premium. Accordingly, the effect of temporary increases in short-term rates on medium and long-term yields has been attenuated.

Since last October demand in the primary market for Treasury bonds has regularly exceeded supply. Between the first auction in October 1990 and the first in February 1991 applications for the three maturities issued (four, five and seven years) exceeded the 26.5 trillion offered by the Treasury by more than 70 per cent on average. In the secondary market rates remained markedly stable and there was a reduction in the term premium.

In the months between August 1990 and January 1991, during which financial markets were affected by the Gulf crisis, the ratio of the standard deviation of the four-year Treasury bond yields to the mean was only a little more than a quarter of the corresponding figure for three-month Treasury bills (compared with about one third in the preceding quarter). When account is taken of the seven-year Treasury bonds that were listed on 20 August, the ratio for medium and long-term securities is found to have fallen considerably in absolute terms as well, from 2.4 to 1.5 percentage points, bringing it closer into line with the German and French values (which fell respectively from 1.3 to 0.9 points and from 2.2 to 1.8 points).

Figure 1





(1) Net of withholding tax. Daily figures

3 ond-based funds raised a substantial net volume of resources (2.8 trillion lire), while mixed funds recorded net redemptions totaling 2.1 trillion and share-based funds ended the year virtually unchanged. The success of the bond-based funds was entirely attributable to the spread of investment funds linked to bank current accounts; these funds not only increased in number but also entered into agreements with banks with large branch networks. At the end of the year there were ten funds of this kind, with net assets equal to more than 10 per cent of the industry total, compared with 3 per cent a year earlier. In addition to the competitive edge these funds enjoy by offering a product that differs from bank and Treasury liabilities, in the last part of the year they benefited from investors' willingness to hold more liquid assets in view of the uncertainty about future yields.

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These developments were accompanied by a reduction in the maturity premium demanded by the market over the whole range of maturities. For securities with residual lives of less than two and a half years, the reduction was substantial and caused a large decrease in the slope of the yield curve (see Figure 25). Between August and December the differential between the net yields on seven and four-year Treasury bonds narrowed (see Figure 1 above) to less than its value for the end-June issue (around 60 basis points).

Turnover on the screen-based market last year was about six times that recorded in 1989 and seven times the total for the Milan Stock Exchange and the screen-based market in 1988. In relation to the stock of government securities, turnover rose from 7.9 per cent in 1989 to 41.7 per cent last year.

Turnover in fixed rate securities grew faster than the average: Treasury bonds and option certificates accounted for 46 per cent of the total in the last four months of 1990, compared with 37 per cent in the earlier months. In the same four months average daily turnover rose from 478 to 1,157 billion lire,

The increase in trading was especially large for seven-year paper, for which the ratio of daily turnover to the face value of the related stock was much higher than for the most heavily traded four-year bonds, found to be those issued most recently (see Figure 2 below). Trading showed this pattern even between August and November, when only four-year bonds were issued. Between August 1990 and January 1991 the bid-ask spread for seven-year securities averaged about 3.3 basis points, which was considerably smaller than both the market average (22 points) and that for four-year securities (about 6.3 points).



The foregoing considerations reveal the link between the amount of longer-term fixed rate paper and the depth of the secondary market. Increases in the former encourage a larger volume of trading, while a deeper secondary market facilitates new issues. The positive effects of this interaction will be enhanced by the introduction of ten-year Treasury bonds, the first issue of which was announced on 20 February.

The growth of the bond-based funds caused the share of government securities in the industry's portfolio to rise over the year from 41 to 54 per cent. The largest increases were in the proportions of Treasury credit certificates (from 28 to 40 per cent) and Treasury bills (from 3 to 5 per cent).

Conversely, the proportions of shares and foreign securities both declined. The average net yield earned by Italian investment funds was negative in 1990 (-3.5 per cent), the result of bond-based funds recording a positive yield of 10.5 per cent and the mixed and share-based funds incurring losses of respectively 7.9 and 13.2 per cent. The net yield on Treasury credit certificates averaged 14.2 per cent. The yields of the individual funds showed a high degree of dispersion, ranging from -22.3 per cent to +16.4 per cent.

Short-term prospects

The international economy

The slowdown in economic activity in the leading industrial countries is becoming more pronounced in the wake of the Gulf crisis, owing mainly to the weakening of confidence among consumers and enterprises. In addition, cyclical differences between the various economies are increasing. The combination of international economic and political uncertainties has led to recession in those countries where economic activity was already weak, such as the United States, Canada and the United Kingdom. Growth is still strong, however, in Germany and Japan. Other countries, such as France and Italy, are in an intermediate position, with slow growth.

The main international economic organizations have revised their forecasts for 1991 downwards, although they continue to predict that a recovery will begin towards the end of this year and gather strength during 1992. According to the projection published by the OECD in December, which is based on an assumed oil price of \$27 per barrel in 1991, GDP growth in the industrial countries is likely to fall from 2.8 per cent in 1990 to 2 per cent in 1991 and then to recover to 2.5 per cent in 1992 (Table 20).

Concern about a resurgence of inflation has generally receded of late, thanks partly to the monetary policy response to the rise in oil prices. The rate of increase in consumer prices slowed down slightly from 5.8 per cent in November to 5.6 per cent in December; inflation is expected to remain at this level in 1991 and to fall by one point the following year. The weakness of non-oil raw materials prices, which has persisted for several years, will probably contribute towards this result. The more favourable inflation expectations have affected medium and long-term bond yields, which declined slightly almost everywhere from the end of December onwards. The projection is subject to major uncertainty, however. The usual difficulties in identifying cyclical turning points have been exacerbated by the political situation created not only by the Gulf crisis but also by the changes occurring in Central and Eastern Europe. The scenario is further complicated by the unification of Germany and specific factors such as the fragility of financial institutions in the United States and their low propensity to lend.

The events in the Gulf continue to be the most important cause of uncertainty. After the start of hostilities on 17 January the feared rise in the prices of oil products did not occur, owing partly to the decision of the International Energy Agency to make available up to 2.5 million barrels of oil a day by releasing oil from strategic reserves and taking measures to curb consumption. Oil prices fell from over \$30 to less than \$20 per barrel, similar to the price prevailing at the end of July. If a reasonably stable settlement emerges in the Middle East, crude oil prices may fall below their present levels. The market continues to be highly volatile, however. Even if the possibility of a disastrous rise in prices, such as was predicted in several quarters in the summer, now seems unlikely, it cannot be ruled out that oil prices may rise again if the tense situation continues.

The present difficulties are aggravated by differences in the mix of monetary and fiscal policies in the various countries. In order to reduce uncertainty, the Finance Ministers and central bank Governors of the seven leading industrial countries reaffirmed their intention to strengthen cooperation at their meeting in New York on 20 and 21 January.

Monetary policy decisions continue to be determined first and foremost by domestic considerations, however. In Germany the policy of high interest rates and a strong currency is justified by the declared intent to curb the inflationary impetus that may spring from the pressure of the budget deficit

on resources and from wage demands. On 31 January the Bundesbank raised the discount and lombard rates by half a point to 6.5 and 9 per cent respectively. This decision, which was taken partly on technical grounds in order to position official rates at a higher level than market rates, led to an immediate appreciation of the Deutschemark against the dollar and within the EMS. Short-term market rates, which had risen in earlier months, actually moved in the opposite direction to official rates, falling from 9.2 per cent at the end of January to 9.0 per cent in mid-February.

In the United States the need to combat recession became the primary objective of monetary policy. The recent fall in the price of oil and the easing of wage pressures are calming fears of inflation. On 1 February the Federal Reserve reduced the discount rate by half a point; it also brought the federal funds rate down to 6.25 per cent by means of money market operations. This was 2 points below the rate recorded in mid-1990 and respectively 3 and 2 points lower than short-term rates in Germany and Japan. The depreciation of the dollar was countered by means of coordinated central bank intervention.

Table 20

Forecasts of the main international macroeconomic variables (1)

(percentage changes on previous year)

	1990	1991	1992		1990	1991	1992
				Current balances (4)			
	0.0	0.0	0.5		111.0	1170	05.0
	2.0	2.0	2.5		-111.0	-117.0	-95.0
of which:				of which:			
United States	0.9	0.9	1.9	United States	-95.2	-94.0	-61.0
Japan	5.5	3.7	3.8	Japan	35.8	37.0	36.0
EEC	2.9	2.2	2.5	EEC	-10.0	-32.0	-45.0
Germany	4.6	3.0	2.6	Germany (5)	46.2	30.0	18.0
LDCs	2.2	4.2	4.9	LDCs	-5.0	-11.0	-20.0
Consumer prices (3)				Unemployment rate (6)			
Industrial countries	4.8	5.6	4.6	Industrial countries	6.2	6.7	6.9
of which:				of which:			
United States	5.4	6.8	5.4	United States	5.5	6.4	6.7
Japan	2.4	2.4	2.0	Japan	2.1	2.3	2.3
EEC	4.3	5.1	4.5	EEC	8.4	8.5	8.7
Germany	2.6	3.9	3.7	Germany	5.0	5.0	5.1
Product deflator				World trade			
Industrial countries	4.3	4.9	4.3	Exports (2)			
of which:				Industrial countries	5.2	5.4	6.6
United States	4.1	4.9	4.5	LDCs	3.1	3.9	6.0
Japan	1.5	2.2	1.9				
EEC	5.0	5.3	4.7	Imports (2)			
Germany	3.4	4.3	4.0	Industrial countries	5.6	4.9	5.5
-				LDCs	5.3	6.6	8.6

(1) Based on an assumed oil price of \$27 per barrel at the beginning of 1991, remaining constant in real terms thereafter in relation to the dollar prices of industrial countries' manufactures. – (2) At constant prices. – (3) Private consumption deflator. – (4) Billions of dollars. – (5) From July 1990 onwards includes the transactions of the former German Democratic Republic. – (6) Level.

The tensions between the dollar and the Deutschemark had repercussions within the EMS at the end of 1990 and the beginning of this year. The recent measures by the Bundesbank did not, however, lead to a significant increase in divergence among EMS currencies. The Italian authorities induced a rise in short-term interest rates, thereby confirming their commitment to exchange rate stability. The United Kingdom has to reconcile the need to counter the forces of recession with the constraints resulting from membership of the Exchange Rate Mechanism. The British authorities recently reduced base rate by half a point, thus confirming a decline in market rates; strengthened sterling slightly against the Deutschemark, but together with the French franc it remains the weakest of the ERM currencies.

Looking ahead, the cyclical disparities among the leading industrial countries should narrow slightly during 1991 and to a more marked extent in 1992 (Table 20). Economic activity in the United States may be stimulated by lower interest rates, improved international competitiveness and the recovery in purchasing power due to lower inflation. In Germany, by contrast, the impetus generated by unification is expected gradually to wane, while high interest rates and the fall in foreign demand will tend to moderate the expansion.

In the industrial countries as a whole, the possibility of a revival in economic activity coupled with lower inflation and a reduction in imbalances depends partly, however, on the ability of each country to implement a better mix of monetary and fiscal policies and to achieve more effective international cooperation.

The monetary targets announced for 1991 confirm the commitment to price stability, even in those countries where the need to promote a recovery in activity is felt most acutely. The fiscal policy stance is more difficult to assess, especially in a year in which the slowdown in economic activity is tending to inflate budget deficits.

Germany's fiscal policy will continue to exert a strong influence on monetary policies in Europe. According to official estimates, Germany's public sector borrowing requirement is likely to reach DM 140 billion, equal to around 5 per cent of GNP, compared with DM 100 billion and 4 per cent in 1990. As a result, German domestic demand and exports to Germany will remain strong. The expansionary effect on the other countries will be offset to varying degrees, however, by the impact that the Bundesbank's restrictive monetary policy has on interest rates, especially in the European countries belonging to the ERM.

In Japan the budget surplus is expected to continue to increase this year, from 3.1 to 3.3 per cent of GDP. In the United States the federal budget deficit for the current fiscal year, including expenditure of \$100 billion connected with the crisis in savings and loan associations and support for the Federal Deposit Insurance Corporation, is likely to amount to \$318 billion, equal to 5.5 per cent of GNP, compared with 4 per cent in 1990. This figure is \$64 billion higher than that foreseen last autumn, owing mainly to the slowdown in the economy and, to a lesser extent, expenditure relating to the conflict in the Gulf; the draft federal budget is based on the assumption that such expenditure will be largely financed by the coalition partners.

The Italian economy

The outlook for the Italian economy also appears less promising than was depicted in the previous issue of the Economic Bulletin. There is a risk of a further deterioration in the situation compared with 1990, which closed with a higher rate of inflation, a slowdown in economic activity and a larger deficit on the current account of the balance of payments.

In view of the trends in the international economy, economic activity has been subdued in the early part of 1991 and employment has fallen. Estimates based on electricity consumption indicate that in January and the first half of February industrial output was slightly higher than at the end of 1990. Consumption and investment are both growing slowly. A recovery may begin in the second half of the year, but this will depend not only on developments in the international economy but also on the credibility of domestic economic policy. At best, GDP is unlikely to grow at anything like the average annual rate recorded last year.

Preliminary figures for February indicate that the twelve-month rate of increase in the cost of living rose to 6.8 per cent, compared with 6.4 per cent in December. Inflation is being fueled by the rise in unit labour costs, which is expected to amount to around 6 per cent in the private sector in 1991, and by the increase in energy prices in the second half of 1990. The stability of the lira is tending to curb the rate of increase in prices in the sectors exposed to international competition and is squeezing profit margins. In the less exposed sectors, such as professional services, the rate of increase in prices is well above the average. The effect of lower oil prices on inflation will probably be felt in the second half of the year. The annual average rise in consumer prices is unlikely to be less than 6 per cent, with no improvement in the inflation differential vis-à-vis the other leading European countries.

Exports are suffering from last year's loss of competitiveness, so that in volume terms they are growing more slowly than world trade. On the other hand, the slackening of domestic demand is dampening the growth of merchandise imports, while their cost is being held down by the weakness of both the dollar and raw materials prices. If the price of oil were to remain at the average level recorded at the beginning of the year, the trade balance on a *fob* basis could show a small surplus. The increase in the deficit on investment income caused by the growth in Italy's foreign debt is likely to prevent an improvement in the current account.

Confidence has been undermined by developments abroad. The prices of shares and bonds, which had fallen sharply last August, nonetheless remained stable or even rose slightly in the days immediately following the outbreak of war in the Gulf. Consumption has been postponed most markedly in specific sectors, such as tourism and transport.

The tense international political situation is clearly influencing consumer behaviour. If it remains

adverse for long, firms that are now waiting to see how matters develop may cut back their investment programmes.

In uncertain conditions such as these, economic policymakers must stabilize expectations by pursuing policies that are consistent with their medium-term objectives while at the same time preparing measures to cope with changeable external factors. Italy's adherence to the narrow fluctuation band of the EMS means that monetary policy is now largely conditioned by exchange rate objectives. It is up to fiscal policy and incomes policy to send unambiguous messages and create the conditions for a more balanced development of the economy.

Fiscal policy is directed towards bringing the public debt under control and halting its growth in relation to GDP. The Government estimates that this objective will be achieved in 1993. The budget approved by Parliament in December is designed to produce more than 28 trillion lire of additional revenue and almost 20 trillion of expenditure savings in 1991 (see insert). The correction is intended to reduce the borrowing requirement from around 180 trillion, as estimated in September 1990 on a current programmes basis, to 132 trillion and to generate a surplus net of interest payments.

In view of the nature of the budget measures (see the previous issue of the Economic Bulletin), their ability to produce the expected corrections should be verified as soon as possible and supplementary measures prepared as necessary. There is an equally urgent need to carry out the sales of state assets that are already possible under existing legislation and to lay down the administrative procedures for further operations of this kind so as to realize the forecast revenue of 5.6 trillion lire.

Recent economic developments and the state of the international capital markets nonetheless suggest that a 48 trillion lira correction might not be sufficient to prevent the deficit from overshooting the target of 132 trillion lire.

Interest payments are likely to exceed the forecast of 140 trillion lire by around 5 trillion owing to the acceleration in inflation and the rise in domestic

The implementing provisions of the 1991 budget

The 1991 budget (described in the previous issue of the Economic Bulletin) is intended to reduce the state sector borrowing requirement by around 48 trillion lire, with additional revenue accounting for 28.4 trillion of this total. The implementing decree laws were issued at the end of December and those that have been ratified so far are officially expected to generate around 22.2 trillion of additional revenue and 19.6 trillion of expenditure savings (of which 3.5 trillion attributable to the reduction in interest payments resulting from the budget itself). Provisions implementing the plan to sell public sector assets for a total of 5.6 trillion have still to be adopted.

Expenditure

The main changes to the original budget measures concerned the provisions regarding the labour market and the loans that the Deposits and Loans Fund may grant; their effect is likely to be a small reduction in the projected savings.

During the process of parliamentary ratification, major changes were made to the measure regarding trainee contracts and the hiring of workers on Wage Supplementation. The limit on the number of new trainee contracts that firms with more than ten employees are allowed in 1991 was eliminated (it had originally been fixed at 50 per cent of those approved in 1990); the corresponding relief was reduced, however, from 50 to 25 per cent of employers' social security and health service contributions. The relief granted for persons on Wage Supplementation who are hired by such firms was also reduced, though its scope was enlarged to cover all workers who have been unemployed for twenty-four months. For such workers hired by firms with less than ten employees or by firms located in the South of Italy, employers are completely exempted from the payment of social security and health service contributions for three years.

As regards the lending of the Deposits and Loans Fund, the 4.5 trillion lira ceilings for ordinary loans in 1990 and 1991 provided for in Decree Law no. 269 of 1.10.1990 (which was not ratified by Parliament) were replaced in Law no. 403 of 22.12.1990, by a lower limit of 8 trillion lire in 1991 for the ordinary lending of the Fund plus special loans granted in compliance with specific laws. The policy of curbing the Fund's lending that was pursued in 1990 and given legal force by the above-mentioned October Decree Law should nonetheless ensure the projected 4 trillion lira reduction in the Fund's disbursements in 1991, provided that the volume of loans granted does not significantly exceed the aforementioned lower limit. Disbursements during the

Effect of the budget on expenditure in 1991 (1) (billions of lire)

Decrease in expenditure	19 ,600
Finance Law for 1991	5,050
Direct reimbursement of loans raised by state-controlled enterprises	3,050
Redetermination of transfer payments and other budget allocations	2,000
Measures implementing the Finance Law	7,050
Law no. 407 of 29.12.1990	
Health services	5,150
Trainee contracts and hiring of persons on wage supplementation	800
Restrictions on hiring staff	500
Disability criteria	500
Deferred retirement option	100
Other minor items	7,500
Cap on lending by the Deposits and Loans Fund $\ .$.	4,000
Reduction in interest payments	3,500
(1) Official estimates	

year should also be held in check by the directive recently issued by the Council of Ministers placing restrictions on the operations that can be carried out in the first six months.

Revenue

Excluding the amounts to be raised through the sale of assets, the size of the budget correction on the revenue side remained basically unchanged when the Finance Bill and the related implementing legislation was approved. The shortfall of around 6.6 trillion lire compared with the original budget was offset by other measures expected to raise around 6 trillion of additional revenue.

The measures actually approved have resulted in a small increase in central government tax revenue, from 20.2 to 20.6 trillion. This result is primarily attributable to the raising of imputed property incomes (3 trillion), which is intended to compensate for the postponement, from 1 July 1991 to 1 January 1992, of the increased scope for local authorities to raise taxes (2.5 trillion) and of the new property rating scheme (0.7 trillion). The increases in the excise taxes on oil products and methane (1.2 trillion), coupled with those in the sales tax on tobacco products and the television licence fee (0.85 trillion), which were not foreseen in the original budget, offset the effects of the decision to abolish local income tax for smaller firms (2 trillion) at the beginning of this year. instead of the beginning of 1992 as originally envisaged. To conclude, the right, conferred by Law no. 9 of 9.1.1991, to defer, without penalty, the payment of excise taxes on oil products is expected to cause a 1.4 trillion lira loss of revenue this year.

As regards local taxes, the increases in the regional tax on motor vehicle ownership and the provision made for regional surtaxes (1 trillion in total) attenuate the shift in favour of central government revenue caused by the above-mentioned postponement of the planned increase in the scope for local authorities to raise taxes.

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Effect of the budget on revenue in 1991 (1) (billions of lire)

Increase in revenue	22,214
Finance Law for 1991	11,210
Increase in imputed property incomes	3,000
Increase in family allowances	-450
Bringing forwrad of VAT payments	5,800
Increase in stamp duty	1,500
Increase in excise tax on oil products	1,035
Increase in excise tax on methane	168
Increase in government concession charges	80
Increase in entertainment tax	77
Measures implementing the Finance Law	8,750
Law no. 408 of 29.12.1990	
Revaluation of company assets	4,400
Unlocking of retained profits held in tax-exempt	
reserves	4,000
Condonation schemes	50
Abolition of local income tax for smaller firms	-2,000
Law no. 407 of 29.12.1990	
Increase in health service contributions	1,200
Increase in special wage supplementation contributions	700
Increase in TV licence fees	200
Increase in Chamber of Commerce fees	200
Other measures	2,254
Prime Minister's Decree of 21.12.1990	
Revision of income tax reference parameters	2,500
Increases in excise duties	620
Ministerial Decree of 19.12.1990	
Increase in sales tax on tobacco products	650
Legislative Decree of 21.12.1990 and Law no. 158 of 14.6.1990	
Increased scope for regions to levy taxes	1,000
Decree Law no. 411 of 27.12.1990	
Extension of VAT relief to shoe manufacturers	-116
Decree Laws nos. 267 of 28.9.1990 and 350 of 27.11.1990 (expired) and Decree Law no. 27 of 28.1.1991	
Taxation of capital gains	500
Decree Law no. 9 of 9.1.1990	
Deferment of excise tax on oil products	-1,400
Decree Law no. 18 of 19.1.1991	
Increase in social security contribution relief	-1,500
(1) Official estimates.	

interest rates following the tightening of monetary conditions in Germany. The slowdown in economic activity is tending to inflate the deficit, both by increasing expenditure on income support and by reducing tax revenue, which in 1990 was 4 trillion lire less than the figure envisaged in the September Forecasting and Planning Report. There will also be additional expenditure in connection with the conflict in the Gulf and the measures that have been adopted to counter terrorism; other events unrelated to the economic cycle or the Gulf crisis may have negative repercussions on specific revenue and expenditure items as well. All of these factors will have to be taken into account in preparing any corrective measures that are required in addition to those needed to achieve the full 48 trillion lira adjustment.

The programme for the adjustment of the public finances will be more difficult to implement in a phase of cyclical slowdown. Its successful completion is nonetheless a necessary condition for maintaining confidence, ensuring stable growth and participating in Economic and Monetary Union. Corrective action will have to focus on the three sectors that tend to be the cause of budget deficits, especially through their expenditure implications, namely social security, health services and local government finance. This action, which involves both improving the quality of the services provided and reducing their cost, is the means of achieving the basic objective: to eliminate the general government deficit on current account and halt the resulting absorption of savings, which is equivalent to nearly 6 per cent of GDP.

The adjustment of the public finances will have to be accompanied by a policy for curbing the increase in nominal incomes, first and foremost in the public sector. The wage increases won by public employees will continue to be a dangerous benchmark for wage claims in the rest of the economy if they are not brought into line with the targets the Government has set for inflation. Labour costs in the private sector are rising some 3-4 percentage points faster than in France and Germany. The inflation differential vis-à-vis the other European countries needs to be eliminated. Further losses of competitiveness would prevent the Italian economy from taking full advantage of the opportunities that will appear when the upturn in the world economy comes.

Although the national wage agreements that have already been signed in the industrial sector involve increases that are higher than the European average, they do leave a little room for restraining wage growth. The contracts due to be signed in the coming months must not be out of line with settlements so far. The situation calls for a clear reversal of the present trend in the wage negotiating behaviour of employers and unions and in wage drift. The conditions for such a reversal should be established without delay. A reform of negotiating methods that respects the independence of the parties involved will have to be linked with the Government's undertaking to orient the expectations and behaviour of enterprises and unions towards price stability, thus exploiting the anti-inflationary discipline inherent in the lira's adherence to the narrow fluctuation band of the EMS.

In the last few months monetary policy has succeeded in keeping the lira within the narrow band even in the adverse conditions created by pronounced oil price volatility and successive increases in German interest rates. The firmness of the response to external strains reduced the cost of the monetary policy measures that had to be adopted. The increases in short-term interest rates were only reflected to a very small extent in longer-term rates; they also prevented the growth in the money supply, which was boosted by the rise in prices and the large Treasury borrowing requirement in the last few months of the year, from significantly overshooting the upper limit of the target range: on the basis of monthly averages, the 12-month growth in M2 amounted to 9.6 per cent in December and preliminary estimates indicate that it fell well below 9 per cent in January.

The time banks take to adjust their minimum lending rates to changes in money market rates has shortened, but it is still too long. Towards the end of 1990 the delay with which rates below the prime rate were adjusted to the higher yields available in the money markets made various forms of round tripping profitable. This led to a large expansion in bank lending, despite the slowdown in economic activity. The expansion was largely reversed in January, when minimum lending rates were raised by about twenty basis points and the yields on three-month Treasury bills came down by more than one percentage point.

The flow of funds projection for 1991 is based on a target range of between 5 and 8 per cent for the growth of M2, whereas credit to the non-state sector is expected to expand by around 10 per cent. These values were approved by the Interministerial Committee for Economic Planning in September and have been submitted to the Committee of EEC Central Bank Governors, which judged them to be consistent with the objective of ensuring the internal and external stability of the Community. They are also consistent with the commitment to bring Italy's inflation rate closer to the EEC average. Compared with last year, the target range for monetary growth has been reduced by one percentage point in Italy, while it has been left unchanged in Germany at 4-6 per cent.

It will again be necessary to replace a huge volume of maturing government securities in 1991. Excluding short-term securities that will be issued during the year, the value of the debt to be renewed is estimated at around 435 trillion lire, nearly 100 trillion of which consists of medium and long-term paper. Market conditions currently make it possible to pursue the policy of lengthening the average maturity of the public debt and reducing the proportion of floating rate securities. In view of the success of the seven-year securities issued in 1990, the Treasury has decided to make its first issue of ten-year fixed rate bonds at the beginning of March as well as floating another issue of seven-year credit certificates. The confidence that the state is thus asking investors to show makes the rehabilitation of the public finances all the more urgent.

Based on information available at 25 February.

Articles

Cheque Truncation (*)

Two of the projects promoted by the Bank of Italy for the reform of the payment system concern the processing of cheques. The new procedure for the clearing house exchange and settlement of out-of-town cheques is now well established and has already produced important results. The arrangements for cheque truncation, the second project, required more time, since suitable technical equipment had to be acquired, complex computer procedures prepared and major organizational changes made.

Cheque truncation was made available to the banking system as a whole on 10 September 1990 after being run from the end of March on an experimental basis with a pilot group of banks.¹ Under the new procedure, cheques are held by the collecting bank, which wires the drawee bank the data it needs to pay the cheque by debiting the account on which it was drawn. The interbank debits and credits arising from such operations are settled by inclusion of the resulting balances in the national clearing.

Banks bear the risk implicit in the impossibility of verifying the signature of the drawer or issuer, as well as that of being unable to protest a cheque within the prescribed time. These risks make it necessary to limit the maximum value of cheques that are eligible for truncation. The procedure initially handled out-of-town bank cheques up to 1 million lire and banker's drafts up to 5 million lire; on 4 February the two ceilings were raised to 2 and 10 million lire respectively.

Banks can participate in the procedure directly or indirectly via another bank that truncates the cheques,

prepares the data for transmission and settles the balances.

Truncated cheques are presumed paid if three days elapse following settlement day without the collecting bank being notified to the contrary. A cheque that is dishonoured is returned promptly to the drawee bank, which will lodge a protest if this is necessary. These arrangements provide a stopgap solution as regards the protest procedure, which must be initiated within a very narrow time limit at the place of payment and thus basically conflicts with the logic of truncation. Different solutions will have to be found in the future, not least in order to be able to raise the limits on the value of cheques eligible for truncation. To this end, legislation is being drafted to permit a cheque also to be protested in the place where it is presented at the request of the collecting bank, acting as the representative of the drawee bank.

Cheque truncation data are sent through the Interbank Data Transmission System (SITRAD) at night, which makes for more efficient use of the system.

^(*) Prepared by the Data Processing and Information Systems Department.

^{1.} The group comprised Banco di Napoli, Istituto Bancario S. Paolo di Torino, Banca Commerciale Italiana, Credito Italiano, Istituto Centrale di Banche e Banchieri, Banca Sella, Banca Nazionale dell'Agricoltura, Banca San Paolo di Brescia, Banca Credito Agrario Bresciano, Istituto Bancario Italiano, Istituto di Credito delle Casse di Risparmio Italiane, Cassa di Risparmio delle Provincie Lombarde, Cassa di Risparmio di Verona, Vicenza, Belluno e Ancona, and Istituto di Credito delle Casse Rurali e Artigiane. Another 16 banks, including 10 rural banks, were involved indirectly.

	Truncate	d cheques	Unpaid	cheques
_	Number	Amount (*)	Number	Amount (*)
March	148,125	75,183	194	70
April	866,780	451,860	4,655	2,012
Мау	1,354,750	699,575	9,248	3,990
June	1,228,701	647,694	11,011	4,940
July	1,312,665	721,026	7,856	3,300
August	1,037,205	549,175	5,699	2,435
September	1,137,034	592,689	6,548	3,237
October	1,417,837	761,666	7,290	3,578
November	2,094,196	1,070,500	20,639	10,344
December	2,408,621	1,275,837	11,137	5,316
Total	13,005,914	6,845,205	84,277	39,222
(*) Millions of lire.				

Truncated cheques (26 March - 31 December 1990)

Correct application of the procedure should enable the banking system to make significant improvements in the field of cheque management. Massive computerization will substantially reduce the costs and risks connected with the manual processing of cheques and shorten the time needed to ascertain cheques' status, thereby providing a solid basis for improving the quality of service to customers. The Italian Bankers' Association is currently examining changes to the general conditions of current account contracts so as to enable customers to verify the reduction in the time required for funds to be made legally available after a cheque is presented for collection.

At the end of 1990, 84 banks (including 58 rural and artisans' banks) were using the procedure; on 4 February they were joined by another 33 (of which all but one were rural and artisans' banks). The participating banks account for 34.1 per cent of the banking system's total customer deposits. A resolution adopted by the Interbank Convention on Automation makes cheque truncation mandatory for all banks belonging to SITRAD (920 institutions, at present) and requires these banks to participate within 18 months of the date on which the procedure was opened to the banking system as a whole. Just as important as banks' formal adherence is their actual use of cheque truncation for all eligible cheques, since the potential benefits of the procedure increase with the volume handled.

Between 26 March and 31 December 1990 truncation was used for 13,005,914 cheques totaling 6,845 billion lire and averaging 526,315 lire per cheque. In the same period, "unpaid cheque" messages numbered 84,277 (0.6 per cent of all truncated cheques). The table shows the monthly breakdown of the figures.

The feasibility of extending truncation to cheques drawn on banks in the same town as they are issued will also need to be examined in the future.

The Mobilization of Compulsory Reserves (*)

The changes in the system of compulsory reserves, which came into effect on 15 October, form part of the Bank of Italy's programme of structural measures to improve the working of the money and financial markets and the effectiveness of monetary policy instruments.

Together with the creation of screen-based markets in government securities and interbank deposits and the reforms taking place in the payment system, the arrangements for banks to mobilize part of their compulsory reserve deposits are intended to deepen the money market and improve its efficiency, giving prominence to short-term interest rates as an indicator of the central bank's stance. A broader and more efficient market with short-term rates responding consistently to monetary policy impulses facilitates the attainment of monetary targets.

Securities repurchase operations are now being used more extensively to pursue monetary policy objectives, while their role in compensating short-term excesses and shortages of liquidity has been reduced. The effectiveness of repurchase agreements in regulating the money supply will be further enhanced when the mobilization ceiling is raised from the current level of 3 per cent of compulsory reserves to the planned 5 per cent.

It is difficult to evaluate the results of the reform in view of the shortness of the period for which the new system has been in operation and the very tight monetary conditions that have prevailed for much of that time. Nevertheless, it is possible to outline the changes that the reform has entailed.

Two indicators are relevant under the new arrangements: one showing the day-to-day liquidity of the banking system and another showing its position with regard to the average monthly reserve requirement.

On any given day the banking system's reserve deposits may be above, equal to or below the average requirement, provided that any shortfall is within the permitted mobilization ceiling. The difference between actual deposits and the average requirement constitutes "excess reserves". As before, the system also has the undrawn portion of ordinary advances at its disposal. A composite indicator of the overall position for the day can be obtained by summing these two components with the banks' holdings of notes and coin and the deposits held at the Bank of Italy by banks not subject to reserve requirements (chiefly the rural and artisans' banks).

This is the aggregate that best approximates to the old definition of bank liquidity, but it is much more flexible, in that daily liquidity may be quite low if the system has mobilized a substantial amount of compulsory reserves. In the first four months of the new system the aggregate averaged 4.5 trillion lire, compared with average bank liquidity of 5.6 trillion in the same period of 1989-90 and 6.0 trillion lire in the previous twelve months.

As expected, the introduction of the new system led to a decrease in funds bearing interest at 0.5 per cent (the deposits of banks not subject to the requirement and the excess reserves in other banks' compulsory reserve accounts). Since the reform the excess with respect to the requirement at the end of the reserve period has averaged less than 100 billion lire, as against a daily average of some 670 billion (11.5 per cent of bank liquidity) in the twelve months before the introduction of the new system.

^(*) Prepared by the Bank Lending and Clearing Department and the Research Department.



Reserve account balance and average requirement (daily data in billions of lire, 15 October 1990 - 14 February 1991)

The indicator of the average reserve position is the total of excess reserves for the reserve period; this is a function not only of the actual values for the period so far but also of expectations concerning movements in reserve accounts during the days that remain. A simplified version of this indicator (the running average), which takes only past values into account, has been provided on Reuters Monitor since 17 January to help money market operators assess market conditions (Figure 1).

The new reserve system has produced the expected improvements in the operation of the interbank deposit market. The most significant of these are reduced volatility in very short-term interest rates and closer correspondence between these and longer-term interbank rates (Figure 2); the coefficient of variability of overnight rates fell from 43.1 per cent in the six months before the introduction of the new system to 12.7 per cent in the four months following, that of tomorrow-next rates came down from 33.5 to 10.9 per cent, and that of spot-next rates declined from 27.9 to 10.5 per cent.

The volume of operations on the screen-based interbank market has increased, but this must be assessed in the light of the tight monetary conditions that prevailed for much of the period under examination. Average daily turnover from 15 October to 14 February was 28 per cent higher than in the previous four months. The greatest increases were for 24-hour deposits and those with terms of between two and four days and between one week and one month. There was a decline in trading in "time-deferred" deposits, which run from a date between one and three days after the dealing date, as agreed between the parties.

From the supervisory standpoint, the banking system has responded well to the introduction of the average reserve requirement. With few and sporadic exceptions, banks have complied with the new regulations.

The banking system has gradually appreciated the possibilities of the reform, and reserve mobilization has steadily increased. Average utilization rose from 23 per cent of mobilizable funds in the first reserve period to 27 per cent in the fourth. The number of banks making significant use of the facility has also risen, with the proportion of banks mobilizing between 2 and 3 per cent of their reserves increasing from a daily average of 35 per cent to over 40 per cent.

From the outset the larger banks have shown a greater capacity to mobilize their reserves than has the system as a whole (Table 1). These banks, which account for a very large proportion of total advances from the central bank, maintained very low excess reserves in all four months. Most excess reserves were thus held by the small and minor banks; although they have increased their reserve mobilization, on the whole they make comparatively little use either of the funds in their reserve accounts

Figure 1

Table 1

Mobilization of reserves, drawings on ordinary advances and distribution of excess reserves (percentages)

	Size categories (1)									
	Banks					Total system				
	Major	Large	Medium- sized	Small	Minor	Major and large	Medium- sized	Small	Minor	-
Compulsory reserves (2)										
15.10/14.11.90	1.0	1.2	1.0	0.7	0.6	1.0	0.8	0.6	0.5	0.7
15.11/14.12.90	1.2	1.2	1.1	0.9	0.7	1.3	0.8	0.9	0.6	0.8
15.12/14.01.91	1.2	1.6	1.0	1.0	0.9	0.9	1.3	1.0	0.7	0.9
15.01/14.02.91	1.3	1.3	1.0	0.9	0.8	1.1	1.2	1.0	0.6	0.8
Ordinary advances (3)										
15.10/14.11.90	18.8	12.4	13.6	5.5	3.1	33.0	10.4	4.1	0.9	12.8
15.11/14.12.90	84.7	74.1	77.9	47.0	22.0	65.7	45.6	28.4	16.0	70.5
15.12/14.01.91	79.0	76.6	69.3	52.8	21.1	86.1	48.3	25.8	19.0	71.2
15.01/14.02.91	93.6	90.0	87.1	73.1	28.3	79.2	77.0	47.9	25.6	82.0
Excess reserves (4)										
15.10/14.11.90	1.1	-	0.1	1.6	62.9	-	4.7	1.7	9.5	100
15.11/14.12.90	-	_	_	2.3	54.1	_	_	2.1	5.9	100
15.12/14.01.91		1.3	_	0.2	40.0	-	-	3.9	5.7	100
15.01/14.02.91	12.2	-	14.7	4.0	49.3	-	-	—	5.6	100

(1) Excluding branches of foreign banks, central credit institutions and banks too small for inclusion in the size categories. – (2) Average percentage mobilization of compulsory reserves. – (3) Percentage utilization of credit line. – (4) As a percentage of total excess reserves; sum of items does not total 100 per cent because of the exclusion of the institutions mentioned in Note 1.

or of ordinary advances, presumably owing to persistent structural problems in placing their funds on the interbank market and their lack of information technology adequate to the new cash management needs. This has reduced the scope for a rapid improvement in the efficiency of the interbank market.

The institutions engaging mainly in wholesale banking – chiefly foreign banks and central credit institutions – have continued to draw on ordinary advances for day-to-day cash management; in some cases this has been their sole instrument for meeting their normal liquidity requirements. The dissemination of aggregate daily information on average reserve requirements and the running average for the reserve account via Reuters Monitor is bringing further improvements in the efficient use of reserve mobilization and cash management. Knowledge of the aggregate reserve position lessens uncertainty and, especially in the last few days of the reserve period, limits sudden movements in interest rates, although some variability remains normal.

In operational terms, the possibilities opened up by the new system and the scope given to bank treasurers to allocate liquidity among their various accounts have encouraged banks to move funds via the interbank data transmission network. The



Central bank financing and interbank rates (daily data, 15 October 1990 - 14 February 1991)

number of network participants rose from 181 at the launch of the new system to 272 in January, equal to about 30 per cent of all banks with reserve accounts but over 65 per cent of the banks subject to reserve requirements. The number of electronic transfers has likewise risen sharply to 2,474 per reserve period, more than three times the monthly average for January-September 1990.

The working of the market has also benefited from the new schedule of account transaction charges introduced at the same time as the reserve mobilization arrangements and from the changes in value dating. In particular, the levying of penalty charges for giro transfers to banks otherwise unable to meet their settlement obligations in the last phase of the national clearing procedure has reduced the number of banks failing to complete their settlements on time from an average of 2.2 a day in the months preceding the reform to one of 0.8 under the new system.

Figure 2

Speeches

Europe in the Nineties - Towards a New International Order

Remarks by the Governor, Carlo A. Ciampi, to the Conference celebrating the 25th Anniversary of the "Istituto Affari Internazionali" Rome, 22 November 1990

It is a great pleasure to take part in this convivial gathering of the conference that the Institute for International Affairs has organized to mark its first twenty-five years of activity. The theme of the conference evokes issues that hark back directly to the pan-European ideals of the Institute's founder, Altiero Spinelli. Long considered utopian or achievable only in the distant future, these ideals have taken on new life in recent years and are now at the top of the agenda of the bodies governing the Community.

Spinelli himself could hardly have imagined such rapid progress towards economic and monetary integration in the Community or such strides in transcending the division of Europe into hostile blocs inherited from the Second World War. It is therefore all the more commendable that the Institute should have begun to plan this conference almost a year ago, with a formula that has stimulated research by a large group of political scientists, economists and experts in problems of security. My remarks this evening will focus on the specific issue of the new monetary order that is being established in Europe.

A few weeks ago, here in Rome, the European Council adopted important decisions in the monetary field. The meeting has been depicted, mistakenly I believe, as having radicalized the debate on Economic and Monetary Union. The emphasis has been on the split between the United Kingdom and the other eleven countries, while the fact that the "British paragraph" of the European Council's conclusions reflects broad acceptance of several of the basic principles of the Economic and Monetary Union has been overlooked.

The Rome meeting has also been seen as a victory of the "politicians" over the "technicians". This view, however, fails to note that on monetary issues the former only discussed the question of "when". On the technical front, no changes were introduced to the solutions worked out in the Delors Committee and, subsequently, in the Monetary Committee and the Committee of EEC Central Bank Governors.

Allow me to expand on this aspect. The plan for Economic and Monetary Union being proposed to the citizens of the Community envisages a market-oriented system based on freedom of economic and financial transactions, monetary stability and budgetary equilibrium. To ensure the lasting achievement of these objectives, the plan foresees a fundamental role for a strong and independent central monetary institution with full responsibility for the conduct of monetary policy and with the priority task of maintaining price stability.

The new monetary institution is the necessary consequence of the momentous decision to create the single market and irrevocably fix exchange rates; without a single monetary policy, the large market would risk turning into an area of instability and inefficiency. Monetary union is not cloud-cuckooland, but the response of practical men to the challenges posed by economic and financial integration. Being practical does not mean being without guiding ideals or the ability to formulate far-sighted and innovative plans.

The draft statutes of the European System of Central Banks, which the Committee of Governors approved on 13 November, are the fruit of a joint effort inspired by a strong Community spirit, firm belief in the importance of monetary stability for the general welfare and direct experience of the need for an independent central bank to safeguard this stability. In drawing up this document, the Governors looked to the American and German versions of a federal model. They drew on the statutes of the Bundesbank for the explicit declaration of the new institution's task of combating inflation, an objective shared by all the participating central banks.

If the Treaty on Economic and Monetary Union incorporates the statutes as drafted by the Governors, a monetary institution will come into being whose independence will be sanctioned by an instrument of constitutional force. Its primary objective of maintaining price stability, and that of supporting the general economic policy of the Community without prejudice to this objective, will be explicitly stated in the Treaty, which will outweigh national law. The legitimacy of the governing bodies of the European System of Central Banks will be ensured by the procedures for designating its officials and the periodic reports on its operations that will be submitted to the democratically responsible institutions of the Community.

In recent weeks the international press has extensively commented on the Bundesbank's position with regard to the plans for monetary union, sometimes interpreting it as negative. The tenacity with which Chairman Pöhl has guided the complex work of the Committee of EEC Governors testifies eloquently to the Bundesbank's full adherence to the project. Rather than criticizing, the Bundesbank has voiced a wholly legitimate concern that the Bank of Italy and the other central banks certainly share.

The preoccupation stems from the fact that the basic principles I have cited cannot be the subject of negotiations or weakened by political compromise. Moreover, acceptance of these principles implies the imposition of a tight consistency constraint on the overall conduct of economic policy.

The European Central Bank's independence and its objective of price stability must be provided for in full, with no watering down; otherwise, the institution will not be able to carry out the demanding task with which it is to be entrusted. There is no room for ambiguity on this point.

If there was a new development in the conclusions of the Rome European Council, it was the adoption of the ecu as the future single currency of the Community. But this, it should be noted, was also a purely political decision that does not have technical implications able to create serious problems for monetary authorities.

In the Delors Committee the Governors stressed the need for a common monetary policy, implemented by a single central bank, as the fundamental condition for maintaining fixed rates between the European currencies. Once this primary requirement was satisfied, it was argued, operators would be indifferent as to whether they held Deutschemarks, French francs or Italian lire and it would emerge clearly that national currencies had turned into different denominations of a single currency.

This approach suffered from two drawbacks: it did not fully recognize the advantages that the switch to a single currency would bring, for operators even more than for central banks, and it left the market in a state of uncertainty about the role of the ecu.

It is for this reason that I submitted a proposal to the Delors Committee suggesting that as early as phase two a role should be foreseen for the ecu in the conduct of a more closely coordinated monetary policy based on a system of bank reserves in ecus. Subsequently, I pointed out to the Forum for Italo-German Dialogue held at Bad Neuenahr a year ago that it would not be possible to construct a solid, equitable and lasting monetary union on the basis of either a hegemonic currency or competition between currencies. More recently, just a few days before the European Council, I told the annual meeting of the Italian Forex Club I hoped the decision to grant the ecu the status of future European currency would be taken before long, to enhance the vitality of the embryo of a single currency that the market has created on its own and which has already developed considerably even though the environment has not always been favourable.

The Rome European Council judged that it was politically unacceptable to persist in a state of uncertainty regarding this basic aspect and agreed that the Community would have a single currency, a "strong and stable" ecu, thereby also taking account of the contribution of the British authorities.

The meeting added new objectives and deadlines to the timetable for Economic and Monetary Union. In particular, the possible content of phase two has begun to emerge, together with the period during which it should be implemented. In this field there is also a need to eliminate any misunderstanding.

The Delors Committee's first priority was to provide a clear definition of the final goal of economic and monetary union, partly to clear the ground of misconceptions that would have been an obstacle to all progress. Hence the effort devoted to determining the economic and institutional content of phase three and outlining what I like to call the "design of the cathedral". The Committee then laid down the minimum conditions for the process of unification to get under way with the start of phase one. This focusing of attention on the first and third phases led to the content, though not the importance, of phase two being understated. There was agreement on its being logically indispensable at the moment a start was made on the transition from a system with twelve central banks to that with just one.

Are those who criticize phase two or question its usefulness suggesting perhaps that the European Central Bank should take over from one day to the next immediately after the ratification of the new Treaty? I do not think so. And, in any case, it cannot seriously be imagined that such a step would be technically feasible. There must be a phase two.

The Rome European Council recognized this logical necessity and laid down some basic political guidelines. It decided that the second phase was to start on 1 January 1994 and that the new monetary institution was to come into being on that date. Now that these points have been decided, the content of

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phase two corresponds to the gradual transfer of powers from the national central banks to the new institution. It will be up to the governing body of the European System of Central Banks to define the procedures by means of which to strengthen monetary policy coordination; for example, by starting to exercise powers of initiative and suspension with respect to national monetary policy decisions, carrying out exchange market intervention in third currencies and managing the liquidity of the ecu clearing mechanism.

By the time this point is reached, the Economic and Monetary Union Treaty, including the statutes of the European System of Central Banks, will have already been approved by the Parliaments of the member states and will have the force of law in the Community and precedence over national laws. The transition will therefore consist of a whole series of technically difficult steps that will nonetheless be "required" and directed towards implementing a final order that has already been clearly defined and approved.

The conclusions of the Rome European Council provide the base for the Intergovernmental Conference. The draft statutes of the European System of Central Banks are also of fundamental importance, both in their own right and for what they imply. The Conference will have a clearly charted course to follow and, though there are problems requiring difficult choices, the prospects for a successful conclusion have been enhanced.

The understandings reached in Rome will be a powerful stimulus for Italy to pursue the fiscal and incomes policies without which it cannot catch up with the more stable and efficient European economies. Whenever the Community has set itself far-reaching goals in the past, Italy has always given its best, revealing an ability to accelerate adjustment and courage in taking the right decisions, despite their unpopularity at the time.

The set of conditions to be satisfied before entering phase two is both balanced and demanding. Had they been so hard as to appear unattainable, they would have cast doubt on the will to advance towards Economic and Monetary Union by offering a justification for slowing down efforts to achieve convergence, or given individual countries an implicit power of veto over each successive step. The timetable is nonetheless a tight one: the conclusions of the Rome European Council state that *within three years* from the start of the second phase the decision will be taken as to when the passage to the third phase is to occur and that provision is to be made for some countries to proceed before the others. There is thus the possibility of a two-speed phase three, in which laggard countries will proceed in the slow lane and be handicapped by having to join a system in which the modus operandi has already been established.

It is evident that the most serious obstacles facing Italy are the imbalance in its public finances and an inflation rate that remains above those of France and Germany. It is not necessary for me to return to these problems on this occasion. A month ago I informed the Italian Parliament of the Bank of Italy's concern in the face of a situation that calls for determined, consistent and unrelenting efforts if it is to be overcome.

Progress has been made in other fields: all the restrictions on the freedom of capital movements have been lifted, the lira has adhered to the narrow EMS fluctuation band and the structures and procedures of Italy's banking and financial systems are being modified to comply with the rules of the single market. Above all, and this is a point that I particularly wish to stress, for several years now the autonomy the Bank of Italy enjoys in pursuing monetary policy objectives has allowed us to control the creation of money in accordance with the primary objective of countering inflation, without monetary financing of the budget deficit. Each year the Bank of Italy fixes the target for the creation of money in the light of the needs and expected development of the economy; during the year it conducts its central bank operations with the foreign sector, the Treasury and commercial banks consistently with this antiinflation goal. The changes that will have to be made to Italy's institutional arrangements in this field, specifically as regards the Treasury's current account with the Bank of Italy, will do no more than set the seal on what is already a feature of the conduct of Italian monetary policy.

In conclusion, the prospect of a single currency and a single central bank in the Community before the turn of the century has ceased to be the utopia it was for Altiero Spinelli. The achievement of this goal will require the public and private spheres to join forces. The authorities must give practical effect to the undertaking entered into by the governments of the member states to create the institutions of the Economic and Monetary Union. The citizens and businessmen of Europe will have to modify their commercial and financial practices to foster, and in some respects anticipate, the transition to monetary union and a single currency.

Monetary union is only one aspect, visible and substantial, of the union of the peoples of Europe, the vision of the signatories of the Treaty of Rome. Its achievement requires perseverance, commitment and confidence in the ability of the Community to complete the journey started more than thirty years ago. Those who balk at initiating a project until its implementation can be guaranteed not to involve any difficulty or risk are condemned to immobility. This cannot be the choice of those who believe in a united Europe.

Financial Integration and the Italian Securities Market

Address by the Director General, Lamberto Dini, to the J.P. Morgan Seminar on International Fixed Income Investment

New York, 5 December 1990

1. When considering the international dimension of the financial market in Italy, and for that matter in other continental European countries, one cannot fail to be struck by how little cross-border portfolio investment there is, despite all the talk about globalization. The choices for most issuers and investors are restricted to their domestic markets. This contrasts sharply with the situation for manufactured goods, especially when account is taken of the inherent mobility of financial products.

To some extent, this state of affairs can be attributed to the exchange controls that were in force in several countries until recently, but it also reflects difficulty in effecting transactions and, above all, a lack of knowledge and understanding of foreign markets that needs to be overcome.

2. At the end of last year, non-residents' holdings of Italian securities (government paper, bonds and shares) amounted to just over 3 per cent of residents' total financial assets. At the same time, the Italian private sector's holdings of foreign securities also amounted to around 3 per cent of the same aggregate.

These amounts are small, and appear almost ridiculous in comparison with the openness of the Italian economy in merchandise trade, since both exports and imports of manufactures amount to more than one third of total domestic output.

A more telling comparison is that with the financial openness of countries with long-standing freedom of capital movements and more highly developed markets, such as the United States and the United Kingdom. No less than 19 per cent of America's public debt is held by non-residents, and the figure for the UK is 12 per cent. Moreover, foreign investors' purchases of new issues of US government securities are now an important component of total demand at Treasury auctions.

Table 1

	Medium and long-term securities	Shares and participa- tions	Total	Total as % of total financial assets		
	(Holdings; in billions of lire)					
1980	2,147	6,132	8,279	1.46		
1984	1,320	23,619	24,939	2.25		
1985	1,315	32,796	34,111	2.13		
1986	1,299	43,487	44,786	2.18		
1987	3,045	43,210	46,255	2.32		
1988	7,833	63,718	71,551	3.07		
1989	23,432	58,692	82,124	3.06		
(Net purchases; in billions of lire)						
1980	179	569	390	0.64		
1984	-79	3,330	3,251	2.26		
1985	-33	2,838	2,805	1.97		
1986	-414	2,916	2,502	1.43		
1987	1,727	2,159	3,886	2.34		
1988	5,220	3,851	9,071	4.44		
1989	15,455	-5,887	9,568	4.07		
Source: Bank of Italy.						

Italy's portfolio investment abroad was undoubtedly hindered by exchange controls. These were not completely abolished until October 1989, since when this item has increased rapidly: from \$6.4 billion in the first ten months of 1989, when liberalization was already well advanced, to over \$16 billion in the same period of this year. Consequently, the share of this item in the total increase in Italian residents' financial assets rose from 7 to 14 per cent between the two periods.

The rapid emergence of the previously suppressed demand for foreign assets is not giving rise to balance-of-payments problems since it is being offset by substantial inflows of foreign capital.

In all likelihood exchange controls had depressed inward portfolio investment as well, albeit indirectly, by discouraging the development of suitable channels of intermediation and causing foreign operators to have doubts about the stability of the lira and the effectiveness of Italian economic policy. Technical difficulties in effecting transactions also helped to discourage activity, as did the starting-up costs involved in entering a new market, a course that is only justified if the planned volume of trading is sufficiently large.

Here again, however, a radical change has taken place. In 1989 non-residents' purchases of Italian securities amounted to \$49 billion and their sales to \$37 billion. Net purchases of bonds totaled \$7.7 billion and those of shares \$4.8 billion, a significant proportion of new corporate issues. The fact that the gross flows were several times the net flows is clear evidence of the liquidity of the market.

The conclusion I draw from these considerations is that the integration of the Italian financial market in the world economy is still far from complete, though it has undoubtedly speeded up.

One of the conditions for the international diversification of Italian residents' portfolios is that the present lack of knowledge about foreign markets be made good.

The adjustment of the composition of households' portfolios is being performed today mainly by mutual funds and banks, which provide advice and portfolio management services. However, these intermediaries also have to create organizations to assess opportunities in foreign markets and conduct operations, something that cannot be achieved from one day to the next.

	Table	2
Foreigners' investments in Italian securit	ties	

	Government securities	Shares	Debentures	Total		
(Gross purchases; in billions of lire; end of period)						
1984	3,794	1,329	496	5,619		
1985	9,731	4,763	477	14,971		
1986	11,898	10,490	1,135	23,523		
1987	13,461	7,077	845	21,383		
1988	19,391	9,442	595	29,428		
1989	42,362	18,334	6,497	67,193		
	(Net purchases; billions of lire)					
1984	543	211	-219	535		
1985	2,062	183	-125	2,120		
1986	4,390	-4,008	161	543		
1987	-376	-4,364	-96	-4,836		
1988	5,257	2,298	-25	7,530		
1989	9,904	6,656	514	17,074		
1990 (1)	7,434	1,032	-349	4,090		
Source: Bank of Italy. (1) First half.						

As for inward investment, the need is for the market to perceive the scale and structural nature of the changes that have occurred in the Italian economy, which deserve to be mentioned briefly: during the course of this year the lira has adhered to the narrow fluctuation band of the EMS, all the remaining restrictions on capital movements have been lifted, the regulations on the listing and trading of foreign securities have been simplified, and the Italian central securities system has been linked with equivalent organizations abroad. These, however, are only the most recent steps in the process Italy embarked on more than ten years ago, leading to a considerable improvement in macroeconomic conditions and a commitment to European integration that has irreversibly influenced economic policy by incorporating basic choices in institutional arrangements. It remains to be seen how fast economic agents will recognize these trends and adapt their behaviour accordingly.

3. I am convinced that the international integration of the Italian financial market will occur on a very large scale; in economic terms the Italian

securities market can rationally be expected to be even more open than those of other countries.

One reason for holding this view is that an obvious way for resident investors to correct for the lack of diversification of the Italian market is to internationalize their portfolios. A few figures will clarify what I mean: the issues of the Italian Treasury account for more than 84 per cent of the bonds outstanding today, and households hold 55 per cent of all Italian securities. In the United States, the corresponding figures are 40 and 10 per cent, and in Germany, 38 and 14 per cent.

The predominant role played by the Treasury makes it difficult for institutional investors to diversify their portfolios by issuer and limits the value of intermediaries, such as mutual funds, specialized in the collective management of individuals' savings. Investment in foreign securities would undoubtedly make for better balanced portfolios and enhance the function of specialized intermediaries.

In turn, the Treasury's ability to manage the public debt efficiently is undermined by the fact that the greater part is held by individuals. The repeated attempts that have been made to lengthen the average maturity of the debt and to use innovative instruments that would reduce the cost to the issuer by exploiting particular market needs have all fallen foul of the public's preference for simple and mostly short-term securities. The potential benefits associated with greater international integration are demonstrated by the fact that recourse to foreign markets has allowed the Treasury to broaden the range of public debt instruments and, more importantly, to raise loans with 10 and even 15-year maturities. At the same time the demand of foreign investors has permitted the issue of 7-year fixed rate securities for the first time since 1975.

4. Two other factors promoting greater openness compared with other countries are the size of Italy's public debt and the high level of private sector saving.

Italy's public debt in the form of securities is roughly equal to those of Germany, France and the United Kingdom taken together. In truly integrated markets, one would expect Italian government securities to account for a relatively large share of foreign investors' portfolios.

The other side of the coin shows a very high propensity to save in Italy, which has rivalled Japan for pole position for the last thirty years or so. According to the OECD, in 1989 the proportion of disposable income that households saved was over 14 per cent in Italy, compared with 15 per cent in Japan, 12 per cent in France and Germany, 10 per cent in Canada and no more than about 5 per cent in the United States and the United Kingdom. Market integration should therefore imply a proportionately larger share of Italian investment in foreign securities.

5. These simple facts show how great is the potential in Italy's case for growth in cross-border portfolio investment, in both directions. I have already mentioned that the speed of this growth will depend primarily on the acquisition of knowledge about foreign markets, but it is worth looking at some of the other factors that are likely to accelerate or slow down the process.

6. The attractiveness of any investment is, of course, a function of the risk and the return.

Italy now ranks as a "top quality borrower" on international capital markets. Most of Italy's foreign borrowing is done through jumbo issues, which set benchmarks in the various segments of the market. Such issues are frequently used to refinance earlier loans whose terms no longer reflect the country's improved credit standing.

At the end of October 1990 the Treasury's outstanding foreign currency borrowing, including ecu securities issued in Italy but purchased by non-residents, amounted to about \$34 billion or 3.3 per cent of Italy's total public debt. About two thirds of Italy's external debt is in ecus, a mark of the Italian authorities' commitment to fostering this currency's use.

The Treasury's higher credit standing has also brought benefits to other leading Italian borrowers, whose access to the international market is coordinated by the monetary authorities with a queuing system designed to avoid bunching. This

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system has been maintained on an informal basis since foreign borrowing by Italian residents was completely liberalized.

A market for Eurolira bond issues was started in October 1985 with the aim of promoting the internationalization of Italy's currency. The lira has in fact been underrepresented in international financial transactions compared with the country's role in the world economy. The Eurolira market also provides Italian banks with an opportunity to increase their placing power abroad. The new market has developed extremely fast, with the volume of issues more than doubling every year until 1989, and with a further 50 per cent increase this year. The organization of the market includes a queuing system for instruments and issuers that prevents an excessive concentration of issues and ensures the market's regular and orderly development.

Investor interest in Italy stems not only from the country's good economic prospects and the new freedom of capital movements but also from Italy's relatively high interest rates. Although nominal interest rates declined rapidly in the period 1981-87, they did not fall by as much as inflation. In recent years real interest rates have fluctuated around 5 per cent, a level consistent with the restrictive stance of monetary policy made necessary by Italy's large and persistent budget deficits.

The gross return that an American investor could have earned by investing in Italian government securities averaged 13 per cent in 1982-86 after adjusting for exchange rate variations, and 19 per cent in 1987-90. No other major country offered a higher return in this period.

The situation regarding after-tax yields is nonetheless more obscure than would be desirable. Except for government securities issued abroad, which are totally exempt, the taxation of bond interest income is regulated by double-taxation agreements, so that the treatment differs with the investor's country of residence. Moreover, when an agreement foresees a zero, or low rate of taxation at source, this is not automatically applicable and investors have to apply for the reimbursement of the standard 12.5 per cent withholding tax that is levied. The time it takes to obtain this reimbursement is at present both too long and unpredictable, but the procedures in question are being revised by the Ministry of Finance and I hope that a solution will soon be found.

7. The market for Italian government securities is naturally one of the deepest in the world. Treasury bills alone amount to some \$300 billion, making Italy second only to the United States in this respect. The average maturity of these bills is only 4-5 months and monthly redemptions and new issues are on the order of \$40 billion.

The aim of lengthening the average maturity of the public debt without forcing investors to run excessive risks led to the introduction of floating rate securities, which now amount to close on \$400 billion, or 42 per cent of the public debt, and constitute the largest market in the world for such instruments. Investors have appreciated the mechanism whereby interest rates are adjusted to those in the money market and have enjoyed considerable price stability, even in periods of rising interest rates.

The liquidity of a security, i.e. the possibility of trading large quantities without unduly influencing prices, does not depend, however, only on the volume of securities in circulation, but also on numerous other factors, ranging from issue techniques to the methods employed for listing, trading, settlement, delivery and custody. In many of these fields the Bank of Italy plays an important role and I am happy to be able to report that considerable improvements have already been made and that others are in the pipeline.

Two major steps taken recently in the primary market were the adoption of auctions for all Treasury issues and the decision to keep the features of successive issues unchanged, apart, of course, from the tender price. The first change has made it possible to have prices reflecting the effective level of demand, and the second larger volumes of standardized securities, thereby meeting the needs of large traders.

The most important recent improvements in the secondary market for government securities include the creation of a screen-based block market and the introduction of a system of central securities accounts run by the Bank of Italy. The screen-based market started operating in 1988; it is a dealer market with 20 banks and securities firms acting as primary dealers under the supervision of the Bank of Italy. There are now about 200 operators and daily turnover has risen rapidly: in September it exceeded \$2 billion, half of which was in just five securities. The availability of continuous firm quotations has greatly enhanced the transparency and efficiency of the market, which has also benefited indirectly from the creation of a screen-based market for interbank deposits. This only started operations at the beginning of this year, but daily turnover has already exceeded \$6 billion, thereby making it easier to finance securities positions.

The system of central accounts makes it possible for government securities deposited with the Bank of Italy to be transferred between several hundred operators by computerized book entries. The securities handled by the system correspond to around 90 per cent of those in circulation and are worth about \$800 billion.

Account-holders include Cedel (Centrale de Livraison de Valeurs Mobilières S.A., located in Luxembourg) and Euroclear-Morgan Guaranty Trust Company of New York (located in Brussels), so that we already have the first international links between central securities systems that were envisaged from the very start of the project.

On the whole, the trading and settlement systems in place for Italian government securities can be considered practical and efficient. Further improvements in the screen-based secondary market will stem both from technological innovations permitting the number of primary traders and listed securities to be increased, and from the plan to achieve immediate delivery versus payment by linking operators' securities and deposit accounts with the central bank, thus completely eliminating settlement risk.

One other point I particularly want to stress concerns the Bank of Italy's activity in the market for government securities. This has the dual aim of achieving monetary policy objectives and ensuring orderly conditions. The decision taken in the eighties to abandon administrative credit controls has entailed growing use of secondary market intervention in the form of both temporary and outright sales and purchases. In the first eleven months of this year the control of bank liquidity involved repurchase agreements totaling \$95 billion and matched sale repurchase agreements totaling \$60 billion. At the same time the Bank made \$24 billion of outright purchases and \$28 billion of outright sales to smooth temporary mismatches between supply and demand in the various segments of the market. These figures are clear evidence of the assiduity with which the central bank intervenes to ensure the proper functioning of the market that permits the non-monetary financing of the Treasury.

8. In a broader perspective, it is worth briefly examining how the European single market and economic and monetary union are likely to affect the market for government securities, primarily through the interaction with the government's financial policies. On the one hand, access to a larger market may facilitate debt management by permitting a reduction in the yields offered on securities; on the other, market forces will exert pressure for the convergence of budgetary policies within the Community. The latter factor will be the more important in the long run, and the present imbalance in Italy's public finances is undoubtedly incompatible with full integration.

Some progress has been made in the budgetary field in recent years. The deficit has been declining as a ratio to GDP, especially when interest payments are excluded. Net issues of government securities dropped from the equivalent of 9.5 per cent of GDP in 1988 to 8.6 per cent in 1989. In 1990 the state sector deficit is expected to amount to 10.4 per cent of GDP, as against 14 per cent in 1983, while net of interest payments it should fall from 6.5 per cent of GDP to little more than 1 per cent.

The Government's medium-term financial plan projects a budget surplus net of interest payments in 1991; this will speed up the reduction in the overall deficit and stabilize the public debt in relation to GDP.

9. The creation of the single market will have a significant impact on securities business. Starting in 1993, European intermediaries will enjoy unrestricted access to the various national markets in the
Community and operate within a harmonized regulatory framework. The potential benefits to be reaped from economies of scale, reduced information costs and less complex procedures are obvious.

The decision to participate in the single market does not, of course, automatically guarantee the harmonization of the relevant regulations. However, the Italian Parliament is close to completing a reform of the legislation on financial intermediation that does not simply give effect to the Directives issued by the EEC but is comparable in scope to Italy's 1936 Banking Law. The aim is to bring Italy's regulatory framework and institutional arrangements into line with those of the most advanced countries and to foster competition and efficiency in the financial market while ensuring its stability.

10. To conclude, far-reaching changes are under way in the Italian government securities market. The third-largest market of its kind in the world is being transformed to take advantage of international, and especially European integration and as part of the modernization of Italy's financial structures.

There is enormous scope for increasing the flows of inward and outward portfolio investment. Considerable resources will have to be invested to prepare the necessary trading facilities. The Bank of Italy is well aware of the importance of advanced technology, appropriate regulations and professional competence; it is pushing ahead, with some success I think I can fairly claim, with the projects within its sphere of competence. Nonetheless, how and when this potential is realized will depend ultimately on the initiative of market operators.

11. The innumerable individual decisions that fix the economy's course and its position in the world are powerfully influenced, however, by the basic choices underlying economic policy, its credibility and the consistency with which it is implemented. Nobody is more firmly convinced of this than the Bank of Italy. The progress made in the last ten years in establishing Italy as one of the leading industrial countries has undoubtedly owed much to the tenacity shown in respecting the constraint imposed by the decision to participate in the European Monetary System and its Exchange Rate Mechanism. We must build on this success.

The basic choices have been made: by adhering to the narrow EMS fluctuation band at the beginning of this year, by participating actively in the first phase of economic and monetary union and by pressing for the recent European Council meeting in Rome to lay down demanding conditions of economic convergence and a tight timetable for the passage to the second phase. The forthcoming Intergovernmental Conference in Rome will prepare the necessary changes to the Treaty of Rome, the Constitution of the Community; it is solemn confirmation that these decisions are not aimed simply at cyclical control of the economy but designed to give the objectives constitutional force.

There is no alternative, no short cut. In every sphere behaviour will have to become more consistent with the basic choices that we ourselves have made. Most importantly, the public sector will have to pursue the plan for financial adjustment drawn up by the Government: the first step requires the rapid and undiluted approval of the budget for 1991. The corporate sector will have to accept that the exchange rate constraint will not be eased, that competitiveness will depend on actively curbing costs rather than passively waiting for a devaluation. Workers will have to realize that real wages and employment are best defended with wage claims which match the productive potential of the economy in conditions of monetary stability.

One could say that the monetary authorities have shot their bolt. The drive to strengthen and improve the working of the financial system will continue, as will the efforts to make monetary policy more effective; and the commitment to the design of procedures for common action at the Community level will be maintained, together with the development of closer monetary cooperation. But it will no longer be possible to accommodate inconsistent behaviour with regard to prices, wages and budget deficits.

Role and Independence of Central Banks

Lecture by the Deputy Director General, Antonio Fazio, to the IMF Seminar on Central Banking

Washington, 8 November 1990

In the autumn of 1962 I went to the Massachusetts Institute of Technology to study monetary theory and econometrics with Professor Modigliani. It was the period when the "monetarist controversy" was raging in academic circles. Even though Modigliani disagreed with many of Friedman's theses, he advised me to read his works on money and to attend the advanced course on monetary theory taught by Samuelson with the assistance of Albert Ando. One day somebody came into class with a mimeographed copy of "The Monetary History of the United States".¹ The manuscript was several inches thick. Samuelson looked at it, weighed it in his hand and said (more or less literally, I quote by heart): "Milton, Milton, we set up the Fed to adjust the quantity of money to the needs of the economy".

It was a critique, but also, in a nutshell, a philosophy of central banking. I will return to this point later, at greater length.

Students of monetary policy – and particularly those who are engaged in its conduct – must often ask themselves whether it is the central bank that "moves" the economy, or vice versa.

Having implicitly declared my exposure – and my affiliation – to a vision of the economy which can be defined as "Keynesian", let me immediately state: i) my belief in the importance of nominal quantities of money and credit (and not only of their relative prices with respect to other financial assets and liabilities, in other words interest rates); and ii) my distrust of excessive activism in monetary intervention: such activism may be ineffective and, in some cases, even damaging.

These two positions, together with the revival of the importance of monetary policy for the control of both output and prices, are certainly a product of what we may call a monetarist vision of the economy.

I do not wish to appear eclectic, so let me be more analytical and define the points I wish to discuss and the arguments.

1. Theoretical setting of the problem

I shall begin by briefly discussing what money is – not only what money does 2 – in a market economy involving an independent State, a fiscal authority and a banking system. Modern economic theory has taught us that in such a context money may be a good which has no intrinsic value.³

Contrary to an often-encountered view, centuries of experimentation and a few decades of formalized economic theory have convinced us that this is the case.

The amount of fiduciary money must be determined by outside forces, by forces that are external to the market. This requisite is necessary if the units of money are to have a determinate value.

Fiduciary money circulating in the economy embodies a credit on the authority that issues it. There must be reliance on some economic entity which is absolutely secure and which guarantees the value of money, or the authority that issues it. This is necessary to ensure the general acceptability of money, in other words its liquidity.

Since every private agent in a market economy can fail, one sees behind this requisite the emergence of an authority, the State, which can guarantee all its debentures thanks to its power to levy taxes. In ancient societies and early political organizations money often circulated that had only a conventional value.⁴ This is the earliest example of a circulating medium incorporating a credit.

It was when the authority of the State was not sufficiently strong that the circulating medium needed to have an intrinsic value, although even then the weight generally had to be certified by a sovereign. Even in this case, however, it is difficult to understand why precious metals were so valuable independently of their monetary function.

Within the State, money possessed clearly fiduciary characteristics. It was issued by the sovereign and circulated on the basis of confidence in his authority. It embodied a claim on the authority that issued it (to finance public expenditure) and accepted it back for tax payments.

There appears, in this interpretation, to be a close connection between public expenditure and money circulation, and between sound fiscal policy and the value of money. (I am aware of the danger of interpreting complex historical phenomena in an oversimplified way by using modern analytical instruments, but I am confident that the interpretation is basically correct, albeit simplified for reasons of time and space).

Medieval times, first in Italy and then in other important markets and cities in Europe, show us instances of bankers issuing notes which were the certification of given quantities of precious metals deposited with them.⁵ In the loose institutional settings of the time, precious metals were the only internationally accepted medium of exchange for many centuries. Notes representing the value of the deposited metals began to circulate; they generally paid no interest and served as the basis for exchange and credit operations between different places.

Bankers then experimented with the issue of notes that were backed not by deposits of precious metals but by credits on merchants or, in some instances, on kings and foreign States. The modern concept of banking activity began to emerge, although developments in this direction were hindered in some respects by the laws prohibiting usury. Some loans to monarchs proved ruinous, both for the bankers and for their depositors.

Modern states, which began to emerge in the seventeenth century with stronger institutional arrangements, "invented" the banks of issue. Some of them have evolved into what we now consider modern central banks.

Fiduciary money (banknotes) can be raised to the status of **legal tender** for all payments, public and private. In this way the general acceptability of the medium of exchange tends to be established by decree. However, what I want to insist upon is that the imposition is well received by the market, and becomes effective, if it is based on confidence in the final debtor.

A final point concerns the banking system. Via the expansion of credit, the banking system creates deposits that perform a monetary function. There must be some institutional and market links between the amount of money created by, or on behalf of, the State and the amount of bank credit and deposits.

2. The emergence of central banks

A masterly, though concise, account of the emergence of the role and institutions of central banking in the 19th century and of the accompanying discussions in Europe and the United States is given by Vera Smith (Lutz) in her "Rationale for Central Banking".⁶ Amid long and sometimes fierce discussions about free banking and central banking, there generally emerged a tendency toward concentration and monopoly in banknote issue. The power tended to be assigned to banks which already provided liquidity for other note-issuing or deposit-taking institutions, and often had close ties with the government, including its financing.

An account of the formation of a European central bank is also given by Ralph Hawtrey in his book "The Art of Central Banking", published in 1932, in the middle of the Depression.⁷ He discusses at length the emergence of the Bank of England during the nineteenth century as a lender of last resort for the London bill market and its progressive assumption of the functions of a central bank. Together with a response to the needs of liquidity control, there was, from time to time, the need to stabilize the value of the pound in terms of gold. All this presupposed and required a growing involvement of the Bank with the market.

The status of bank of issue was important in performing those functions. Banknotes were considered a substitute for specie for certain classes of payments; the value of the banknotes was guaranteed by the gold reserve and by credit to the private sector and to other banks. In periods of tight liquidity the Government or Parliament authorized, and basically guaranteed, an expansion in the volume of banknotes in circulation in excess of the rigid limits set by the gold reserve.

The value of the banknotes, their liquidity and their acceptability rested on the existence of a gold reserve and on the quality of credit to the private sector; however, in periods of stringency an authorization and a guarantee from the political authority were also deemed necessary.

The Federal Reserve System was created in 1913 to act as a clearing house for the financial system and to provide liquidity to commercial banks under strain for cyclical or seasonal reasons by means of rediscounting. In practice, the system was also charged with pursuing the public interest tasks of controlling the circulation of the currency and some operations of the banking system. Some of these functions had previously been performed by the Treasury.⁸

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The origin and use of the expression "central bank" in academic literature go back to the turn of the century. However, in actual legislation, and in the usage of practical men and politicians, the term is a rather recent one.

One definition of the central bank describes it as the "bank of banks". Sometimes it is also defined as the bank of the Treasury and as the bank for the external sector of the economy, in other words the custodian of a country's foreign currency reserves.

The problem of the degree of independence arises when the central bank is, more explicitly, expected and required - by law, by tradition, by the development of monetary theory, or by public opinion - to perform tasks that are considered to be of public interest.

The institution charged with pursuing such public objectives is a bank of banks, an institution which was historically generated, or at least shaped, by market forces. It would be difficult to assign these tasks to a public body less intrinsically linked with and involved in the working of the financial market.

3. Financial instability

The Great Depression of the thirties, with all its appalling social and political consequences, was partly due to a series of mistakes, a lack of coordination and rigidities in the conduct of monetary policy by the authorities and the central banks of the principal countries.⁹

The logical algorithm provided by Keynes' General Theory clarified the way in which the restrictive impacts on investment and production generated by reductions in bank credit were amplified by the multiplier and by international trade.

Indeed, in every country, the crisis in productive activity led to and was exacerbated by bank failures. The close relationships between economic and financial crisis, and between macroeconomic regulation and banking stability, emerged very clearly.

The first consequence was the tendency for the various economies to close their frontiers to international commercial and financial transactions.

At the institutional level, banking and financial legislation was adopted that regulated intermediaries and markets much more extensively and in greater detail than ever before. Banks of issue tended to acquire new powers; new government bodies were created to supervise and control the banking sector.

One problem that emerged clearly was the instability of the money supply, which had come to be considered as including not only specie and banknotes but also banks' checking accounts.¹⁰ It became clear that banks' credit policies and behaviour affected and could upset monetary policy. Hence the dramatic proposal, coming from such a free-market-oriented centre as the University of Chicago, for a 100 per cent reserve requirement on checking accounts, and even the proposal for the suppression of certain private banking operations.¹¹

The period since the Second World War has been one of unprecedented growth and stability. International trade has been liberalized and has become an engine of growth; it has benefited from the new monetary order provided by the Bretton Woods agreements. The share of public expenditure has grown considerably, even excessively, providing a built-in stabilizer for the economic cycle.

In these conditions financial instability has been drastically reduced by comparison with both the inter-war period and the early years of this century. Certainly the surrounding economic environment and the new international monetary arrangements have had a decisive effect on the performance of financial systems. However, monetary authorities and central banks have made good use of the expertise gained in the earlier sometimes disastrous experiences.

* * *

There are two macroeconomic aspects of the financial performance of national economies and of the international economy to which I should like to draw attention.

Table	1
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Ratios of domestic financial assets to GDP

· · · · · · · · · · · · · · · · · · ·	1975	1980	1985	1988
United States				
Households	2.2	2.4	2.5	2.6
Firms (1)	1.9	2.1	2.4	2.7
Total	4.1	4.5	4.9	5.3
Japan				
Households	1.1	1.3	1.8	2.2
Firms (1)	2.9	3.2	4.0	5.1
Total	4.1	4.6	5.9	7.3
Germany				
Households	0.9	1.0	1.2	1.2
Firms (1)	3.3	3.7	4.5	4.6
Total	4.2	4.7	5.7	5.9
France				
Households	(2) 1.0	1.0	1.2	1.3
Firms (1)	(2) 2.5	2.7	3.4	4.2
Total	(2) 3.5	3.8	4.5	5.5
United Kingdom				
Households	1.3	1.3	1.8	2.0
Firms (1)	1.5	1.5	2.1	2.6
Total	2.8	2.7	3.9	4.6
Italy				
Households	0.9	0.9	1.1	1.3
Firms (1)	1.9	1.9	2.2	2.1
Total	2.8	2.8	3.3	3.4

Source: OECD, Financial Accounts. For the UK, CSO Financial Statistics. For Italy, Bank of Italy.

 Firms include non-financial enterprises, banks, insurance companies, pension funds and other financial institutions. – (2) 1977 data. First, the degree of financial deepening of the industrialized economies has increased steadily over the last 15 years.

Table 1 shows how the volume of financial assets owned by the domestic private sector has evolved in relation to gross domestic product in six leading industrial countries (the United States, Japan, Germany, the United Kingdom, France and Italy).

In all these countries the ratio has increased considerably, and constantly. In other words, the period has witnessed an increase in the quantitative importance of the balance sheets of banks and other financial intermediaries, the expansion of existing financial markets and the development of new ones. This means that the expenditure behaviour of households and firms is more dependent on the composition, nature and yield of financial assets.

The second aspect concerns the international economy. The international financial markets also grew dramatically in relation to the world economy between the mid-seventies and the end of the eighties.

International banking activity, measured in terms of banks' total external assets, grew from 10.6 to 17 per cent of GDP of the OECD countries between 1975 and 1980. During the eighties the ratio rose to about 30 per cent. The international Eurobond market has grown even more rapidly, passing from 0.5 per cent of the same aggregate in 1975 to 2.2 per cent in 1980 and 8.4 per cent according to the latest available data.

Table 2

Growth of international financial intermediation

	Percentage ratio of banks' external assets to GDP (1)	Percentage ratio of international bonds to GDP (2)
1975	10.6	(3) 0.5
1980	17.0	(3) 2.2
1985	30.9	6.3
1990 (4)	33.6	8.4

Source: BIS.

(1) All banks in BIS reporting countries plus some offshore markets; year-end data. OECD area GDP at current prices and exchange rates. – (2) Total outstanding international bonds; year-end data. OECD area GDP at current prices and exchange rates. – (3) Estimates. – (4) Estimates based on second-quarter figures. Broadly speaking, international banking activity is outside the monetary control of central banks. The performance of these markets can be influenced only indirectly by the action of central banks and national regulatory agencies.

All other things being equal, the growth of domestic and international financial markets increases the importance of and the need for financial regulation and control.

4. The "weight" of central banks

If a central bank is to influence the behaviour of financial aggregates and rates of interest through reliance on its position in the market, one necessary condition is that its balance sheet has to be sufficiently large with respect to the size of the economy. Table 3 shows, for various countries and periods, the ratio of the total assets of central banks to: a) the money supply (a measure of the consolidated balance sheet of the banking system), and b) annual national product.

Both ratios are significantly higher in Italy and in France and lower in the United States and the United Kingdom. The ratios for Germany are between the two extremes. The situation does not change over time, except in the case of the United Kingdom, where the ratio of money to gross national product doubled in the second half of the 1980s, while the importance of the central bank remained unchanged in relation to national product.

Table 4, which refers to the year 1989, shows the ratios of different categories of central bank assets and liabilities to GDP.

It is evident from the table that more than half of the high ratio found for the Bank of Italy is due, on the assets side, to its financing of the Treasury; the reserves of gold and foreign currencies are also remarkably high.¹² On the liabilities side a large proportion is accounted for by the deposits of the banking system, i.e. essentially compulsory reserves; given the amount of financing provided to the Treasury and the amount of gold and foreign exchange reserves, these deposits increase the demand for monetary base and make it possible to keep a certain amount of refinancing to the banking system among the central bank's assets.

The amount of Treasury debentures is also high in the assets of the Federal Reserve System.

The refinancing of the private financial system is relatively high for the German Bundesbank and the Bank of France.

Table 3

Central bank assets	, the money sup	oply and GDP:	selected ratios
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(percentage ratios of annual averages)

	Assets/M2			Assets/GDP			M2/GDP		
	1980/83	1984/87	1988/89	1980/83	1984/87	1988/89	1980/83	1984/87	1988/89
						l			
Italy	36.20	34.30	31.70	25.70	22.80	21.30	70.90	66.30	67.30
USA	9.50	9.20	9.50	6.10	6.00	5.90	64.30	65.00	62.60
Germany	21.00	19.90	21.90	11.60	11.60	13.20	55.00	58.50	60.10
υк	—	19.90	10.50	9.40	8.70	9.60	_	43.70	90.90
France	35.20	30.50	27.50	18.50	16.20	13.40	53.00	52.60	48.90
Sources: Central bank bulletins and	IMF internation:	I Financial Stat	istics			••			

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Table 4

(percentages)											
	Italy	United States	Germany	United Kingdom (1)	France						
Assets											
Foreign	11.62	1.65	7.42	5.05	14.05						
Treasury	17.85	7.56	1.04	3.18	1.34						
Financial system	0.67	0.08	13.01	0.11	8.45						
Other	1.13	0.57	1.43	1.21	3.01						
Total	31.27	9.86	22.89	9.54	26.85						
Liabilities											
Currency	8.92	7.83	11.17	3.55	8.52						
Bank deposits	14.12	1.24	4.96	0.34	2.68						
Treasury	0.08	0.20	0.45		3.15						
Other	8.15	0.59	6.31	5.64	12.50						
Total	31.27	9.86	22.89	9.54	26.85						

Central bank balance sheet aggregates and M2:

(1) The monetary authorities' foreign assets and liabilities are based on those reported in International Financial Statistics.

One tentative conclusion is that in the cases of Italy and the United States the influence on market conditions is mostly transmitted via open market operations on the public debt. In Germany and France there is a more direct influence on the financial sector via lending to the banking system and the supply of liquidity to private financial intermediaries.

* * *

The central bank is part of the financial system; it intermediates a part of the flows of savings passing through the system. But the liabilities of the central bank are of a special nature; they are money par excellence, or monetary base. Because of legislative prescriptions, long tradition and their intrinsic qualities, these liabilities have the features of absolute liquidity and general acceptability, and serve as means of payment not only among individuals and firms but also among banks and financial intermediaries, which are, in turn, themselves creators of money.

Here again we meet the fundamental characteristic of the central bank as "the bank of banks". and thus a natural candidate to influence their operations.

This influence can be reinforced by obliging banks to make special deposits, in other words by imposing compulsory reserve requirements, which are now mostly enshrined in law. The reserves strengthen the link between the size of the central bank's balance sheet and that of the consolidated balance sheet of the banking system.¹³

The point is that, in order to preserve the value of banks' deposits, one can apply to banking activity the same type of analysis that requires an outside limit to be imposed on the amount of banknotes in order to preserve their nominal value.

The volume of banking activity, the output of the banking system as measured by the amount of credit and deposits, is not limited by the availability of some primary resource, as is the case with all other productive activities. In a closed economy, credit produces deposits, and deposits allow a further expansion of credit.

This process affects real variables and prices.

During the great economic crisis of the thirties it appeared that financial instability could be the result of a sort of chain reaction involving company failures, bank failures and depositor panic.

This demonstrated once more: i) the inherent instability of the banking system; ii) the economic, social and political importance of stability in this sector; and iii) the close connection between financial stability and macroeconomic policy in both inflationary and deflationary circumstances.

Central banks did not fail: they had sufficiently large gold reserves (some analyses consider that it was precisely their sticking to the rules that was at the root of the crisis). They were also mostly creditors of the State – which cannot fail – and had a sort of State guarantee.

* * *

A similar relation to that existing between the central bank and the banking system exists between banks and the financial system. This is made up of intermediaries which extend credit and collect liabilities that we do not generally consider as means of payment. The system also includes markets where debtors and creditors, investors and savers, meet directly.

A bank can provide investors directly with means of payment, because its liabilities are considered as such. Other intermediaries and financial markets need at least a temporary credit, and hence the money provided by the banking system.

Expenditure by debtors stimulates economic activity and saving. Part of the saving takes the form of bank deposits and financial assets, thus closing the financial circuit.

Because of its special nature and position in the market, the central bank can understand what is happening in such a circuit and the velocity at which it operates, and can strongly influence its operation.

5. Rules and discretion

In order to influence the volume, composition and cost of financial transactions, the central bank needs to be able to manage the size and composition of its balance sheet, as regards both assets and liabilities. Because it has the monopoly of monetary base creation, it can set the nominal interest rate at which monetary base is lent to the system.

In the monetarist approach to monetary policy, the central bank only needs to influence the amount of money, via the provision of monetary base and the money multiplier. It is assumed that the amount of money can be more or less perfectly controlled on the supply side; the demand for money is stable in the long run; the underlying development of real variables is considered, per se, regular and stable. Prices are assumed to be sufficiently flexible; consequently they respond to the quantity of money.

In the approach I have discussed at length above, the scope of monetary policy is wider and in a certain sense more ambitious, though perhaps less exclusive, less sharply defined.

Monetary policy in this view can and has to affect first of all the behaviour of the banking system, i.e. bank credit, deposits and the money supply.

Specifically, by providing monetary base the central bank will affect banks' willingness to lend, in other words, the supply of bank credit. This will be matched in the market with the demand for credit for investment, for the financing of current production and sales or even for the hedging of financial operations.

All these uses of credit and the resulting amount of money affect the domestic economy in various ways, directly or indirectly, as well as the relationships with the foreign sector.

The volume of foreign reserves held by the central bank will consequently be affected. And most important of all, so will the exchange rate.

The process I have just described is by no means a mechanical one. The reactions of different variables to the stimuli of monetary policy may vary considerably from one situation to another. Good qualitative and quantitative analyses can provide reliable indications of the effect of policy actions. However, it is not possible, at least in my view and experience, to cover all of this with **simple rules**, for example, merely by fixing the rate of money expansion.

* * *

Returning to what I said at the beginning, I believe that **quantities** of credit and money expansion have to be defined **ex ante**. The quantities can also be announced to provide markets with correct indications.

But I do not think that there exist simple quantitative rules by means of which the price level can be controlled.

A lax monetary policy will certainly result in inflation. But monetary fine-tuning cannot be relied upon for close inflation control. Fine-tuning is difficult and probably impossible to achieve in such matters, mostly because of incomplete information, lags and uncertainties regarding the size of the effect of the various instruments.

There is thus a grain of wisdom in the monetarist prescription of not seeking continuous correction of the economic cycle and avoiding over-activism in the use of monetary instruments.

6. The Italian experience. Effectiveness of central bank action

As a result of long experience, at the Bank of Italy we rely on a complex econometric model of the economy to understand how monetary policy affects all the variables we wish to influence. The model is particularly detailed for the monetary and financial sectors.

The numerical results provided by the model only serve as a basis for decisions. Judgment and other empirical evaluations complete the assessment of situations and influence decisions.

Technically speaking we rely on the structure, in other words on the estimated coefficients of different equations of the model, only to provide a starting point for decision-making. What is implicitly relied on, always, is the model, i.e. the logical interconnections between all the variables.

What the model, or more correctly the structure, says is that variables, such as internal demand, prices, employment and the balance of payments, can be affected significantly, though not very much in the very short run, through the use of ordinary monetary policy instruments such as open market operations, bank reserves, rediscount rates and the like.

In some periods marked by high inflation, large balance-of-payments deficits or exchange rate crises, it was necessary to resort to extraordinary administrative policy instruments, namely credit ceilings and portfolio requirements, for which the Italian banking law provides.

These extraordinary and harsh restrictive interventions were devised and graduated on the basis of the econometric model.

They proved effective in stabilizing the economy.

I venture to suggest that similar conclusions can be applied to all systems that find themselves under exceptional strain because of accelerating inflation, a balance-of-payments crisis or rapid exchange rate depreciation. In the case of Italy, the adoption of direct or administrative methods of monetary control has entailed some costs, not only in terms of growth and employment, but also in terms of negative side-effects on the efficient allocation of credit resources.

* * *

In conclusion, it seems to me that in the first place the central bank can and must use its tools, its instrumental variables, to pursue the smooth and regular development of the economy. In the expression employed by Samuelson: "to adjust the quantity of money to the needs of the economy", not merely to the demand of the economy (which could, for example, be merely in response to inflationary expectations).

From time to time the behaviour of real variables, that is to say of those (including prices) that have a more or less direct impact on social welfare, may be unsatisfactory. In such cases the central bank can use its instruments to correct the situation via the supply of credit, interest rates and bank money supply.

In a deeper sense, if the correction is in the direction of stability, for the **common good**, it is an adjustment of the quantity of money to the more profound needs of the economy.

We thus have a complete philosophy of central bank action.

* * *

Let me now try to conclude on another more theoretical issue that remained unanswered at the beginning, namely whether it is the central bank that **moves** the economy or vice versa.

From what has just been said it is clear that over the long run there is a close correlation between the behaviour of the economy and the evolution of monetary aggregates. This parallelism, which is the result of close links between monetary, financial and real variables, is for some periods the result of an adaptation of financial variables and monetary guidance to a satisfactorily smooth operation of the economic system.

From time to time the system needs corrections. The central bank has the power to enforce such corrections. The parallelism is now the result of active monetary policy intervention.

In these cases money and credit determine the evolution of the system.

On such occasions the quantitative relationships between real variables and financial variables are usually altered, posing a problem not only for the econometrician but also for the central banker, who has to use judgmental evaluation to graduate the strength of interventions.

I am thinking mostly of cases of restrictive monetary policy. Perhaps I continue to be influenced by the old dictum that monetary policy is like a rope that you can pull, but not push.

6

7. The central bank and the State's economic objectives. The public debt

The central bank must coordinate its action and its economic policy interventions in the general context of the State's economic policy.

Given the macroeconomic objectives of the political community, which can be defined either by law or by the Government (depending on the level of generality and constancy over time) the central bank has to deploy all its tools to achieve these objectives, some of which are more immediately within its reach, while others require it to cooperate with other institutions or agencies.

Ensuring financial stability and the proper functioning of the financial system is certainly a primary duty of the central bank. When stability depends on an adequate supply of liquidity, the central bank is endowed with all the necessary powers.

Regulation of the structure of the banking system and achievement of a good performance by that system generally require powers that go beyond those relating to the supply of liquidity. These powers are granted by banking legislation, which recognizes the particular character of banking activity.

The central bank is at the centre of the financial system; it understands and participates in its working. It is natural to use its status and technical skills in enacting banking legislation and to discipline the conduct and working of this important sector of the economy.

Within the banking sector significant pieces of information are necessarily possessed only by individual banks; therefore, their assets are not marketable. As a consequence, the working of competitive markets can be relied upon only within certain limits. The central bank is then charged with supervision and inspection duties and granted powers of intervention in order to prevent instability.

In current macroeconomic policy the primary duty assigned naturally to central banks is the maintenance of the purchasing power of the currency. As I said before, a necessary condition for the achievement of this and other objectives is the possibility for the central bank to control, in complete freedom, the size and composition of its balance sheet.

The pursuit of macroeconomic objectives must be related to overall economic policy (formulated in a democratic society by Parliament and the Government). As far as monetary matters are concerned, the ways and means of achieving the objectives should be left to the judgment of central bankers, and indeed they generally are.

Central banks themselves can help define some of the economic objectives of the nation. The possibility for the State's Executive to have access to the creation of money – for purposes relating to particular objectives, and more specifically for the purpose of financing public expenditure – may create a conflict of interest between different authorities of the State. This suggests that the Executive should not interfere with the process of money creation.

This does not mean at all that the central bank cannot facilitate the financing of the Treasury in ways that do not conflict with the stability of the currency.

Indeed, one traditional and fundamental task of central banks is to cooperate actively in the management of the public debt.

The existence of a budget deficit and of a public debt means, after all, that Parliament has chosen not to cover a part of public expenditure through taxation. This can be done for structural, redistributive or allocative purposes, or even just for cyclical reasons. Such a decision by Parliament is, at least in the short run, a **datum** for all the public bodies and institutions within the State.

An examination of the operations of the central banks of the main industrial countries reveals that all have special arrangements with the Treasury for the placing and management of the public debt.¹⁴

There are functional and historical reasons for the central bank performing this role. In the first place, an important part of monetary control is implemented via purchases and sales of government paper and, as I said before, government debentures constitute an important component of a central bank's assets. Moreover, in a system where fiduciary money is the norm, confidence in central bank money is in some fundamental way related to the authority of the State. It would be difficult to think of sound money in a fiscally bankrupt State, unless we assume, for example, a money circulation strictly related to gold or foreign assets.

In the long run there cannot be sound money without a sound fiscal system. In countries where most of the tax revenue comes from seignorage, money tends to be deprived of its most intrinsic features.

In a hypothetical unsound fiscal system, one could imagine, for a while, a monetary system based directly or indirectly only on credit to the private sector. Such an equilibrium is illusory, and at best temporary.

In such circumstances the government debt might take on some of the functions of a monetary standard and tend to displace the sound money. More realistically, the crisis of the State would entail that of the private sector.

* * *

The question is sometimes discussed whether the central bank, or more generally monetary policy, can be assigned the objective of absolute price stability.

It is certainly true that good monetary management is a necessary condition for price stability. However, our knowledge of the working of modern economic systems suggests that in some cases an objective defined in precise quantitative terms can be difficult or even impossible for the central bank to achieve.

In an open system central banks may have considerable scope for influencing the external value of the currency – in the short run through intervention on foreign exchange markets and, more basically, by controlling the expansion of credit and money. The external value of a currency is, in turn, an important component or, in equilibrium, the mirror image of the currency's domestic value, i.e. of its internal purchasing power.

However, in a large and complex economic system the level of prices is strongly affected by other

variables and circumstances, first of all fiscal policy and labour costs. In such cases, sole reliance on monetary policy to achieve monetary stability can be extremely costly in terms of other economic objectives.

Monetary policy, including exchange rate policy, can make a large and essential contribution to the achievement of price stability. Other policies, namely fiscal and wage policies, have to join forces in the same direction. Indeed, this is a widely held view among central bankers.¹⁵

8. Institutional status of the central bank

One fundamental issue remains to be discussed, namely that of the institutional setting of the central bank in relation to other organs of the State.¹⁶

It is sometimes questioned whether there is room, within the State organization, to define a moneyregulating authority flanking the traditional powers: the Legislative, the Judiciary and the Executive.

The problem did not arise in the past, because the purchasing power of money was usually thought of as being anchored by law to a circulating medium_ having an intrinsic value, namely gold.

Over the last 60 years or so – but especially over the last ten or twenty years, during which awareness of the phenomenon at both the theoretical and the practical levels has spread – the value of money has relied only on its good management by central banks and monetary authorities.

The historian and the theorist might see here a spectacular, though perhaps not surprising, return to some aspects of the origins of money in ancient history.

It is difficult to decide what is the appropriate institutional position for the central bank in the State organization on the basis of economic analysis alone. The solution has to be determined with reference to social and constitutional theories of political organization. The existence of international treaties conferring some monetary powers on international or supranational organizations complicates the problem, or perhaps just adds another dimension to it.

However, economic analysis has a duty to suggest guidelines, or at least minimum prerequisites for the appropriate institutional setting.

First of all there must exist, at the constitutional level, a broad, explicit or implicit, delegation of authority by a sovereign State, which has the power to levy taxes, to the central bank, to provide the fiduciary standard for the economy.

Secondly, there must be independence from other powers of the State in the process of money creation and control, in the sense that the amount of money and the channels of creation have to be decided only on the basis of the achievement of the general objectives of economic policy. Within this framework the central bank will seek the best ways to achieve those objectives.

A closely correlated proposition is the implausibility of creating a system separated from the fiscal authority and the value of the public debt. The points of contact and the degree of involvement in this field are a very delicate issue. I simply wish to express my fears about the emergence, where there is absolute separation, of a sort of parallel monetary system in the event of an uncontrolled public debt; as Gresham said: bad money drives out good.

Finally, there must be a functional, legally sanctioned connection between official money, created by the central bank, and the money produced by the banking system.

In effect central banks and monetary authorities control money creation indirectly, on the basis of banking legislation giving central banks powers to exercise wide control over banking activities.

This amounts to recognition, at the institutional level, that money is a component of the financial process. It is also an indispensable element for the correct and stable unfolding of the whole process.

Given all these conditions, a bank of issue becomes the central bank of the system.

9. The international dimension

Up to now I have referred to economic systems that are independent of each other, not only politically but also to a large degree economically, in other words situations in which national economic policies are directed towards national economic objectives.

I would now like to add a few considerations about the international dimension of the problem.

As I have already indicated, in the last few years a feature of the evolution of the international economy has been the rapid development of banking and financial activities outside national boundaries.

Underlying this development there has been a steady growth of international trade in goods and services, but more important still has been the rapid growth in transactions for purely financial purposes.

Many restrictions on such transactions, and on capital movements in general, were removed in industrialized countries during the eighties. Exchange rate stability was viewed with some scepticism in the seventies, but it is once again being accorded greater importance. There has been a dramatic fall in computing and communication costs. All these factors have created favourable conditions for the expansion of international financial transactions.

The implications and advantages of this development in terms of economic growth, employment and economic stability are not yet clear.

However, given the **fiduciary character** of the money in circulation, this trend is posing formidable and in some ways completely new problems for the regulation of the economic cycle and for international, financial and economic stability.

Central banks and national monetary authorities find themselves somewhat impotent in this field.

In some respects there is a sort of free banking in international markets, in a context in which there is no reserve with an intrinsic value, and no lender of last resort.

Freedom of capital movements and relatively stable exchange rates are tending to create an

international monetary system subject to no overall quantitative limits. Until now, risks of various kinds have checked the expansion of the markets to some extent – but at a cost.

Central banks are in the market. By virtue of their participation in the foreign exchange markets in particular, they are in a position to understand what is happening in the international banking and financial markets.

Since the abandonment of the Bretton Woods system in the early seventies, national monetary authorities have been trying to restore their control of the international monetary order by means of closer cooperation and various reform proposals at regional or world level.

10. Summary of conclusions

Central banks emerged fully with their present role and functions only in the context of the tormented political and monetary history of the 20th century. In the great economic and financial crisis of the 1930s the close connection between financial stability and economic activity became dramatically apparent. The problems have persisted and reappeared at various times since then, though less dramatically.

The problems were tackled by imposing restrictions on international trade and finance, introducing banking legislation, engaging in more active central bank intervention and, after the Second World War, establishing a new monetary order.

The Bretton Woods system stressed new aspects of the maintenance of the objective of the external value of the currency as a policy objective and certainly contributed to price stability in international markets.

The development of unrestricted international banking activity and the more recent reciprocal opening of financial systems, in a context of money based on purely fiduciary standards, is posing new problems for national central banks and monetary authorities. They are attempting to solve them through closer cooperation and reform projects. Central banks play an important and sometimes exclusive role in preserving the value of currencies, and in ensuring the overall stability of banking and financial systems; they contribute to the achievement of Governments' economic objectives.

The role of the central bank in preserving the value of a currency rests, explicitly or implicitly, on a delegation of powers by the political authority. Central banks need to be credible and trustworthy. In a regime of fiduciary money, the sound operation of the fiscal authority is a necessary condition for guaranteeing the value of the currency.

The effectiveness of the central bank in achieving the aims assigned to it by law and by the Government depends on its being free to manage all the items of its balance sheet.

The central bank derives its powers from being part of the financial system; however, it must also be enabled, by banking and financial legislation, to control certain operations of banks and financial markets.

The legal status of central banks, with special reference to their role and powers, is sometimes not clearly defined in the institutional framework of modern industrial economies.

A central bank has to be accountable for its actions and policy; whether it is to be accountable only to public opinion, or also to Parliament and the Executive, is a constitutional problem to be solved on the basis of political, social and legal analysis.

Economic analysis provides some indications and minimum requirements to be observed for the correct and effective performance of the central bank's role.

- 2 On this aspect, i.e. what money does, I am basically influenced by F. Modigliani's articles, "Liquidity Preference and the Theory of Interest and Money", *Econometrica*, 1944, and "The Monetary Mechanism and its Interaction with Real Phenomena", *The Review of Economics and Statistics*, 1963.
- 3 See: D. Patinkin, Money, Interest, and Prices. An Integration of Monetary and Value Theory, Evanston (III.), Row, Peterson & Co., 1956.
- 4 See: M.H. Crawford, La moneta in Grecia e a Roma, Bari, Laterza, 1982, p. 33. A. Forzoni, La moneta nella storia, vol. I, Dalle origini alla riforma di Caracalla (214 d.C.), Bari, Cacucci, 1989.
- 5 See: P. Spufford, *Money and its Use in Medieval Europe*, Cambridge, Cambridge University Press, 1988.
- 6 See: V.C. Smith, *The Rationale of Central Banking*, London, P.S. King & Son Ltd., 1936.
- 7 See: R.G. Hawtrey, *The Art of Central Banking*, London, Longmans, Green, 1932.
- 8 See: R.H. Timberlake, Jr., The Origins of Central Banking in the United States, Cambridge (Mass.), Harvard University Press, 1978.
- 9 See: Friedman and Schwartz, op. cit.; Hawtrey, op. cit.; League of Nations, International Currency Experience, Geneva, 1944.
- 10 An explicit definition the first to my knowledge of the total quantity of money, as we usually consider it today, was given by Keynes in the *Treatise*. See: J.M. Keynes, A *Treatise on Money*, London, Macmillan, 1930. In particular: volume I, *The Pure Theory* of Money, Book I, "The Nature of Money", p. 9.
- 11 See: H.C. Simons, A Positive Program for Laissez Faire; Some Proposals for a Liberal Economic Policy, Chicago, University of Chicago Press, 1934; A.G. Hart, "The 'Chicago Plan' of Banking Reform", Review of Economic Studies, no. 2, 1935.
- 12 The balance sheet shown here is the consolidation of the balance sheets of the Bank of Italy and the Foreign Exchange Office.
- 13 The link would be perfectly rigid in the famous 100 per cent reserve requirement proposed by the Chicago School in the 1930s. See: Simons, op. cit.
- 14 See: Banca d'Italia, "Note di raffronto dei bilanci di alcune Banche Centrali Europee e del sistema della Riserva Federale degli Stati Uniti", Rome, 1988.
- 15 See: P. Ciocca, ed., Money and the Economy: Central Bankers' Views, London, Macmillan, 1987. In particular: O. Emminger, "Thirty Years of the Deutsche-Mark", Postscript.
- 16 See, for example: M. Friedman, "An Independent Central Bank", in Leland B. Yeager, ed., *In Search of a Monetary Constitution*, Cambridge (Mass.), Harvard University Press, 1962.

¹ This monumental academic work was published in 1963. See: M. Friedman and A. Jacobson Schwartz, A Monetary History of the United States 1867-1960, National Bureau of Economic Research, Princeton, Princeton University Press, 1963.

Central Banks, Payment Systems and the Single Market

Address by the Deputy Director General, Tommaso Padoa-Schioppa, to the Conference on the Consequences for Banking and Insurance of the Liberalization of Capital Movements organized by the EC Commission

Brussels, 15-16 October 1990

Introduction

In recent years payment systems have re-emerged as a central issue for bankers, central bankers and economic agents. Their rapid development, driven by technological change and the internationalization of financial and monetary markets, is transforming our way of looking at central banking. When a banker asks me to single out one factor that is likely to be decisive for his success in approaching 1992, my inclination is to point not so much to the way banks will act in their lending or deposit-taking business as to the way they will provide payment services.

In dealing with this broad subject, I shall focus my attention on three issues. Firstly, I will recall some old truths about central banking and payment systems; secondly, I will touch briefly upon the effects of internationalization and technological progress, the two main forces behind the rapid changes in today's payment systems; and finally, I will consider aspects that are specific to the EC.

Old truths about central banking and payment systems

The concept of central banking does not lend itself to a neat and immutable definition. Throughout the history of their institutions, central bankers have witnessed an evolution not only of the functions they perform but also of the perception of the nature and content of their own tasks. At the turn of the century, note-issuing and discount lending to commercial banks were widely seen as "the" functions of central banks. Twenty years ago, if asked about his activities, a central banker would probably have replied that he was mainly concerned with monetary policy. Ten years later, the function of banking supervision acquired special importance. Central banks had been involved in this activity ever since the function of lender of last resort was recognized, but supervision had been performed rather unsystematically and seen almost as an appendix to other, more essential functions. Today, most central bankers would add, and probably stress, a third function, which I shall label operating and overseeing the payment system.

It would be misleading, in my view, to regard the role of central banks in payment systems as a "new" function. Quite the contrary, I believe this role to be the cornerstone of modern central banking, while the other two functions – monetary policy and banking supervision – are in a way derived from it. Let me briefly elaborate on this point.

Modern central banks have their origin in a fundamental change in payment technology: the transition from a commodity currency system, based on metal, to a fiat currency system, that owes its name to the fiduciary element it involves.

In all systems based on fiat money payments between two parties are carried out by transferring the liability of a third party. Now, the value of a liability, and hence the "quality" of the payment in a fiat money system, depends entirely on the standing of the third party, the issuer of the liability; in economists' jargon, money is "intrinsically valueless". This is why a system based on fiat money requires an ultimate issuer whose liabilities are universally accepted. It also explains why, after some not altogether successful experience with unregulated private systems of issue, it was recognized that the role of ultimate issuer should be formally entrusted to a "central" bank, specifically designed to perform a function of a public nature.

It is debatable whether State ownership of the central bank's capital is necessary. It can be argued that only a publicly-owned, non-profit institution can perform this role in all circumstances, especially when doing so involves "leaning against the wind" and/or making losses. But in fact there are still countries, such as Belgium, where the central bank is a private bank. What really matters is that the central bank, whether public or private from a legal point of view, be entrusted with, and capable of performing, a public function, and consequently act as a public authority for all practical purposes.

The central bank was thus "created" – though strictly speaking not as the result of a conscious design, but rather as the outcome of a lengthy evolutionary process – to issue liabilities that would be accepted by everyone in the economy and, by its existence, to underpin confidence in a payment system based on fiat money and ensure its security and efficiency.

Once the right of issue had been centralized, it gradually became clear that paper currency did not have to be kept in a rigidly fixed proportion to the amount of gold held by banks. The central bank could fix the amount of currency in circulation in accordance with the needs of the economy. It is in this sense that modern monetary policy stems from the payment system function.

Over time this institutional setting has had to be modified to take account of the growing role of commercial banks in creating payment instruments and providing payment services. Today, the bulk of the money stock consists of commercial bank deposits. As a consequence of this new change in payment technology, the lender-of-last-resort function and banking supervision have assumed paramount importance in ensuring the stability and efficiency of the payment system. Ultimately, the medium of exchange supplied by banks participating in the payment mechanism must be as sound as the banknote it has partly replaced, and confidence in it must be no less.

As a result of the spread of bank money, however, central banks have come to play another essential, though less visible, function. They supply payment services to banks similar to those that banks supply to individuals and firms. When payments are between banks, the central bank is the only possible "third" party - in the sense of being external to the banking system as a whole. The transfer of a liability of the central bank itself is the only payment that instantaneously and totally extinguishes an obligation and closes the transaction, thus eliminating any risk. The central bank thus produces a special kind of money, bank reserves; this money is excluded from the overall money stock, so that it is scarcely visible, but it nonetheless acts as the indispensable lubricant of the monetary system.

The picture I have sketched shows why it is fair to consider the whole activity of modern central banks as based essentially on a "payment technology".¹ This fact came to be almost forgotten, because payment systems did not undergo major innovations for several decades and worked so smoothly that central bankers could safely turn their attention to more urgent tasks and problems. It is only now, under the combined pressure of technological innovation, deregulation and growing financial integration, that we have rediscovered how important management of the payment system is.

Present-day payment systems can be visualized as a pyramid, with individuals and firms forming the base; then come commercial banks providing them with payment services; and finally, at the apex, there is the central bank, which plays the same role vis-à-vis commercial banks as the latter play vis-à-vis individuals and firms.

Clearing and settlement mechanisms are at the core of this pyramid. As soon as "intrinsically valueless" forms of money began to spread, it became clear that the benefits of such a monetary system could only be fully exploited if some mechanism for netting debts were set up. A clearing mechanism is a source of both efficiency and security, because it permits actual transfers of money to be enormously reduced for a given volume of exchanges of goods and services.

The first clearing mechanisms were set up by banks on a bilateral basis, but in the course of time it was realized that a fully effective clearing process had to be multilateral. Multilaterality has two consequences: first, it implies centralization of the clearing process and, second, it involves a new risk for each bank, since the finality of the payments it receives will depend on the reliability not only of its direct counterparties but also of other institutions with which it does not do business directly. Multilaterality therefore requires, in addition to the establishment of a clearing house (a place where payments can be netted and executed, with only the net amounts resulting from the clearing process being transferred), the setting-up of a procedure to ensure systematic monitoring of the agents and institutions admitted to the process.

It is therefore not surprising that many central banks began life as clearing houses. When a participant did not have enough money to make the payment due at the end of the clearing process, he would first try to borrow from some other participant in the process; if that proved impossible, he would borrow from the clearing house itself. This required the clearing house to gather sufficient information to assess the creditworthiness of participants. Hence, the clearing house gradually came to play the role of a central bank, providing both the so-called finality of payments and the liquidity needed to make final payment. From both a conceptual and a historical point of view, the clearing house can be seen as a quasi-central bank.

The last step was the establishment of the public status of the central institution. As long as the clearing house is privately run, the clearing process, and the stability of the monetary system as a whole, are vulnerable to breaches of the cooperative attitude of the participants, who after all are competitors. Instances of non-cooperative behaviour were not infrequent in the nineteenth century and the early part of the twentieth. Moreover, a private clearing house cannot act effectively as a lender of last resort for its members in all circumstances. For a clearing house to be able to "lean against the wind", its liabilities must be accepted as "money", i.e. as means of final settlement; however, it is difficult to see how the acceptability of clearing house "notes" or "certificates" can be maintained in the absence of a public guarantee or of a stock of reserves on which to draw.² These are the main reasons why the responsibility for managing and supervising the clearing and settlement process has almost universally been entrusted to public, non-profitmaximizing bodies: today's central banks.

The public nature of the role played by the clearing house does not mean that it "monopolizes" the process in any way. The cancelling-out of debits and credits is common practice at all levels of economic and monetary activity. The public interest only emerges when the clearing process acquires a "systemic" dimension, involving the efficiency and stability of the payment system as a whole. This happens at the very top of the pyramid, after the myriad bilateral evidences of debt generated in the economy have been netted, and the need arises for definitive settlement, i.e. a final transfer of money. This is where the central bank comes into the picture, because only the transfer of a liability it has issued can make payments final, thereby closing the entire process.

New as this may sound to our ears, the foregoing was well known in the nineteenth century, when the technology of paper-based money was still being "explored" by economists. Later, the details of the process tended to be forgotten because we became so accustomed to our present system that we long ago ceased to consider it as the result of an ongoing historical process.

The present dynamics of payment systems

After the double transition from commodity money to fiat money and from central bank money to bank deposits had been completed payment technology remained stable for a long time. Today, however, we are again in the middle of far-reaching changes, engendered by two main forces: technological progress and internationalization. The ways in which telematic systems are transforming products and processes and the whole environment of payment services is well known and I shall not dwell upon it. Suffice it to say that dematerialization is just as great a change compared with paper technology as the latter was compared with commodity money. I will spend a few more words, instead, on internationalization.

An international payment system lacks some of the features that are deemed essential to national payment systems. First of all, different sets of national laws and regulations are in force at the same time. Secondly, there is not just one money, since prices and invoices – and hence payments – are denominated in a variety of currencies. Thirdly, the technology is not the same everywhere because standards and software products vary from one country to another. The international payment system differs from national systems in two other major respects: time is no longer unique because there are several time zones and, even more importantly, there is not just one central bank – many different pyramids are in play, each with its own apex.

It follows that the recent growth in international payments has involved fundamental changes and challenges for both commercial banks and central banks. The combination of technological change and internationalization has paved the way for two developments: for new providers of services to enter a game in which commercial banks used to be the only players; and for commercial banks to perform the role of central banks. Indeed, in the same way as commercial banks may be challenged by other financial institutions and providers of telematic information services, central banks may be challenged by individual banks and groups of banks, which are increasingly capable of providing forms of international service and organization similar to those supplied by central banks within their national systems. The process has marked analogies with that which led to one commercial bank gradually emerging as the central bank in each national system.

The competition commercial banks are facing in this field is sufficiently well known. The competition central banks are facing is less widely appreciated: the crux of the matter is that the changes under way are eroding the correspondence between each central bank's area of jurisdiction and the wider area in which financial and trade transactions, and therefore payments, are taking place. Looking at the system from a global point of view, the fact that commercial banks are organizing themselves to provide payment services in this wider area may result in what used to be the "content", namely the business and activity of individual commercial banks and other economic agents within a national system, outgrowing the "container", namely the area of jurisdiction and activity of the central bank.

Thus, not only central banks but the international financial community at large are confronted with the need to adapt the conceptual, operational, legal and technical framework within which payment systems operate, to keep pace with rapidly changing technology and increasing international integration.

On what "forces" can we count to carry out this adaptation? To my mind, a successful evolution of the payment system will depend, as in the past, on a carefully balanced blend of three forces: competition, cooperation and public action.

As in other areas, competition must ensure that providers of payment services strive to make the best use of new technologies and to serve customers at the lowest possible price. For a number of reasons, not least the protection that national banking systems long enjoyed, until recently there was little competition in the market for international payment services. Consumers will certainly benefit from the more competitive environment that deregulation and confrontation between national systems will bring.

However, an efficient and safe payment system must also rely heavily on cooperative arrangements. Standards, common infrastructures and rules, which are indispensable components of such a system, are not the product of competition. Cooperation has a key role to play in preparing the ground for competition.

Finally, the scope for central bank and public action emerges clearly from the considerations I have already expounded. The provider of the final settlement medium has to be a central bank, namely an institution acting in the public interest rather than for profit. In the system for international payments that we have today these three forces are somewhat unbalanced. Moreover, they are not always entrusted with the appropriate tasks: there is little competition, while cooperation is mostly restricted to bilateral links and the public role is performed only at the domestic level. There is growing awareness of the need to stimulate interplay between these three forces, of the shortcomings of their present performance, and consequently of the need to redefine and rebalance their roles to arrive at a better blend.

At the international level, market participants banks and groups of banks - have organized efficient multilateral payment services along the lines of national systems. This development is driven by profit motives and by the demand of firms and individual investors for more efficient payment services. Offshore clearing systems are being designed, and a few are already in place. These systems operate in a currency different from the local one, and are evolving from bilateral single-currency operations to a multilateral multicurrency structure. In the last few years central banks have paid growing attention to these developments, analyzing the problems and risks involved in international netting systems and examining the roles they could play.

In its final Report, published in November 1990, the Committee on Interbank Netting Schemes (the Lamfalussy Committee) stressed that netting schemes can greatly enhance the efficiency of domestic payment systems and reduce settlement costs, but at the same time have the potential to increase systemic risk. Accordingly, the Committee recommended that, on the one hand, cross-border netting schemes be designed and operated with adequate attention to the prudent management of credit and liquidity risk; on the other, that effective central bank oversight be established. In order to foster further progress along these lines, the Committee has laid down a set of minimum standards to which all cross-border netting schemes should conform, as well as a set of general principles for the sharing of central bank responsibilities with regard to system supervision.

Towards a single EC payment system

Let me now turn to the EC payment system. From the point of view of both commercial and central banks, the case for developing cross-border payment services and systems is stronger within the EC than in the wider international sphere. Much has already been achieved, but much still remains to be done.

The incentive to develop an integrated payment system is greater in the EC than at the international level because economic integration is greater. To quote only one figure, in 1989 intra-EC trade accounted for about 60 per cent of overall EC trade, and was about eight times the trade between Europe and the United States.

Greater economic integration is accompanied, however, by greater diversity and fragmentation in the payment system: the five pluralities I mentioned earlier in connection with international payment systems (laws and regulations, currencies, technologies, times and central banks) are all more acute sources of fragmentation, inefficiency and potential instability in the Community than worldwide, with the sole exception of the time zone problem, which is almost non-existent in Europe. Each country has its own technology, central bank, currency and legal system. Paradoxically, the number of currencies in intra-European trade is greater than in world trade. While European firms are reckoned to invoice between 40 and 80 per cent of their exports in their own currency, thus making up a truly multi-currency payment system, firms from other countries rely mainly on the dollar, with percentages that range from 66 per cent for Japan, to 85 per cent for Latin American countries and 96 per cent for OPEC countries.³ Compared with the world, the Community is thus characterized by a wider gap between what is required and what exists: it has a greater need for a single payment system to match its greater economic integration, but its present system is actually more fragmentated and less integrated.

The stimulus to develop an EC-wide payment system does not come only from the real side of the economy. Financial and banking integration, the legislative basis of which is mostly in place, also calls for the creation of an integrated payment system in the Community. In this respect, EMU is certainly an important factor, but it is by no means the primary one. Indeed, capital mobility and the single market for banking services, of which payment services are a major part, coupled with a regime of fixed or quasi-fixed exchange rates, exert pressure for a single payment system to replace today's plurality. If all financial assets, including monetary instruments, can be moved freely across national borders, if the service of transferring customers' money can be provided by any bank in each country, and if the value of any one currency in terms of another is almost certain and stable, the divisions between national payment systems will inevitably be eroded by the increasing integration of member countries' commercial and financial transactions.

Thus, a strong movement towards an integrated payment system in the Community does not directly depend on the achievement of EMU. The problem is, rather, that a single payment system almost inevitably implies a single clearing process, an integrated exchange rate, a single currency, and in the end a single central banking function.⁴ The evolutionary process that led to a single central bank in each of our countries will be powerfully fueled by the forces generated by the single market, especially that for capital instruments and financial services.

This "bottom up" movement involves both competition and cooperation. Banks and other financial institutions, while seeking to offer their customers better and cheaper payment services, realize that competition alone cannot integrate the system and thus enlarge the market in which they compete. In addition to fiercer competition, there is also evidence of greater cooperation among commercial banks, for example in the fields of payment cards and Eurocheques, as well as in the Ecu Clearing System.

What is still lacking is the third component of the process, central banking or public intervention. How will this third component come into play?

The Community's central banks are, of course, already involved in the process of integrating

banking, monetary and payment systems. Their involvement, however, is not of a truly central banking nature, it is not of the same kind as is found within countries. Rather, it is a mixture of cooperation and competition: two forces we normally find at work in commercial banking activities, not in central banking functions.

Only joint action by the Community central banks can really provide the kind of public services that are necessary to ensure the functioning and soundness of any payment system. And I think that this joint action is required primarily in the area of clearing and settlement processes and services. The interbank exchange and settlement circuits are the core of each country's payment system; in particular, the clearing arrangements and the type of settlement services provided by central banks considerably affect the costs and risks borne by the banking system. The concept of payment finality has become more and more important, in view of the increasing need for time-critical payments, not only for transactions in domestic goods and financial markets but also for those related to international transactions, which typically involve interbank transfers in two or more domestic payment systems.

As we have seen, the G10 central banks have recently framed common policies on international netting systems. They have also agreed on a set of minimum standards and principles for the design and operation of international clearing and settlement systems and for the allocation of the related oversight responsibilities. Both these agreements are likely to have positive effects not only on international initiatives but also on those aimed specifically at the Community. They belong to the area of oversight and *regulations*, but there are reasons for believing that involvement will also be necessary in the area of *operations*.

Close cooperation will be required in central banks' settlement activity in order to ensure the efficiency and soundness of the European payment system. In particular, it seems reasonable to expect that EC central banks will have to introduce two kinds of change in their settlement activity, designed to adapt their domestic systems and provide international settlement services. As to the first, risks in foreign exchange markets depend to a considerable extent on the differences in the timing and organization of final settlement of the currencies involved.⁵ A certain degree of harmonisation of working hours, cut-off times (including settlement times) and risk control policies is going to be increasingly important, not only in order to reduce the "Herstatt risk" but also to accompany the integration of financial markets and provide effective coordination of monetary policy instruments.

The second type of joint involvement of the EC central banks concerns the clearing and settlement of international transactions. To date, the procedures for international payments do not seem to meet the criteria of efficiency and stability that characterize domestic payment systems. Even though central banks are more directly involved in large-value payments, the retail sector cannot be completely neglected. Indeed, a payment system has to be considered as a single entity, the soundness and integrity of which require that the parts also be sound and safe.

Today, with the exception of the Ecu Clearing System, there are no formal schemes concerned specifically with the netting of cross-border payments within the European Community. Moreover, in their present form, none of the existing or planned schemes is eligible to become a quasi-public utility, or open to a reasonable portion of the 10,000 credit institutions operating in the Community. All of them have been designed for a small set of members – basically involving institutions that are satisfied with each other's credit standings.

The Ecu Clearing System is at present the only multilateral European netting system. Thus, it naturally represents the first item to be considered by EC central banks in reviewing payment system issues of common concern. To date, the BIS has only been attributed the role of "clearing agent" in the system; neither the central banks concerned, nor the BIS on their behalf, carry out any of the central banking functions they perform domestically.

The architecture and operational features of the Ecu Clearing System, which was designed in the

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1980s, will have to be reviewed in the light of the minimum standards laid down in the report of the Committee on Interbank Netting Schemes set up by the central banks of the G10 countries. This will be a particularly difficult task because the ecu is nobody's "domestic" currency nor has it a central bank of issue, in contrast with the currencies involved in other international netting schemes to which the G10 principles apply.

Looking further ahead, the question is how the Ecu Clearing System will have to develop in parallel with EMU. In the Draft Statute of the European System of Central Banks the EC Governors have emphasized the role the European Central Bank will have to play in the field of payment systems. The Heads of State and Government of the Community have meanwhile stated that the ecu will be the single currency of the EMU. One of the tasks for EC payment system experts in coming years will therefore be to make sure that efficient and sound operational arrangements follow from these precepts.

Conclusions

Let me summarize my remarks in the following three points:

- firstly, there are strong, though not entirely visible, forces enlarging the network of intra-Community payments. They are probably stronger than those acting at the world level, and similar to those that shaped developments in our national economies in the last century;
- secondly, these forces have preceded, and are independent of, the movement towards Economic and Monetary Union. They originate from trade and financial integration, exchange rate stability and the single market;
- thirdly, if these forces develop to their full strength, they will bring about a single clearing system for interbank payments, thereby making a single central banking function indispensable.

These three points are logically linked, but they are also somewhat contradictory. The question they leave open is: "Will it or will it not be necessary to *create* a single payment system and a single monetary institution in the Community? Or will this emerge naturally through market initiatives?"

The answer I would give to this question is that no public initiative would be necessary if laissez-faire were as widely applied in our economies as it was, say, a couple of hundred years ago. In such a situation one could envisage a central institution gradually emerging from the market, with a commercial bank increasingly playing this role and eventually acquiring the status of a central bank. In our economies today, however, which operate in a much more structured legislative and institutional framework, it is very doubtful whether the need for a single central banking function could be met by one commercial bank, or a group of them. In my opinion, a "top-down" movement is indispensable if this need is to be satisfied in a sound and efficient way. Were such a movement not to succeed, the underlying process of trade and financial integration is likely to run aground, with little chance of its being floated off and completed by a "bottom-up" movement.

- 1 This does not mean that there are no other functions that a central bank can usefully perform in a modern financial system. For instance, as Charles Goodhart has forcefully argued, in view of the non-marketable nature of bank assets and the particular nature of deposits, the banking system could prove inherently unstable and therefore require oversight by a public agency as well as prudential regulation even if it was not involved in the payment system. See C. Goodhart, *The Evolution of Central Banks*, MIT Press, Cambridge (Mass.), 1988.
- 2 This is not to deny that in special circumstances the issue of certificates by the clearing house may be arranged through cooperative action on the part of individual members, as occurred in New York in the nineteenth century (see Gorton, 1985); such emergency schemes nonetheless require a strong commitment to cooperation on the part of members who are normally keen competitors in the payment arena.
- 3 These figures refer to 1980, except for the Latin American countries, for which the reference year is 1976. See S. Black, "International Money and International Monetary Arrangements", in R.W. Jones and P.B. Kenen (eds.), *Handbook of International Economics*, Elsevier Science Publishers, New York, 1985; and S. Black, "Transaction Costs and Vehicle Currencies", *IMF Working Papers*, November 1989.
- 4 A single clearing process does not necessarily imply a single clearing house or netting scheme. What is essential, instead, is that there be linkages between the different clearing houses and that they be governed by common rules.

5 See F. Passacantando (1991).

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Appendix

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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, or does occur and is observed but did not occur in this case.
- the phenomenon occurs but its value is not known.
- .. the value is known but is less than the minimum figure considered significant.
- () provisional.
- () estimated.

Gross product, implicit price deflator and current account balance

Real GNP (% changes on previous period; seasonally adjusted data) 1985 3.4 4.9 1.9 1.9 3.7 2.6 1986 2.7 2.5 2.3 2.5 4.0 2.5 1987 3.4 4.6 1.6 2.2 4.7 3.0 1988 4.5 5.8 3.7 3.8 4.3 4.2 1989 2.5 4.9 3.9 3.6 2.2 3.2 1980 0.9 (4.6) 1989 3.6 2.2 3.2 3.2 3.2 3.2 3.2 1980 0.9 (4.6) 1989 3.6 2.2 3.2 3.2 3.6 3.2 3.2 1990 0.4 2.9 -0.4 0.6 0.5 0.7 4th " 0.1 0.8 1.0 0.7 0.4 0.7 1990 -1st qtr. 0.4 2.7 3.6 0.6 0.6 0.8 <th>a</th>	a
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GNP deflator (% changes on previous period; seasonally adjusted data)	
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1986	2.4
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1988	4.8
1989 4.1 1.5 2.6 3.3 6.9 6.3	4.9
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Current account balance (billions of dollars: seasonally adjusted data)	
	4 5
$1086 \qquad -1454 \qquad 855 \qquad 403 \qquad 24 \qquad -01 \qquad 27$	-1.0
1087 -162.3 86.8 45.5 -4.5 -7.3 1.5	-7.3
1988 - 1289 788 502 - 34 - 273 - 59	-0.9
	-0.3
1990 35.8 (46.2) -28.3	17.1
1989 - 3rd otr -27.6 14.2 14.0 -1.2 -9.9 -2.6	-3.5
4th "	-4.0
1990 – 1st gtr	-4.4
2nd "	3.6
3rd "25.6 7.0 12.1 -3.2 -6.7 -1.6	-3.0
4th " 6.4 (6.9)5.7	

7

Industrial production

(% changes on previous period: seasonally adjusted data)

	US	Japan	Germany	France	UK	Italy	Canada
	· · · · · ·						
1985	1.7	3.7	5.0	0.7	5.3	1.2	5.6
1986	1.0	-0.2	1.8	1.1	2.3	3.6	-0.8
1987	4.9	3.4	0.3	1.9	3.3	3.9	4.5
1988	5.4	9.3	3.6	4.1	3.7	6.0	5.0
1989	2.6	6.0	4.8	3.6	0.4	3.1	0.1
1990	(0.9)	(4.7)	5.4				
1988–4th qtr.	0.7	1.8	1.0		-0.2	1.3	-0.4
1989 – 1st qtr.	0.7	2.7	0.9	0.6	-0.2	-0.1	0.2
2nd "	0.7	0.6	0.9	2.1	-0.5	0.6	0.6
3rd "	-0.3	0.2	2.2	0.2	1.0	1.3	-0.5
4th "	0.1	0.7	0.6	-0.2	-0.2	1.5	-0.8
1990 – 1st qtr.	0.2	0.8	1.3	-0.5	-0.1	-1.5	-1.8
2nd "	1.0	2.1	0.3	1.6	1.8	0.1	0.2
3rd "	0.9	2.6	3.5	1.4	-3.0		-0.4
4th "	(–2.1)	(0.9)	0.8		••••		
1989 – Dec.	0.4	0.2	1.1	-1.0	0.5	. 0.5	0.4
1990 – Jan	-1.0	0.0	0.4	0.7	-0.5	-4.3	2.3
Feb	0.9	0.1	-0.5	-1.3	-0.5	3.3	0.1
Mar	0.4	1.5	1.3	0.8	1.6	0.6	0.3
Apr	-0.1		-2.3	1.7	0.9	-1.2	-0.5
Мау	,0.5	2.6	2.9	-0.4	-1.2	0.2	0.6
June	0.6	0.1	0.3	0.2	2.3	-0.7	0.1
July	0.3	1.8	1.4	1.8	-3.5	-0.5	0.5
Aug	0.0	0.4	1.1	0.0	-0.6	1.4	-0.9
Sept.	0.2	-1.1	0.7	-1.1	-0.4	-0.3	-1.6
Oct	-0.9	2.4	-0.2	-1.0	-0.1	-2.1	(0.2)
Nov	(-1.8)	(-1.0)	-0.4	(-1.9)	(-1.3)	-0.9	•••••
Dec	. (-0.6)	(0.5)	1.5				

Consumer prices

(% changes on corresponding period)

	US	Japan	Germany	France	UK	Italy	Canada
1985	3.5	2.0	2.2	5.8	6.0	9.2	3.9
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		4.8
1988–4th qtr.	4.3	1.0	1.7	3.0	6.5	5.1	4.0
1989 – 1st qtr.	4.8	0.9	2.4	3.4	7.7	5.9	4.5
2nd "	5.2	2.8	2.9	3.6	8.2	6.5	4.9
3rd "	4.6	2.7	2.8	3.4	7.7	6.4	5.4
4th "	4.6	2.6	3.0	3.6	7.6	6.3	5.2
1990–1st qtr.	5.2	3.5	2.7	3.4	7.8	6.5	5.4
2nd "	4.6	2.5	2.3	3.1	9.6	6.1	4.6
3rd "	5.6	2.7	2.7	3.4	10.4	6.5	4.2
4th "	6.2	3.8	3.0	3.7	10.0		4.9
1990 – Jan	5.2	3.2	2.7	3.4	7.7	6.6	5.5
Feb	5.3	3.8	2.7	3.3	7.5	6.5	5.5
Mar	5.2	3.7	2.7	3.4	8.1	6.3	5.3
Apr	4.7	2.6	2.3	3.1	9.4	6.2	5.0
May	4.3	2.6	2.3	3.0	9.7	6.0	4.4
June	4.7	2.1	2.3	3.0	9.8	6.1	4.3
July	4.8	2.2	2,4	3.0	9.7	6.2	4.1
Aug	5.6	2.9	2.8	3.5	10.6	6.7	4.2
Sept	6.2	3.0	3.0	3.8	10.9	6.7	4.2
Oct	6.3	3.5	3.3	4.0	10.9	6.8	4.7
Nov	6.3	4.2	3.0	3.6	9.7	6.8	5.0
Dec	6.1	3.8	2.8	3.4	9.3		5.0
1991 – Jan			(2.9)		(9.0)		

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Wholesale prices

(% changes on corresponding period)

	US	Japan	Germany	France	UK	Italy	Canada
1985	-0.5	-1.1	0.5	4.4	5.5	7.7	2.8
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	(3.8)	(2.0)	(0.5)		(5.9)		
1988 – 4th qtr.	4.2	-1.4	2.7	7.2	4.9	4.3	3.8
1989–1st qtr.	5.9	0.2	5.4	8.7	5.2	5.9	3.7
2nd "	5.9	3.2	6.1	7.8	5.0	6.3	2.8
3rd "	4.1	3.1	5.0	4.5	5.1	5.5	1.3
4th "	4.0	3.7	4.0	0.9	5.2	5.8	0.1
1990 – 1st qtr.	3.2	3.7	0.8	-1.7	5.4	4.9	-0.4
2nd "	1.3	1.8	-0.3	-2.3	6.3	3.7	-0.4
3rd "	3.5	0.9	0.6	-1.4	6.0	4.0	0.5
4th "	(7.2)	(1.8)	(0.8)		(5.8)	•	
1989 – Dec	3.6	3.9	3.3		5.3	5.7	-0.1
1990 - Jan	4.0	3.7	1.4		5.2	5.3	0.1
Feb	3.3	3.5	0.5		5.3	4.9	-0.5
Mar	2.4	3.9	0.5		5.6	4.4	-0.6
Apr	1.6	2.7	-0.2		6.2	4.0	-0.2
May	1.3	1.7	-0.2	·	6.3	3.6	-0.5
June	1.2	0.9	-0.4	••••	6.3	3.4	-0.5
July	1.3	0.8	0.1	••••	6.0	3.4	-0.3
Aug	4.0	1.1	1.3		6.0	4.2	0.7
Śept	5.2	0.9	0.5		. 5.9	4.4	1.2
Oct	7.0	1.5	1.3		5.8	4.2	
Nov	(7.7)	(1.9)	(0.9)		(5.8)	4.1	
Dec	(6.8)	(2.1)	(0.4)		(5.7)		

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Short-term interest rates

	US	Japan	Germany	France	UK	Italy	Canada			
	l		ſ	I	I	ſ				
	Official reference rates (end-of-period data)									
1986	5.50	3.00	3.50	7.25	11.00	12.00	8.49			
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 – Jan	7.00	4.25	6.00	10.00	15.00	13.50	12.29			
Feb	7.00	4.25	6.00	10.00	15.00	13.50	13.25			
Mar	7.00	5.25	6.00	10.00	15.00	13.50	13.38			
Apr	7.00	5.25	6.00	9.50	15.00	13.50	13.77			
May	7.00	5.25	6.00	9.50	15.00	12.50	14.05			
June	7.00	5.25	6.00	9.50	15.00	12.50	13.90			
July	7.00	5.25	6.00	9.50	15.00	12.50	13.59			
Aug	7.00	6.00	6.00	9.50	15.00	. 12.50	" 13.01			
Sept	7.00	6.00	6.00	9.50	15.00	12.50	12.61			
Oct	7.00	6.00	6.00	9.50	14.00	12.50	12.66			
Nov	7.00	6.00	6.00	9.25	14.00	12.50	12.25			
Dec	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			
			Мо	ney market ra	tes	·				
			(F	period average:	5)					
1987	5.78	3.86	3.99	8.27	9.72	10.74	8.41			
1988	6.67	4.05	4.28	7.94	10.34	11.06	10.94			
1989	8.11	5.33	7.07	9.40	13.89	12.55	12.22			
1990	7.49	7.59	8.43	10.32	14.77	12.33	11.47			
1990 – Jan	7.64	6.79	8.25	11.33	15.16	12.99	12.34			
Feb	7.74	7.00	8.26	11.05	15.11	. 12.63	13.16			
Mar	7.90	7.38	8.43	10.67	15.29	13.02	13.26			
Apr	7.77	7.29	8.22	10.02	15.22	13.00	13.55			
May	7.74	7.28	8.29	9.81	15.15	· 11.91	13.67			
June	7.73	7.30	8.27	10.07	14.97	11.28	13.58			
July	7.62	7.53	8.20	10.05	14.95	⁵ 11.58	13.23			
Aug	7.45	7.87	8.40	10.19	14.98	12.08	12.67			
Sept	7.36	8.27	8.41	10.35	14.92	11.98	12.40			
Oct	7.17	8.01	8.54	10.04	14.03	11.80	12.36			
Nov	7.06	8.17	8.81	10.00	13.64	12.26	12.01			
Dec	6.74	8.14	9.11	10.27	13.81	13.47	11.47			
1991 – Jan	6.22	8.04	9.27	10.28	13.96	13.17	10.48			

Long-term interest rates and share price indices

(period averages)

	US	Japan	Germany	France	UK	Italy	Canada
				Bond rates			
1987	8.38	4.21	5.84	9.43	9.48	10.73	10.34
1988	8.84	4.27	6.11	9.06	9.36	11.34	10.36
1989	8.50	5.05	7.03	8.79	9.58	13.01	9.69
1990	8.55	7.36	8.85	(9.94)	(11.10)	13.54	10.51
	0.00		0.00	(0.0.)	(10.01
1990 – Jan	8.21	6.64	7.90	9.52	10.28	13.92	10.04
Feb	8.47	6.92	8.70	9.95	10.72	14.06	10.64
Mar	8.59	7.36	8.90	9.97	11.46	14.08	10.91
Apr	8.79	7.24	8.90	9.65	11.77	13.86	11.54
May	8.76	6.70	8.90	9.62	11.49	13.62	10.86
June	8.48	7.06	9.00	9.76	11.01	12.96	10.72
July	8.47	7.48	8.70	9.61	11.03	12.91	10.77
Aug	8.75	8.19	9.00	10.17	11.41	13.47	10.83
Sept	8.89	8.62	9.10	10.52	11.32	13.28	11.54
Oct	8.72	7.68	9.10	10.39	11.12	13.27	11.15
Nov	8.39	7.40	9.00	10.24	11.05	13.40	10.70
Dec	8.08	7.06	9.00	(9.92)	(10.51)	13.69	10.51
1991 – Jan	8.09	6.83	9.07	(9.72)	(10.23)	13.80	10.22
			Share pr	rice indices (19	975=100)		
1987	336.45	627.72	267.83	543.92	766.90	1,005.17	356.77
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	700.66	337.38	675.47	820.88	1,008.71	342.11
1990 – Jan	399.11	885.22	350.28	731.45	889.87	1,081.28	370.44
Feb	387.99	860.02	358.86	694.60	861.36	1,040.91	368.67
Mar	397.84	770.51	366.91	704.06	838.87	1,044.16	363.95
Apr	397.06	694.16	370.06	744.26	817.27	1,081.33	334.09
May	411.24	759.33	363.33	759.29	828.52	1,119.12	358.20
June	423.14	763.57	361.85	744.42	879.52	1,172.14	354.39
July	422.72	750.74	377.83	730.40	873.01	1,143.11	356.11
Aug	388.34	660.69	333.90	643.94	807.76	992.40	334.63
Sept	370.33	582.45	297.90	594.84	757.75	916.35	315.94
Oct	360.60	564.03	288.33	586.91	758.32	879.34	308.13
Nov	370.19	557.15	286.21	582.17	756.50	811.66	315.10
Dec	385.99	560.05	293.13	589.35	781.77	822.67	325.68
1991 - Jan	382.16	546.51	273.45	559.58	759.36	779.84	

Interest rates on international markets and US dollar premium/discount

Inariad	augrages)
periou	averages

US dollar Japanese yen Deutsche- mark Pound sterling Lira US dollar Japanese yen Deutsche- mark Pound sterling Lira Rates on 3-month Eurodeposits Rates on 12-month Eurodeposits Rates on 12-month Eurodeposits Lira US dollar Japanese yen Deutsche- mark Pound sterling Lira 1987 7.07 4.15 3.92 9.64 10.79 7.49 4.20 4.13 9.74 11.03 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 1990 - Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
Rates on 3-month Eurodeposits Rates on 12-month Eurodeposits 1987 7.07 4.15 3.92 9.64 10.79 7.49 4.20 4.13 9.74 11.03 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 1990 Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
Rates on 3-morth Eurodeposits Rates on 12-morth Eurodeposits 1987 7.07 4.15 3.92 9.64 10.79 7.49 4.20 4.13 9.74 11.03 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 1990 – Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
Rates on 3-month Eurodeposits Rates on 12-month Eurodeposits 1987 7.07 4.15 3.92 9.64 10.79 7.49 4.20 4.13 9.74 11.03 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 1990 - Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
19877.074.153.929.6410.797.494.204.139.7411.0319887.854.404.1810.2510.808.284.494.4810.5511.1819899.155.336.9713.8312.019.175.417.1613.5412.2219908.167.638.3914.7011.638.327.778.8814.4012.071990Jan8.226.928.2515.0912.558.337.068.5514.8812.73
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 1990 Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
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 1990 - Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
1990 8.16 7.63 8.39 14.70 11.63 8.32 7.77 8.88 14.40 12.07 1990 - Jan. 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
1990 – Jan 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
1990 – Jan 8.22 6.92 8.25 15.09 12.55 8.33 7.06 8.55 14.88 12.73
Feb. 8.24 7.10 8.36 15.04 12.80 8.53 7.31 8.94 15.06 13.02
Mar 8.37 7.45 8.24 15.21 12.42 8.79 7.72 9.07 15.54 13.00
Apr 8.45 7.31 8.14 15.14 11.79 8.91 7.60 8.85 15.59 12.59
May 8.36 7.24 8.12 15.08 11.61 8.80 7.38 8.80 15.27 12.04
June 8.22 7.29 8.10 14.92 11.09 8.45 7.34 8.72 14.73 11.53
July 8.10 7.57 8.15 14.86 11.04 8.23 7.67 8.62 14.49 11.43
Aug 7.99 7.89 8.35 14.88 11.28 8.11 8.10 8.83 14.51 11.81
Sept 8.07 8.28 8.36 14.86 10.38 8.18 8.62 8.90 14.37 11.57
Oct 8.03 8.16 8.46 13.94 10.65 8.06 8.36 8.87 13.25 11.49
Nov 8.04 8.24 8.83 13.58 11.54 7.91 8.28 9.08 12.57 11.60
Dec 7.80 8.11 9.29 13.75 12.35 7.57 7.83 9.36 12.53 12.08
1991 – Jan 7.23 8.04 9.23 13.88 12.13 7.30 7.52 9.46 12.89 12.21
3-month US dollar 12-month US dollar
premium (-) / discount (+) premium (-) / discount (+)
1987 2.92 3.15 -2.57 -3.72 3.29 3.36 -2.25 -3.54
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
1990 – Jan 1.30 –0.03 –6.87 –4.33 1.27 –0.22 –6.55 –4.40
Feb 1.14 -0.12 -6.80 -4.56 1.22 -0.41 -6.53 -4.49
Mar 0.92 0.13 -6.84 -4.05 1.07 -0.28 -6.75 -4.21
Apr 1.14 0.31 -6.69 -3.34 1.31 0.06 -6.68 -3.68
May 1.12 0.24 -6.72 -3.25 1.42 0.00 -6.47 -3.24
June, 0.93 0.12 -6.70 -2.87 1.11 -0.27 -6.28 -3.08
July 0.53 -0.05 -6.76 -2.94 0.56 -0.39 -6.26 -3.20
Aug 0.10 -0.36 -6.89 -3.29 0.01 -0.72 -6.40 -3.70
Sept0.21 -0.29 -6.79 -2.31 -0.44 -0.72 -6.19 -3.39
Oct0.13 -0.43 -5.91 -2.62 -0.30 -0.81 -5.19 -3.43
Nov0.20 -0.79 -5.54 -3.50 -0.37 -1.17 -4.66 -3.69
Dec0.31 -1.49 -5.95 -4.55 -0.26 -1.79 -4.96 -4.51
1991 – Jan

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Lira exchange rates and the price of gold

(period averages)

·····	Lire per unit of currency								
	US dollar	Japanese yen	Deutsche- mark	French franc	Pound sterling	Swiss franc	SDR	Ecu	Gold (dollars per ounce)
					1			[
1985	1,909.7	8.0240	650.26	213.08	2,462.5	780.26	1,939.0	1,447.8	327.00
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	1,625.9	1,524.8	385.00
1988 – 4th qtr.	1,317.6	10.5171	742.11	217.33	2,356.0	880.47	1,770.7	1,539.2	410.25
1989 – 1st qtr	1,357.5	10.5641	733.49	215.67	2,371.1	858.42	1,785.8	1,527.3	383.20
2nd "	1,410.8	10.1954	728.39	215.13	2,287.4	830.43	1,789.5	1,513.1	373.00
3rd "	1,386.6	9.7395	720.60	213.06	2,212.4	835.10	1,747.1	1,492.8	366.50
4th "	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	2,191.0	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
1990 – Jan	1,262.5	8.7021	745.95	219.14	2,084.0	831.97	1,664.6	1,515.5	415.05
Feb	1,244.0	8.5433	741.97	218.52	2,109.2	835.83	1,650.3	1,514.6	407.85
Mar	1,257.3	8.2125	737.48	218.48	2,042.3	831.65	1,636.6	1,505.4	368.25
Apr	1,239.7	7.8262	734.53	218.67	2,029.2	832.82	1,613.2	1,502.4	367.75
May	1,221.5	7.9596	734.77	218.22	2,052.3	861.56	1,610.3	1,506.6	363.05
June	1,237.1	8.0417	734.16	218.23	2,113.4	867.61	1,626.0	1,513.8	352.40
July	1,201.7	8.0625	732.65	218.40	2,170.5	862.27	1,615.1	1,517.3	372.30
Aug	1,158.4	7.8580	737.14	219.67	2,200.8	884.70	1,595.3	1,529.1	387.75
Sept	1,171.6	8.4516	746.48	222.89	2,202.9	896.84	1,629.1	1,545.3	406.75
Oct	1,142.2	8.8034	749.18	223.70	2,221.6	891.40	1,631.6	1,550.4	378.25
Nov	1,116.3	8.6622	751.81	223.27	2,193.9	889.39	1,612.9	1,550.2	384.84
Dec	1, 1 27.0	8.4283	754.03	222.00	2,171.5	882.18	1,607.7	1,547.0	385.00
1991 – Jan	1,135.4	8.4911	751.83	221.32	2,194.5	892.34	1,625.4	1,550.1	366.00

Nominal effective exchange rates

(indices, 1980=100)

	US	Canada	Japan	Germany	France	UK	Italy	Switzerland
	-							
1985	133.3	94.1	120.3	103.1	78.2	86.3	73.9	112.1
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	11 7.1	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	162.4	121.4	80.7	78.3	73.4	125.5
1988–4th qtr	89.1	94.9	193.1	116.5	77.2	82.9	71.4	123.3
1989–1st qtr	90.7	96.8	190.6	115.3	76.7	83.3	71.6	120.3
2nd "	94.6	98.0	180.7	115.1	76.9	80.5	72.0	116.9
3rd "	95.1	99.1	174.8	115.4	77.2	78.8	73.0	119.2
4th "	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	174.3	122.4	81.3	80.7	72.8	128.1
1990 – Jan	92.1	98.8	165.1	121.4	79.9	75.4	. 73.0	119.9
Feb	92.3	96.6	164.1	121.2	80.0	76.9	73.3	120.9
Mar	94.0	98.7	156.8	121.2	80.4	74.7	73.7	121.0
Apr	94.3	100.1	150.7	121.5	81.0	74.8	74.1	122.1
Мау	93.0	98.7	154.6	121.3	80.6	75.6	74.0	126.2
June	93.2	98.9	154.6	120.4	80.2	77.5	73.6	126.5
July	90.8	99.5	157.3	120.5	80.5	80.3	73.8	125.9
Aug	88.7	99.9	156.6	121.5	80.9	81.8	73.7	129.5
Sept	87.4	98.2	166.4	121.2	81.2	80.6	72.7	129.4
Oct	84.6	97.1	176.5	121.5	81.3	81.3	72.6	128.2
Nov	83.9	96.5	176.1	122.4	81.5	80.8	72.9	128.5
Dec	85.3	97.2	170.4	123.2	81.1	80.0	73.0	127.6
1991 – Jan	85.4	97.7	170.7	122.5	80.7	80.7	72.9	128.9

Real effective exchange rates

(indices, 1980=100)

	US	Canada	Japan	Germany	France	UK	Italy	Switzerland
1984	126.6	106.1	96.6	91.0	89.2	89.7	99.0	100.1
1985	128.4	103.2	95.7	89.7	92.8	91.7	97.4	98.1
1986	103.3	99.2	120.9	97.5	98.2	90.1	100.9	103.7
1987	93.7	101.2	125.8	102.1	99.2	91.6	102.8	105.6
1988	88.2	108.6	134.5	100.4	98.2	98.7	100.8	104.3
1989	93.4	111.7	124.9	98.4	96.7	96.4	103.2	99.0
1988–3rd qtr	91.3	111.0	130.8	99.2	97.4	98.6	99.8	102.3
4th "	87.5	110.7	135.9	99.7	97.4	100.3	100.7	102.9
1989 – 1st qtr	90.3	111.8	131.7	98.2	96.4	100.5	101.2	100.4
2nd "	94.8	111.2	126.0	97.6	96.1	96.8	102.0	97.6
3rd "	94.9	112.1	122.6	97.6	96.6	95.8	104.1	99.2
4th "	93.7	111.8	119.3	100.2	97.9	92.7	105.4	98.8
1990–1st qtr	93.7	109.4	112.0	102.0	100.1	94.1	107.1	100.2
2nd "	93.7	111.0	106.2	101.9	101.1	96.3	108.1	103.9
3rd "	90.7	108.9	109.7	101.4	101.3	102.3	108.1	105.7
1989 – Nov	94.0	111.9	119.4	99.8	97.7	92.7	105.6	98.6
Dec	92.6	112.1	117.3	101.7	98.9	91.4	106.0	98.6
1990 – Jan	93.3	110.2	113.8	102.1	99.6	93.3	106.3	99.3
Feb	93.1	107.8	113.4	102.1	100.0	95.6	107.1	100.3
Mar	94.5	110.1	108.7	101.9	100.8	93.4	107.7	101.0
Apr	94.6	112.2	104.4	102.2	101.7	94.5	108.3	101.8
May	93.3	110.4	106.9	102.1	101.1	95.9	108.2	104.9
June	93.3	110.5	107.3	101.4	100.5	98.6	107.8	104.9
July	91.0	110.8	109.2	101.5	100.8	102.2	108.4	104.4
Aug	90.6	109.2	107.1	101.9	101.4	103.5	108.7	106.9
Sept	90.5	106.6	112.9	101.0	101.7	101.1	107.3	105.9
Oct	89.3	103.4	118.7	101.0	101.7	101.5	107.3	103.5
Nov	88.0	103.4	119.4	101.8	101.7	101.4	108.0	103.4

Table all

Real effective intra-EEC exchange rates

(indices, 1980=100)

	Belgium	France	Germany	UK	Netherlands	Italy	Spain
1984	94.2	95.6	99.8	101.8	101.5	106.3	100.2
1985	94.3	99.4	97.9	103.8	98.7	104.4	101.7
1986	88.8	102.4	103.8	96.6	93.8	104.8	97.4
1987	87.2	101.6	106.4	95.1	93.6	104.9	94.5
1988	85.3	100.8	105.1	103.6	91.9	103.0	97.8
1989	87.2	99.8	103.2	102.5	92.2	106.1	102.9
1988 – 3rd qtr.	85.4	100.8	104.7	105.0	91.6	102.7	97.8
4th "	85.9	100.1	104.4	105.7	91.8	103.1	98.8
1989 – 1st qtr.	86.0	99.5	103.2	106.9	92.2	104.1	103.2
2nd "	87.0	99.6	103.1	103.8	92.8	105.4	102.3
3rd "	87.4	99.8	102.6	102.1	91.9	107.4	103.3
4th "	88.2	100.2	104.1	97.0	92.0	107.7	102.8
1990 – 1st qtr.	87.3	101.3	104.3	96.1	91.2	108.2	102.3
2nd "	87.1	101.8	103.4	97.5	89.9	108.9	104.3
3rd "	87.3	101.5	102.0	102.7	89.4	108.2	103.8
1989 – Nov	88.1	100.2	103.9	97.2	9 1 .7	108.1	103.2
Dec	88.5	100.6	104.9	94.4	92.3	107.7	102.6
1990 – Jan	87.2	101.0	104.7	95.7	92.1	107.6	102.2
Feb	87.0	101.0	104.2	97.6	90.7	108.2	102.2
Mar	87.7	101.9	104.0	95.2	90.7	108.8	102.5
Apr	87.4	102.4	103.6	95.6	90.3	109.0	103.1
May	87.0	101.8	103.6	96.9	90.0	108.9	104.7
June	86.7	101.2	103.0	100.0	89.5	108.7	105.2
July	86.1	101.2	102.4	103.1	88.8	108.7	105.0
Aug	87.6	101.2	102.0	103.3	88.9	108.5	103.8
Sept	88.2	102.1	101.7	101.7	90.5	107.5	102.5
Oct	87.2	102.1	101.9	102.2	90.9	107.4	102.4
Nov	86.3	101.7	102.2	101.4	91.5	107.8	103.2
External position of the Italian credit system

(end-of-period outstanding claims in billions of lire)

VIS-A-VIS	1989-Q2	1989-Q3	1989-Q4
· · · · · · · · · · · · · · · · · · ·	ľ	1	
Industrial countries	(164,526)	(156,048)	(171,219)
OPEC countries	(4,354)	(7,109)	(6,450)
Other developing countries	(11,191)	(11,021)	(9,124)
of which: Latin America	(6,810)	(6,762)	(5,275)
Africa	(1,505)	(1,492)	(1,314)
Asia	(1,910)	(1,823)	(1,763)
Middle East	(966)	(944)	(772)
Eastern Europe	(9,792)	(10,307)	(9,474)
Offshore centres	(15,808)	(15,248)	(16,370)
International organizations	(1,150)	(1,263)	(1,185)
Totai	(206,821)	(200,996)	(213,822)
Memorandum item:			
Argentina	(1,577)	(1,530)	(1,339)
Bolivia	(3)	(5)	(6)
Brazil	(1,241)	(1,812)	(1,073)
Chile	(240)	(373)	(265)
Colombia	(191)	(236)	(203)
lvory Coast	(33)	(36)	(28)
Ecuador	(143)	(488)	(172)
Philippines	(88)	(86)	(74)
Yugoslavia	(450)	(378)	(500)
Могоссо	(520)	(475)	(450)
Mexico	(2,726)	(1,873)	(1,832)
Nigeria	(143)	(207)	(257)
Peru	(215)	(165)	(177)
Uruguay	(44)	(168)	(50)
Venezuela	(719)	(671)	(677)
Total	(8,333)	(8,503)	(7,103)
Bulgaria	(401)	(400)	(410)
Czechoslovakia	(143)	(209)	(204)
Poland	(1,512)	(1,488)	(1,383)
German Democratic Republic	(842)	(952)	(997)
Romania	(8)	(74)	(201)
Hungary	(510)	(626)	(598)

Sources and uses of income

(% changes on previous period)

GDP Imports Total Gress fixed investment weighein vehicles Total Gress fixed investment explained vehicles Households for explained vehicles Other conserve total Exports 1984 3.0 11.3 4.5 -1.0 10.9 4.5 2.1 10.2 7.3 1986 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.9 1986 2.5 4.6 2.9 1.1 2.1 1.6 3.8 0.4 3.8 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.8 -0.5 1.1 4.5 4.8 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988-3rd gtr. 0.8 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 2rd * 0.8 1.2 0.9 0.6 0.8 0.7 0.3 4.6 <tr< th=""><th></th><th></th><th>SOURCES</th><th></th><th colspan="5">USES</th><th>•</th></tr<>			SOURCES		USES					•
GDP Imports Total Building Machinery, and and and and and and Total Households consultion Comestic consultion Esports 1984 3.0 11.3 4.5 -1.0 10.9 4.5 2.1 10.2 7.3 1985 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.8 1986 2.5 4.6 2.9 1.1 2.1 1.6 3.8 0.4 3.8 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1988					Gro	ss fixed investr	nent			
At 1980 prices 1984 3.0 11.3 4.5 -1.0 10.9 4.5 2.1 10.2 7.3 1985 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.9 1986 2.5 4.6 2.9 1.1 2.1 1.6 3.8 0.4 3.8 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1988 4.2 6.9 4.7 1.2 11.6 6.7 4.1 4.5 4.8 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988-3rd qtr. 0.8 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 4th " 0.9 3.5 1.5 0.6 2.1 1.4 0.0 -0.2 2nd " 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -0.4 2.0 0.3 0.8 1.5 0.3		GDP	Imports	Total	Building	Machinery, equipment and vehicles	Total	Households' consumption	Other domestic uses	Exports
https://pres 1984 3.0 11.3 4.5 -1.0 10.9 4.5 2.1 10.2 7.3 1985 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.8 1986 2.5 4.6 2.9 1.1 2.1 1.6 6.8 4.2 5.1 3.3 1988 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 1.01 1988-3rd qr. 0.8 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 41h* 0.9 3.5 1.5 0.6 2.1 1.5 0.9 -0.9 4.8 1989-1st qtr. 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2nd* 0.7 0.8 0.2 0.3 0.8 1.5 0.3 306 1.4 0.2 0.7 0.5 0.2						l				[
1984 3.0 11.3 4.5 -1.0 10.9 4.5 2.1 10.2 7.3 1985 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.9 1986 2.5 4.6 2.9 1.1 2.1 1.6 5.8 4.2 5.1 3.3 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1986 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1989 1.6 0.8 2.7 1.7 2.4 2.1 1.4 1.0 -0.2 2.01** 0.8 1.2 0.9 0.6 0.8 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1.0					A	t 1980 price:	S			
1985 2.6 4.6 3.0 -0.5 3.4 1.4 3.1 3.4 3.9 1986 2.5 4.6 2.9 1.1 2.1 1.6 3.8 0.4 3.8 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1988 4.2 6.9 4.7 1.2 11.6 6.7 4.1 4.8 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988-3rd gtr. 0.8 3.7 1.4 0.6 3.0 1.9 -0.3 4.8 1989-1st gtr. 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2nd " 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3rd " 0.7 0.9 0.7 0.8 0.7 0.3 0.8 1.5 0.3 1990-1st gtr. 0.8 4.8 1.7 0.6 0.6 1.4	1984	3.0	11.3	4.5	-1.0	10.9	4.5	2.1	10.2	7.3
1986 2.5 4.6 2.9 1.1 2.1 1.6 3.8 0.4 3.8 1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1988 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988 0.9 3.5 1.5 0.6 2.1 1.5 0.9 -0.9 4.8 1989 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2nd " 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3rd " 0.7 0.9 0.7 0.8 -0.2 0.3 0.8 1.5 0.3 1990 1.6 1.4 0.2 0.7 0.5 0.2 1.0 1.0 1.0 2.0 0.5 .0 5.0 -3.2 <t< th=""><th>1985</th><th>2.6</th><th>4.6</th><th>3.0</th><th>-0.5</th><th>3.4</th><th>1.4</th><th>3.1</th><th>3.4</th><th>3.9</th></t<>	1985	2.6	4.6	3.0	-0.5	3.4	1.4	3.1	3.4	3.9
1987 3.0 10.1 4.4 -1.1 12.6 5.8 4.2 5.1 3.3 1988 4.2 6.9 4.7 1.2 11.6 6.7 4.1 4.5 4.8 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 4th<* 0.9 3.5 1.5 0.6 2.1 1.5 0.9 -0.9 4.8 1989 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3.3 4.6 1.2 0.9 0.6 0.8 0.7 0.8 1.5 0.3 4.33 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1990 1.5 0.3 -0.6 0.6 1.4 6.5 0.1 1990 1.5 0.3 -0.6 0.5 0.5 6.0 -0.2	1986	2.5	4.6	2.9	1.1	2.1	1.6	3.8	0.4	3.8
1988 4.2 6.9 4.7 1.2 11.6 6.7 4.1 4.5 4.8 1989 3.2 9.6 4.5 3.6 6.3 5.1 3.8 -0.5 10.1 1988	1987	3.0	10.1	4.4	-1.1	12.6	5.8	4.2	5.1	3.3
1989	1988	4.2	6.9	4.7	1.2	11.6	6.7	4.1	4.5	4.8
1988-3rd qtr. 0.8 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 4th 0.9 3.5 1.5 0.6 2.1 1.5 0.9 -0.9 4.8 1989-1st qtr. 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2nd . 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3rd . 0.7 0.9 0.7 0.8 -0.2 0.3 0.8 1.5 0.3 4th . 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1990-1st qtr. 0.8 4.8 1.7 0.7 0.6 0.6 1.4 6.5 0.1 2nd " -0.4 2.5 0.3 -0.8 1.7 0.6 0.2 -6.3 5.0 -3.2 1986 . 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 <t< th=""><th>1989</th><td>3.2</td><td>9.6</td><td>4.5</td><td>3.6</td><td>6.3</td><td>5.1</td><td>3.8</td><td>-0.5</td><td>10.1</td></t<>	1989	3.2	9.6	4.5	3.6	6.3	5.1	3.8	-0.5	10.1
1988 - 3rd qtr. 0.8 3.7 1.4 0.6 3.0 1.9 1.3 6.6 -2.5 4th " 0.9 3.5 1.5 0.6 2.1 1.5 0.9 -0.9 4.8 1989 - 1st qtr. 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2rd " 0.7 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3rd " 0.7 0.9 0.7 0.8 -0.2 0.3 0.8 1.5 0.3 4th " 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1990 - 1st qtr. 0.8 4.8 1.7 0.6 0.6 1.4 6.5 0.1 2rd " 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 1980 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1986 7.7								1.5		
1989-1st qtr. 0.8 2.5 1.2 1.7 2.4 2.1 1.4 1.0 -0.2 2nd " 0.8 1.2 0.9 0.6 0.8 0.7 0.3 -4.2 6.4 3rd " 0.7 0.9 0.7 0.8 -0.2 0.3 0.8 1.5 0.3 4th " 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1990-1st qtr. 0.8 4.8 1.7 0.7 0.6 0.6 1.4 6.5 0.1 2nd " -0.4 2.5 0.3 -0.8 1.7 0.6 0.2 -6.3 5.0 3rd " 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 Implicit price defiators Implicit price defiators 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5<	1988 – 3rd qtr	0.8	3.7	1.4	0.6	3.0	1.9	1.3	6.6 0	-2.5
100 40. 10. <	-1989 – 1st atr	0.5	25	1.0	1 7	2.1	21	14	-0.9	-02
3rd * 0.7 0.9 0.7 0.8 -0.2 0.3 0.8 1.5 0.3 4th * 0.7 0.3 0.6 1.4 0.2 0.7 0.5 0.2 1.0 1990 - 1st qtr. 0.8 4.8 1.7 0.7 0.6 0.6 1.4 6.5 0.1 2nd * -0.4 2.5 0.3 -0.8 1.7 0.6 0.2 -6.3 5.0 3rd * 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 Implicit price deflators 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1986 8.9 7.5 8.6 8.6 7.9 8.2 9.0 8.6 7.9 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 -3	2nd "	0.0	12	0.9	0.6	0.8	0.7	0.3	-4.2	6.4
ath 1.0 1	3rd "	0.7	0.9	0.7	0.8	-0.2	0.3	0.8	1.5	0.3
1990 - 1st qtr. 0.8 4.8 1.7 0.7 0.6 0.6 1.4 6.5 0.1 2nd " -0.4 2.5 0.3 -0.8 1.7 0.6 0.2 -6.3 5.0 3rd " 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 Implicit price deflators Implicit price deflators 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 Implicit price deflators Implicit price deflators 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1986 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 6	4th " .	0.7	0.3	0.6	1.4	0.2	0.7	0.5	0.2	1.0
2nd " -0.4 2.5 0.3 -0.8 1.7 0.6 0.2 -6.3 5.0 3rd " 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 Implicit price deflators 1984 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1985 8.9 7.5 8.6 8.6 7.9 8.2 9.0 8.6 7.9 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 5.1 1988 6.2 2.0 1.8 1.3 1.6 1.4 1.3 1.0 3.4 4th " 1.2 0.7 1.0 1.1 2.0 1.5 5.0 6.3 2.4 <th>1990 – 1st qtr.</th> <td>0.8</td> <td>4.8</td> <td>1.7</td> <td>0.7</td> <td>0.6</td> <td>0.6</td> <td>1.4</td> <td>6.5</td> <td>0.1</td>	1990 – 1st qtr.	0.8	4.8	1.7	0.7	0.6	0.6	1.4	6.5	0.1
3rd " 0.7 -1.1 0.2 -0.6 0.5 0.5 5.0 -3.2 Implicit price deflators 1984 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1985 8.9 7.5 8.6 8.6 7.9 8.2 9.0 8.6 7.9 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 6.1 1988 -3rd qtr. 2.0 2.0 1.8 1.3 1.6 1.4 1.3 1.0 3.4 4th " 1.2 0.7 1.0 1.1 2.0 1.5 -0.4 1.0 1989 -1st qtr. 1.7 3.0 1.8 1.0 2.2 1.6 1.6 1.8 2.4 2nd	2nd " .	-0.4	2.5	0.3	-0.8	1.7	0.6	0.2	-6.3	5.0
Implicit price deflators 1984 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1985 8.9 7.5 8.6 8.6 7.9 8.2 9.0 8.6 7.9 1986 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 5.1 1989 6.3 7.5 6.2 6.0 5.2 5.5 6.0 8.8 6.7 1988 - 3rd qtr. 2.0 1.8 1.3 1.6 1.4 1.3 1.0 3.4 1989 1.7 3.0 1.8 1.0 2.2 1.6 1.6 1.8 2.4 1989-1st qtr. 1.7 3.0 1.8 0.9 1.3 1.7 4.8 1.9 3rd " 1.0 -1.	3rd " .	0.7	-1.1	0.2	-0.6	0.5		0.5	5.0	-3.2
Implicit price deflators 1984 11.4 10.8 11.3 9.7 8.9 9.1 11.8 12.4 10.7 1985 8.9 7.5 8.6 8.6 7.9 8.2 9.0 8.6 7.9 1985 7.7 -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 5.1 1989 6.3 7.5 6.2 6.0 5.2 5.5 6.0 8.8 6.7 1989										
198411.410.811.39.78.99.111.812.410.719858.97.58.68.67.98.29.08.67.919867.7-15.23.43.73.33.55.84.2-4.719875.9-0.54.54.63.23.55.06.51.919886.24.45.87.23.34.85.29.85.119896.37.56.26.05.25.56.08.86.71988-3rd qtr.2.02.01.81.31.61.41.31.03.44th "1.20.71.01.12.01.51.5-0.41.01989-1st qtr.1.73.01.81.02.21.61.61.82.42nd "1.0-1.70.52.21.11.2-1.2-0.74th "2.30.72.11.9-0.60.71.66.71.01990-1st qtr.1.8-0.41.24.51.93.21.7-3.61.62nd "1.8-0.41.24.51.93.21.7-3.61.62nd "1.9-1.81.12.20.71.31.43.3-0.7					Implic	cit price defl	ators			
19858.97.58.68.67.98.29.08.67.91986 $7,7$ -15.2 3.4 3.7 3.3 3.5 5.8 4.2 -4.7 1987 5.9 -0.5 4.5 4.6 3.2 3.5 5.0 6.5 1.9 1988 6.2 4.4 5.8 7.2 3.3 4.8 5.2 9.8 5.1 1989 6.3 7.5 6.2 6.0 5.2 5.5 6.0 8.8 6.7 1989 -0.5 2.0 1.8 1.3 1.6 1.4 1.3 1.0 3.4 $4th$ " 1.2 0.7 1.0 1.1 2.0 1.5 1.5 -0.4 1.0 1989 $-1st$ qtr. 1.7 3.0 1.8 1.0 2.2 1.6 1.6 1.8 2.4 $2nd$ " 1.0 -1.7 0.5 2.2 $$ 1.1 1.2 -1.2 -0.7 $4th$ " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 $-1st$ qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 $2nd$ " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7	1984	11.4	10.8	11.3	9.7	8.9	9.1	11.8	12.4	10.7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1985	8.9	7.5	8.6	8.6	7.9	8.2	9.0	8.6	7.9
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1986	7,7	-15.2	3.4	3.7	3.3	3.5	5.8	4.2	-4.7
19886.24.45.87.23.34.85.29.85.119896.37.56.26.05.25.56.08.86.71988-3rd qtr.2.02.01.81.31.61.41.31.03.44th "1.20.71.01.12.01.51.5-0.41.01989-1st qtr.1.73.01.81.02.21.61.61.82.42nd "1.53.81.91.80.91.31.74.81.93rd "1.0-1.70.52.21.11.2-1.2-0.74th "2.30.72.11.9-0.60.71.66.71.01990-1st qtr.1.8-0.41.24.51.93.21.7-3.61.62nd "1.9-1.81.12.20.71.31.43.3-0.7	1987	5.9	-0.5	4.5	4.6	3.2	3.5	5.0	6.5	1.9
19896.37.56.26.05.25.56.08.86.71988-3rd qtr.2.02.01.81.31.61.41.31.03.44th "1.20.71.01.12.01.51.5 -0.4 1.01989-1st qtr.1.73.01.81.02.21.61.61.82.42nd "1.53.81.91.80.91.31.74.81.93rd "1.0 -1.7 0.52.21.11.2 -1.2 -0.7 4th "2.30.72.11.9 -0.6 0.71.66.71.01990-1st qtr.1.8 -0.4 1.24.51.93.21.7 -3.6 1.62nd "1.9 -1.8 1.12.20.71.31.43.3 -0.7	1988	6.2	4.4	5.8	7.2	3.3	4.8	5.2	9.8	5.1
1988 - 3rd qtr. 2.0 2.0 1.8 1.3 1.6 1.4 1.3 1.0 3.4 4th " 1.2 0.7 1.0 1.1 2.0 1.5 1.5 -0.4 1.0 1989 - 1st qtr. 1.7 3.0 1.8 1.0 2.2 1.6 1.6 1.8 2.4 2nd " 1.5 3.8 1.9 1.8 0.9 1.3 1.7 4.8 1.9 3rd " 1.0 -1.7 0.5 2.2 1.1 1.2 -1.2 -0.7 4th " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 - 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7 3.6<	1989	6.3	7.5	6.2	6.0	5.2	5.5	6.0	8.8	6.7
1988-31d qu.2.02.01.81.31.61.41.31.03.44th "1.20.71.01.12.01.51.5 -0.4 1.01989-1st qtr.1.73.01.81.02.21.61.61.82.42nd "1.53.81.91.80.91.31.74.81.93rd "1.0 -1.7 0.52.21.11.2 -1.2 -0.7 4th "2.30.72.11.9 -0.6 0.71.66.71.01990-1st qtr.1.8 -0.4 1.24.51.93.21.7 -3.6 1.62nd "1.9 -1.8 1.12.20.71.31.43.3 -0.7	1099 3rd atr	2.0	2.0	10	1.0	1.6		10	1.0	
1989 - 1st qtr. 1.7 3.0 1.8 1.0 2.2 1.6 1.6 1.8 2.4 2nd " 1.5 3.8 1.9 1.8 0.9 1.3 1.7 4.8 1.9 3rd " 1.0 -1.7 0.5 2.2 1.1 1.2 -1.2 -0.7 4th " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 - 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7 4th " 0.7 0.5 0.8 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7 2rd " 0.7 0.5 0.8 1.0 1.2 1.5 1.2 0.5 0.5	4th ".	2.0	2.0	1.0	1.1	2.0	1.4	1.3	1.0 0.4	3.4
2nd " 1.5 3.8 1.9 1.8 0.9 1.3 1.7 4.8 1.9 3rd " 1.0 -1.7 0.5 2.2 1.1 1.2 -1.2 -0.7 4th " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 - 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7	1989 1st atr.	1.7	3.0	1.8	1.0	2.2	1.6	1.6	1.8	2.4
3rd " 1.0 -1.7 0.5 2.2 1.1 1.2 -1.2 -0.7 4th " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 - 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7	2nd " .	1.5	3.8	1.9	1.8	0.9	1.3	1.7	4.8	1.9
4th " 2.3 0.7 2.1 1.9 -0.6 0.7 1.6 6.7 1.0 1990 - 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7 2rd " 0.7 0.5 0.8 1.0 1.2 1.5 1.0	3rd " .	1.0	-1.7	0.5	2.2		1.1	1,2	-1.2	-0.7
1990 – 1st qtr. 1.8 -0.4 1.2 4.5 1.9 3.2 1.7 -3.6 1.6 2nd " 1.9 -1.8 1.1 2.2 0.7 1.3 1.4 3.3 -0.7 2rd " 0.7 0.5 0.8 1.0 1.2 1.5 1.0 0.5	4th " .	2.3	0.7	2.1	1.9	-0.6	0.7	1.6	6.7	1.0
2nd ". 1.9 –1.8 1.1 2.2 0.7 1.3 1.4 3.3 –0.7	1990-1st qtr.	1.8	-0.4	1.2	4.5	1.9	3.2	1.7	-3.6	1.6
	2nd "	1.9	-1.8	1.1	2.2	0.7	1.3	1.4	3.3	-0.7
Ju . 0.7 0.5 0.8 1.9 1.3 1.5 1.6 −3.9 0.6	3rd " .	0.7	0.5	0.8	1.9	1.3	1.5	1.6	-3.9	0.6

Industrial production and business opinion indicators (seasonally adjusted data)

	I	NDUSTRIAL P	RODUCTION		ISCO BUSINESS OPINION INDICATORS						
					Chanç	ges in level of o	rders				
	General index	Consumer goods	Investment goods	Intermediate goods	Domestic	Foreign	Total	Expected demand in 3-4 months	Stocks of finished goods vis-à-vis normal		
ł						1					
		(indices, 1	985=100)		(average balance of monthly responses)						
1986	103.6	102.5	108.4	102.7	-18.8	-23.9	-18.0	11.1	4.9		
1987	107.6	105.9	110.3	107.7	-8.4	-25.3	-9.1	10.8	-0.8		
1988	114.1	111.6	119.6	113.6	3.3	-9.6	2.9	18.5	7.5		
1989	117.6	114.6	123.1	117.5	0.5	-5.7	2.8	22.9	-4.1		
1990					-9.4	-16.1	-7.4	11.7	3.7		
1986-4th qtr	105.1	104.1	112.9	103.9	16.7	-21.6	-15.5	11.9	2.7		
1987 – 1st qtr	105.3	105.0	107.6	105.2	-12.2	-25.3	-12.3	13.6	4.0		
2nd "	108.4	106.4	112.1	108.7	-8.9	-27.6	-10.6	9.7	1.7		
3rd "	107.7	105.4	108.4	107.7	-7.3	-26.2	-8.1	10.7	-4.3		
4th "	109.2	106.6	113.0	109.4	-5.1	-22.1	-5.3	9.4	-4.3		
1988 – 1st qtr	112.7	110.8	117.0	112.6	-2.6	-16.9	-2.1	10.3	-2.7		
2nd "	113.1	110.3	119.1	112.4	1.4	-10.1	1.0	14.9	-7.0		
3rd "	114.6	111.7	122.0	113.8	5.8	-8.2	4.9	21.2	-8.7		
4th "	116.0	113.4	120.5	115.8	8.6	3.1	7.9	27.7	-11.7		
1989 – 1st qtr	115.9	112.9	120.7	115.7	5.4	-3.8	8.5	25.6	-8.0		
2nd "	116.6	114.4	119.8	116.1	-0.4	-6.1	1.8	23.5	-1.7		
3rd "	118.1	115.4	123.7	118.5	-1.7	-3.8	1.6	21.8	-4.3		
4th "	119.9	115.7	128.2	119.6	-1.3	-9.1	-0.5	20.7	-2.3		
1990 – 1st qtr	118.1	114.4	126.0	117.1	-1.3	-11.0	-1.9	18.6	-2.0		
2nd "	118.2	114.0	126.4	117.3	-4.9	-9.2	-1.8	16.9	2.3		
3rd "	118.2	116.0	125.0	117.5	-10.7	-20.0	-8.4	4.5	6.7		
4th "					-20.5	-24.0	17.6	7.0	7.7		

Labour market statistics

(seasonally adjusted data; thousands of units and percentages)

			Employment					Unemploym	ent rate (%)	
	Agricul- ture	Industry excluding construc- tion	Construc- tion	Other	Total	Unem- ployment	Labour force	Official	Adjusted for wage supple- mentation	Partici- pation rate (%)
		1	I			i	I	I		
1986	2,242	4,940	1,883	11,795	20,861	2,611	23,468	11.1	12.8	41.5
1987	2,169	4,867	1,849	11,952	20,837	2,832	23,669	12.0	13.3	41.8
1988	2,059	4,954	1,835	12,256	21,103	2,885	23,988	12.0	13.0	42.3
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	12.0		42.0
1986 – 4th qtr	2,237	4,926	1,852	11,925	20,940	2,743	23,683	11.6	13.0	41.8
1987 – 1st qtr.	2,213	4,866	1,851	11,925	20,855	2,766	23,620	11.7	13.0	41.7
2nd "	2,178	4,845	1,861	11,918	20,802	2,841	23,643	12.0	13.3	41.7
3rd "	2,128	4,868	1,847	11,979	20,821	2,897	23,718	12.2	13.5	41.8
4th "	2,095	4,895	1,816	12,096	20,902	2,895	23,797	12.2	13.3	42.0
1988 – 1st qtr	2,097	4,939	1,829	12,230	21,095	2,908	24,003	12.1	13.2	42.3
2nd "	2,080	4,976	1,848	12,322	21,226	2,895	24,121	12.0	13.0	42.5
3rd "	2,022	4,969	1,841	12,282	21,114	2,861	23,975	11.9	12.9	42.2
4th "	1,972	4,935	1,830	12,247	20,984	2,872	23,856	12.0	12.9	42.0
1989 – 1st qtr	1,946	4,933	1,777	12,286	20,942	2,890	23,832	12.1	13.0	41.9
2nd "	1,929	4,951	1,771	12,285	20,935	2,892	23,827	12.1	13.0	41.9
3rd "	1,947	4,975	1,823	12,324	21,069	2,841	23,909	11.9	12.7	42.1
4th "	1,967	5,016	1,850	12,404	21,238	2,738	23,976	11.4	12.2	42.2
1990 – 1st qtr	1,948	5,037	1,861	12,458	21,305	2,636	23,941	11.0	11.8	42.1
2nd "	1,893	4,961	1,853	12,579	21,286	2,598	23,884	10.9	11.6	42.0
3rd "	1,843	4,935	1,857	12,671	21,305	2,607	23,912	10.9	11.7	42.0
4th "										

Wholesale and consumer prices

wholesale and consumer prices
(% changes on corresponding period)

·		Wholesa	le prices		Consumer prices					
	Consumer goods	Invest- ment goods	Intermedi- ate goods	Total	Food	Non-food products	Services	Total	Cost of living	<i>Scala mobile</i> index
						1				
1985					8.7	8.6	10.4	9.2	8.6	8.4
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									6.1	7.2
1988–4th qtr					4.2	4.1	7.1	5.1	5.2	5.7
1989 – 1st qtr					5.7	4.8	7.3	5.9	6.1	6.3
2nd "	••••				6.6	5.0	7.9	6.5	6.8	6.8
3rd "					6.5	4.7	8.2	6.4	6.8	6.3
4th "	••••		••••		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 "									6.4	7.7
1990 – Jan.	6.2	6.6	8.9	8.0	5.8	6.2	7.7	6.6	6.4	6.8
Feb	5.5	5.6	6.2	6.0	6.4	5.8	7.5	6.5	6.2	6.9
Mar	4.8	4.8	5.6	5.3	6.0	5.7	7.4	6.3	6.1	6.9
Apr	6.0	5.0	3.7	4.4	6.0	5.6	7.1	6.2	5.8	6.9
Мау	5.5	5.3	3.1	3.9	6.0	5.3	6.9	6.0	5.7	6.9
June	5.7	5.4	5.4	5.5	6.2	5.2	7.1	6.1	5.6	6.7
July	5.8	5.6	5.4	5.5	6.4	5.1	7.3	6.2	5.7	6.9
Aug	5.4	5.7	11.5	9.4	6.7	6.2	7.2	6.7	6.3	7.5
Sept	5.3	6.1	13.7	10.9	6.4	6.5	7.3	6.7	6.3	7.5
Oct	5.4	5.7	15.5	12.1	6.3	6.6	7.2	6.8	6.2	7.4
Nov	6.2	5.2	11.2	9.4	6.2	6.6	7.5	6.8	6.5	7.8
Dec									6.4	7.8
1991 – Jan.									6.5	

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

			Services and	transfers						
	Goods	Foreign travel	Income from capital	Other	Total	Balance on current account	Non-bank capital flows	Bank capital flows	Errors and omissions	Change in official reserves
									I	
1987	-8,186	9,902	9,873	5,013	5,042	-3,144	4,754	5,573	-408	6,775
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								(22,101)		(–15,160)
1989 – Dec.	(–30)	(–162)	(–1,032)	(–12)	(–1,206)	(–1,236)	(–961)	(1,921)	(627)	(–351)
1990 – Jan	(1,120)	(104)	(–1,114)	(110)	(–900)	(220)	(1,510)	(4,406)	(4,147)	(–1,989)
Feb.	(–2,305)	(91)	(–1,016)	(–242)	(–1,167)	(3,472)	(–107)	(2,214)	(1,094)	(271)
Mar.	(-749)	(508)	(–1,010)	(–1,013)	(–1,515)	(–2,264)	(5,268)	(3,347)	(2,165)	(4,186)
Apr	(–2,250)	(611)	(1,986)	(27)	(–1,348)	(3,598)	(7,088)	(–1,275)	(35)	(-2,250)
May .	(845)	(770)	(–1,582)	(161)	(651)	(–1,496)	(3,902)	(5,214)	(–595)	(-7,025)
June	(–2,337)	(706)	(1,400)	(656)	(–38)	(–2,375)	(7,473)	(808)	(281)	(6,187)
July .	(–967)	(1,201)	(–1,671)	(286)	(–184)	(–1,151)	(2,115)	(1,394)	(418)	(-1,940)
Aug.	(160)	(800)	(974)	(346)	(172)	(332)	(1,502)	(–1,012)	(–163)	(-658)
Sept.	(-1,493)	(742)	(–1,212)	(349)	(–121)	(–1,614)	(4,285)	(3,171)	(46)	(454)
Oct								(3,264)		(2,326)
Nov.	••••							(2,051)		(4,942)
Dec .								(4,861)		(1,082)

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

			Services an	d transfers						
	Goods	Foreign travel	Income from capital	Other	Total	Balance on current account	Non-bank capital flows	Bank capital flows	Errors and omissions	Change in official reserves
	1									
1987	-77	9,902	-8,573	-3,192	-1,863	-1,940	6,530	5,573	-3,388	-6,775
1988	-1,501	8,349	-9,278	-5,389	6,318	-7,819	11,413	10,224	-2,912	-10,906
1989	(2,712)	(7,151)	(–11,366)	(–7,525)	(–11,740)	(14,452)	(20,338)	(14,979)	(-5,479)	(–15,386)
1990						·	<i>.</i>	(22,101)		(–15,160)
1988 – 4th qtr.	308	1,459	-2,074	-1,879	-2,494	-2,186	2,067	6,928	-1,059	5,750
1989 – 1st qtr.	(6,001)	(624)	(–2,181)	(–3,515)	(5,072)	(–11,073)	(6,391)	(11,285)	(383)	(6,986)
2nd "	(–869)	(2,453)	(-3,290)	(153)	(~684)	(–1,553)	(8,194)	(856)	(–1,621)	(4,164)
3rd "	(2,379)	(3,131)	(2,908)	(2,460)	(2,237)	(142)	(10,983)	(2,237)	(–5,154)	(8,208)
4th "	(1,779)	(943)	(2,987)	(–1,703)	(3,747)	(1,968)	(5,230)	(2,313)	(913)	(3,972)
1990 – 1st qtr.	(-5,324)	(703)	(-3,139)	(–3,891)	(6,327)	(–11,651)	(14,277)	(9,967)	(-6,689)	(5,904)
2nd "	(1,621)	(2,087)	(4,318)	(2,268)	(4,495)	(–2,878)	(15,203)	(4,747)	(–1,610)	(–15,462)
3rd "								(2,789)		(–2,144)
4th "			····					(10,176)		(8,350)

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External position of BI-UIC

			Sho	rt-term positio	n				
[Assets		· ·				
-	Gold	Convertible currencies	Ecus	SDRs	Reserve position in the IMF	Liabilities	Balances	Medium and long-term position	Total official reserves
1		1	İ						
				(E	oillions of lire)				
1985	39,530	16,536	7,139	879	1,946	205	65,825	-616	65,209
1986	35,203	14,340	10,158	1,085	1,713	285	62,214	-803	61,41
1987	39,812	20,307	12,220	1,253	1,691	127	75,156	-859	74,297
1988	37,242	32,136	10,360	1,239	1,653	192	82,438	337	82,775
1989 – Dec.	(33,663)	(44,847)	(11,409)	(1,268)	(1,834)	(401)	(92,620)	(620)	(93,240
1990 – Jan	(33,663)	(46,524)	(11,099)	(1,261)	(1,786)	(230)	(94,103)	(527)	(94,630
Feb	(33,663)	(46,136)	(11,067)	(1,281)	(1,790)	(443)	(93,494)	(573)	(94,067)
Mar	(33,606)	(50,109)	(11,029)	(1,264)	(1,755)	(428)	(97,335)	(582)	(97,917
Apr	(33,606)	(51,877)	(10,372)	(1,247)	(1,732)	(370)	(98,464)	(613)	(99,077
May	(33,606)	(59,098)	(10,463)	(1,300)	(1,780)	(352)	(105,895)	(771)	(106,666
June	(31,021)	(64,923)	(10,483)	(1,293)	(1,746)	(248)	(109,218)	(817)	(110,035
July	(31,021)	(66,079)	(10,084)	(1,269)	(1,691)	(323)	(109,821)	(768)	(110,589
Aug	(31,021)	(67,386)	(10,210)	(1,311)	(1,675)	(382)	(111,221)	(808)	(112,029)
Sept	(28,762)	(67,490)	(10,248)	(1,330)	(1,690)	(449)	(109,071)	(933)	(110,004)
Oct	(28,762)	(64,752)	(10,479)	(1,329)	(1,665)	(437)	(106,550)	(1,246)	(107,796
Nov	(28,762)	(59,250)	(10,439)	(1,328)	(1,647)	(338)	(101,088)	(1,513)	(102,601
Dec	(30,580)	(57,578)	(10,433)	(1,172)	(1,937)	(362)	(101,338)	(2,077)	(103,415
				(mil	lions of dolla	rs)			
1985	23,558	9,855	4,254	524	1,160	122	39,228	-367	38,861
1986	26,055	10,614	7,518	803	1,268	211	46,047	-594	45,453
1987	34,050	17,368	10,451	1,072	1,446	109	64,278	-735	63,543
1988	28,521	24,611	7,934	949	1,266	147	63,134	258	63,392
1989 – Dec.	(26,496)	(35,299)	(8,980)	(998)	(1,444)	(316)	(72,901)	(488)	(73,389
1990 – Jan	(26,496)	(37,130)	(8,858)	(1,006)	(1,425)	(184)	(74,732)	(421)	(75,153
Feb	(26,496)	(36,903)	(8,852)	(1,025)	(1,432)	(354)	(74,353)	(458)	(74,811
Mar	(26,902)	(40,113)	(8,829)	(1,012)	(1,405)	(343)	(77,918)	(466)	(78,384
Apr	(26,902)	(42,128)	(8,423)	(1,013)	(1,407)	(300)	(79,572)	(498)	(80,070
Мау	(26,902)	(47,514)	(8,412)	(1,045)	(1,431)	(283)	(85,021)	(620)	(85,641
June	(25,296)	(52,942)	(8,548)	(1,054)	(1,424)	(202)	(89,063)	(666)	(89,729
July	(25,296)	(56,604)	(8,638)	(1,087)	(1,449)	(277)	(92,796)	(658)	(93,454
Aug	(25,296)	(58,121)	(8,806)	(1,131)	(1,445)	(329)	(94,470)	(697)	(95,167
Sept	(24,570)	(57,654)	(8,754)	(1,136)	(1,444)	(384)	(93,175)	(797)	(93,972
Oct	(24,570)	(56,865)	(9,203)	(1,167)	(1,462)	(384)	(92,883)	(1,094)	(93,977
Nov	(24,570)	(52,434)	(9,238)	(1,175)	(1,458)	(299)	(88,575)	(1,339)	(89,914)
Dec	(27,060)	(50,949)	(9,232)	(1,037)	(1,714)	(320)	(89,672)	(1,838)	(91,510)

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State sector borrowing requirement

(billions of lire)

	Budget revenues		Budç	get disburserr	ients				Borrowing r (-	equirement -)	
	Fiscal	Other	Total	Current expendi- ture	Capital expendi- ture	Total	Deficit (-)	Other trans- actions	Borrowing require- ment ()	net of debt settle- ments in securities	of which: settle- ments of past debts in cash
											[· · -
1985	177,645	43,945	221,589	279,238	54,988	334,226	-112,637	-9,976	-122,613	-112,210	-2,187
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	257,271	54,801	312,071	366,887	66,043	432,930	-120,859	-4,784	-125,643	-124,911	-64
1989	293,431	60,530	353,962	394,635	70,172	464,807	-110,845	-23,012	-133,857	-133,403	-1,064
1990	330,497	81,303	411,800	466,463	69,630	536,093	-124,293	-21,873	-146,166	-141,584	-249
1988–4th qtr	90,384	20,301	110,685	105,309	32,917	138,226	-27,540	-3,680	-31,220	-30,549	-2
1989—1st qtr	59,745	9,866	69,611	63,320	10,171	73,491	3,881	-26,849	-30,729	-30,275	-202
2nd " .	87,986	11,701	99,687	107,648	12,633	120,281	20,595	7,371	-13,223	-13,223	-748
3rd " .	57,506	15,079	72,585	87,483	13,362	100,845	-28,259	-11,068	-39,328	-39,328	-26
4th ".	88,195	23,884	1 12,079	136,184	34,005	170,190	-58,110	7,534	-50,577	50,577	-89
1990 – 1st qtr	71,303	10,548	81,852	70,943	6,197	77,139	4,712	-30,363	-25,651	25,651	-145
2nd " .	90,331	21,147	111,478	143,108	18,075	161, 1 84	-49,706	26,992	-22,714	-22,714	
3rd " .	73,088	17,360	90,448	107,560	16,601	124,161	-33,713	-2,449	-36,162	-36,162	-69
4th " .	95,775	32,247	128,022	144,852	28,757	173,609	-45,586	-16,053	-61,640	57,058	-35
1989 – Dec	39,409	15,028	54,437	45,309	23,632	68,941	-14,503	-4,353	-18,856	-18,856	-15
1990 - Jan	29,534	2,909	32,443	23,070	301	23,370	9,073	-4,431	4,641	4,641	0
Feb	19,288	3,026	22,313	20,429	1,386	21,815	498	-12,624	-12,126	-12,126	-3
Mar	22,482	4,614	27,096	27,444	4,510	31,954	-4,858	-13,308	-18,166	-18,166	-142
Apr	20,869	4,079	24,947	49,261	8,018	57,278	-32,331	15,129	-17,202	-17,202	
May	27,666	7,424	35,091	68,823	7,967	76,790	-41,699	27,099	14,600	-14,600	0
June	41,796	9,645	51,440	25,025	2,091	27,116	24,325	-15,236	9,089	9,089	0
July	30,371	5,398	35,769	37,661	4,195	41,856	-6,087	-126	-6,213	-6,213	-4
Aug	26,135	10,344	36,480	44,033	10,071	54,104	-17,624	6,671	-10,953	10,953	-18
Sept	16,582	1,618	18,199	25,866	2,335	28,201	10,002	8,993	-18,995	18,995	-47
Oct	21,915	5,822	27,736	51,234	3,232	54,466	-26,730	2,403	-24,327	-19,746	-12
Nov	30,364	6,915	37,279	33,310	8,150	41,460	-4,180	-14,615	-18,796	18,796	-2
Dec	43,496	19,510	63,006	60,309	17,374	77,683	-14,676	-3,840	-18,517	-18,517	-21

Financing of the state sector borrowing requirement (billions of lire)

	Medium an secu	d long-term rities		BI-UIC financing other than securities purchases					Borro requir	owing ement
	Total	of which: floating rate Treasury credit certificates	Treasury bills	Total	of which: Treasury overdraft with Bl	PO deposits	Foreign Ioans	Other		of which: creation of monetary base
		ſ	ſ		ſ					
1985	93,207	78,567	13,181	3,689	6,340	9,067	2,937	532	122,613	27,519
1986	87,072	53,534	9,697	1,673	4,525	11,267	856	-407	110,159	10,994
1987	56,090	35,267	27,482	10,224	9,274	12,917	6,066	1,470	114,250	9,172
1988	60,972	7,848	41,982	3,704	4,331	10,996	4,227	3,763	125,643	2,748
1989	59,191	20,916	43,143	1,835	1,842	15,364	8,397	5,926	133,857	6,348
1990	69,718	54,214	40,505	2,782	2,908	12,611	13,833	6,718	146,166	694
1988–4th qtr	24,490	-5,133	484	-2,993	-3,406	6,904	698	1,638	31,220	-658
1989 – 1st qtr	4,369	9,675	21,266	-746	-1,018	2,027	2,895	918	30,729	-346
2nd "	17,090	1,466	747	9,696	-8,826	1,348	874	2,861	13,223	-7,716
3rd "	16,314	2,932	8,133	6,980	6,538	1,772	3,875	2,254	39,328	-20
4th "	21,417	6,842	12,997	5,296	5,148	10,218	754	-106	50,577	14,430
1990 - 1st qtr	8,771	9,286	8,559	2,127	1,811	2,661	2,334	1,199	25,651	347
2nd "	24,440	21,505	7,970	16,576	16,757	817	4,773	1,289	22,714	20,222
3rd "	8,111	11,788	8,892	12,124	12,849	779	3,388	2,866	36,162	5,593
4th "	28,396	11,634	15,083	5,106	5,004	8,353	3,337	1,364	61,640	15,670
1989 – Dec	5,758	1,955	4,600	631	-488	9,307	14	-192	18,856	2,793
1990 – Jan	3,021	2,932	2,362	-14,169	-14,025	2,872	1,008	265	-4,641	-3,010
Feb	3,734	1,955	1,961	4,199	4,058	180	1,366	687	12,126	2,152
Mar	2,016	4,399	4,237	12,097	11,779	-390	-40	247	18,166	512
Apr	5,499	9,775	4,994	2,953	3,098	672	3,445	-361	17,202	-2,843
May	15,046	11,730	702	-1,791	-1,471	-469	1,270	-158	14,600	-3,483
June	3,895	0	2,274	-17,738	18,383	614	59	1,808	-9,089	-13,897
July	3,488	2,487	105	2,031	-1,754	419	2,098	2,135	6,213	8,090
Aug	3,786	4,174	2,538	3,304	3,778	526	1,270	581	10,953	-3,324
Sept	837	5,127	6,250	10,851	10,825	886	21	150	18,995	828
Oct	9,991	7,401	5,810	5,840	5,596	1,049	1,679	-42	24,327	6,849
Nov	8,952	2,355	3,632	6,687	6,740	-2,004	1,064	465	18,796	11,993
Dec	9,453	1,878	5,641	-7,421	-7,331	9,307	595	941	18,517	3,172

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The domestic public debt

(end-of-period face value;	billions	of lire)
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								Total	debt
	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		of which: state sector
		1		1			1	1	
1982	80,895	127,395	39,322	24,056	1,938	273,606	78,670	352,276	332,540
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	92,863	545,081	516,214
1095 2nd atr	251 002	150 916	52 409	37.063	2 131	503 624	102 664	606 288	577 457
3rd "	273 513	165 217	52,400	36 546	2,457	530 132	102,004	636 146	609 644
4th "	294 961	150 814	59 693	36 418	2 437	544 323	120 286	664 609	639 252
1986 1st atr	306.585	153.074	61.003	35.424	2,370	558.457	131.536	689.993	666,135
2nd "	335.811	154.261	61,274	36.205	2.386	589.937	120.596	710.533	686,190
3rd "	359.337	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	130,954	775,965	750,698
1987 – 1st gtr	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	135,267	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	861,914
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	86,782	41,258	2,706	803,278	135,601	938,878	913,128
3rd "	464,710	239,400	87,969	42,715	2,722	837,517	138,858	976,374	953,376
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	96,899	44,588	2,749	893,938	139,904	1,033,843	1,011,763
2nd "	501,708	262,129	98,247	47,660	2,807	912,551	133,209	1,045,760	1,024,391
3rd "	522,412	273,266	100,019	48,615	2,842	947,154	133,939	1,081,093	1,060,698
4th "	534,969	284,976	110,237	52,887	2,847	985,916	147,474	1,133,390	1,111,482
1990–1st qtr	540,867	299,333	112,898	55,101	2,904	1,011,103	147,154	1,158,257	1,136,188
1990 - June	574 462	302 313	113 716	56 631	2 008	1 050 120	126 564	1 176 684	1 154 780
	569.375	300.642	114,135	55,741	3.024	1.042.915	134,731	1,177,646	1 159 099
Αμα	579.788	303.793	113.609	56.259	3.068	1.056.517	131.360	1.187.877	1,169 448
Sept.	588.423	313.184	114.495	54.786	3.091	1,073.978	131.858	1,205.837	1,189.009
Oct	597,716	319,474	115.544	55.530	3.130	1,091.394	138.700	1,230.095	1,212.443
Nov	604,640	320,119	113,540	55,062	3,187	1,096,548	150,797	1,247,345	1,230,570

Table a22.1

Monetary base

(billions of lire)

				SOURCES	<u> </u>		
			Trea	sury			
	Foreign sector	Total	of which: BI-UIC government securities	of which: Treasury overdraft with Bl	Memoran- dum item: undrawn overdraft facility	Refinancing	Other sectors
1096	10.557	100 605	72 005	50 707	5 054	1 1 1	9 400
1990	12,557	129,000	73,203	52,707	5,054	4,429	6,433
1997	19,313	140 722	71,713	66 212	1,101	3,699	-9,265
1988	45 221	140,722	70,302	69 155	4,341	3,009	-9,591
1909	45,251	140,010	74,409	66,155	1,000	4,072	11,348
1990 – Jan	47,695	143,800	85,644	54,129	19,171	8,536	-10,928
Feb	47,409	145,952	83,588	58,187	16,672	3,471	-11,648
Mar	51,585	146,463	71,996	69,966	4,953	3,439	13,052
Apr	53,812	143,621	66,195	73,064	1,877	3,423	-14,668
May	60,841	140,138	64,492	71,593	3,367	3,443	-15,448
June	67,008	126,241	68,324	53,209	21,779	4,133	-12,315
July	68,914	134,331	78,436	51,455	23,625	3,489	-13,966
Aug	69,535	131,007	71,803	55,233	19,905	3,503	-14,930
Sept	69,031	131,834	61,773	66,058	9,100	3,501	-15,844
Oct	66,695	138,683	62,773	71,654	4,914	3,468	-17,204
Nov	(61,753)	(150,677)	(68,071)	(78,394)	(-1,360)	(3,481)	(-17,210)
Dec	(60,671)	(147,504)	(72,313)	(71,063)	(6.266)	(6,142)	(-15,074)
1991 – Jan	(59,788)	(150,491)	(74,554)	(71,840)	(9,396)	(3,529)	(–15,160)

	Currency in o	circulation		Bank re	serves		
			Deposits with the	ne Bank of Italy			
	Total	of which: notes and coin		of which: compulsory reserves	Other	Total	Total monetary base
					ł	1	
1986	48,349	48,175	85,509	84,714	4,300	89,809	138,157
1987	52,730	52,613	94,465	93,455	4,908	99,373	152,103
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 – Jan	60,226	60,117	124,437	124,103	4,440	128,877	189,103
Feb	60,072	59,979	120,940	120,749	4,172	125,112	185,184
* Mar	61,318	61,137	121,244	118,850	5,874	127,118	188,436
Apr	61,289	61,195	119,400	119,107	5,498	124,899	186,188
Мау	60,618	60,541	121,850	120,307	6,506	128,356	188,974
June	63,172	63,023	118,304	118,068	3,591	121,894	185,066
July	65,023	64,939	121,527	121,248	6,219	127,745	192,769
Aug	62,210	62,091	121,216	120,999	5,689	126,905	189,116
Sept	63,459	63,319	121,002	120,807	4,061	125,062	188,522
Oct	61,990	61,895	123,358	(123,259)	6,295	129,653	191,643
Nov	(63,334)	(63,274)	(129,902)	(125,507)	(5,465)	(135,367)	(198,701)
Dec	(70,480)	(70,356)	(123,727)	(125,491)	(5,036)	(128,763)	(199,243)
1991 – Jan	(66,199)	(66,062)	(128,527)	(128,338)	(3,923)	(132,450)	(198,648)

Table a22.2

Monetary base

(changes in billions of lire)

								Bank re	serves	·
							Deposits	with the Bl		
	Foreign sector	Treasury	Refinanc- ing	Other	Total	Currency in circulation		of which: compulsory reserves	Other	Total
						ſ			l	
1987	6,756	9,172	-729	-1,253	13,946	4,381	8,956	8,740	608	9,565
1988	10,947	2,748	-30	-707	12,957	4,450	8,770	9,444	-264	8,507
1989	14,971	6,346	1,203	-2,015	20,505	10,507	9,746	9,567	252	9,998
1990	(15,440)	(694)	(1,270)	(–3,727)	(13,679)	(2,793)	(10,746)	(13,026)	(140)	(10,885)
1990 – Jan	2,464	-3,010	3,665	420	3,539	-7,461	11,456	11,638	457	10,999
Feb	-285	2,152	-5,066	720	-3,919	-154	-3,498	-3,354	268	-3,765
Mar	4,176	512	-31	-1,404	3,252	1,245	305	-1,898	1,702	2,007
Apr	2,226	-2,843	-16	-1,616	-2,248	-29	-1,844	256	376	-2,219
Мау	7,029	-3,483	20	-781	2,786	-671	2,450	1,200	1,007	3,457
June	6,167	-13,897	689	3,133	-3,907	2,554	-3,547	2,239	-2,915	-6,461
July	1,906	8,090	-644	-1,650	7,702	1,851	3,223	3,180	2,628	5,851
Aug	622	-3,324	14	-964	-3,653	-2,813	311	-249	530	-840
Sept	-505	828	-2	-914	-594	1,249	-215	-192	-1,628	-1,843
Oct	-2,335	6,849	-33	-1,360	3,12 1	-1,470	2,356	2,452	2,234	4,591
Nov	(4,942)	(11,993)	(13)	(6)	(7,058)	(1,345)	(6,544)	(2,248)	(830)	(5,714)
Dec	(-1,082)	(–3,172)	(2,661)	(2,136)	(542)	(7,146)	(6,175)	(–16)	(429)	(6,604)
1991 – Jan	(–883)	(2,987)	(2,613)	(–86)	(–595)	(4,282)	(4,800)	(2,847)	(-1 ,113)	(3,687)

Monetary base financing of the Treasury (billions of lire)

				(Dittions of	<i></i>				
				Net sales of	f securities	· · · · · · · · · · · · · · · · · · ·			
			Primary market		Open i	market			
	Borrowing requirement	Treasury bills	Treasury credit certificates	Other		of which: repurhase agreements	Total	Other forms of non-mone- tary financing	Monetary financing
1007	114.050	10.252	21 207	00.160	14.004	4 140	84 705	00.254	0.170
1987	114,250	-19,353	-31,207	-20,160	-14,004	4,140	-84,725	-20,354	9,172
1988	125,643	-29,045	9,596	-/3,933	-10,601	-1,066	-103,983	-18,912	2,748
1989	133,857	-36,296	-18,757	-40,730	-2,106	3,941	-97,890	-29,621	6,346
1990	(146,166)	(–39,337)	(–59,322)	(–16,099)	(2,133)	2,769	(–112,625)	(–32,847)	(694)
1990 – Jan	4,641	-2,381	-2,933	-80	11,166	13,594	5,772	4,141	-3,010
Feb	12,126	-3,683	-1,940	-252	-1,875	-3,518	-7,750	-2,224	2,152
Mar	18,166	4,783	4,374	3,305	-11,992	-12,251	-17,844	190	512
Apr	17,202	-5,826	-9,745	3,817	-4,539	-3,386	-16,294	3,751	-2,843
May	14,600	-1,485	-11,713	-3,503	764	404	-17,465	-618	-3,483
June	-9,089	-329	0	-3,920	1,912	5,219	-2,337	-2,471	-13,897
July	6,213	1,165	-2,626	-1,509	11,819	9,776	6.519	-4.642	8.090
Aug	10,953	-1,793	-4,377	400	-7,187	-9,574	-12,957	-1,32 1	-3,324
Sept	18,995	-6,265	4,300	4,636	-11,188	-4.673	-17,118	-1,050	828
Oct	24,328	-6.078	-7,427	-2.893	1,597	-823	-14.801	-2.678	6.849
Nov	(18,796)	(-3,111)	(-6,148)	(-8,189)	(9.950)	7.489	(-7.499)	(696)	(11.993)
Dec.	(18,517)	(-2,438)	(-3.739)	(-7.910)	(3,235)	512	(-10.852)	(-10,837)	(-3 172)
1991 – Jan	(5,500)	(-1,092)	(-212)	(-6,151)	(5,252)	5,041	(-2,203)	(-310)	(2,987)

BI-UIC operations in government securities

(billions of lire)

	1						
	Primary	market		Open r	narket		
]			of which:	repurchase agre	ements	
	Subscriptions	Redemptions	Total	Financing of subscriptions	Other purchases	Sales	Variations in BI-UIC portfolio
	[1]		1	
			٦	Freasury bills			
1987	31,838	26,021	-10,332	-1,035	501	0	-4,515
1988	24,012	16,783	-12,503	614	254	0	-5,274
1989	18,887	15,406	6,464	1,342	0	0	2,983
1990	(15,750)	(10,444)	(775)	-49	1,283	0	(6,080)
1990 – Jan.	0	20	-2,313	-1,826	783	0	-2,332
Feb	1,400	1,606	-14	479	-403	0	-221
Mar	2,200	2,318	-2,405	-723	380	0	-2,523
Apr	1,000	1,076	246	910	0	0	170
Мау	0	30	-705	910	0	0	-735
June	2,300	355	2,409	1,170	25	0	4,354
July	1,300	1,591	2,088	-20	730	0	1,797
Aug	1,450	704	-1,271	-900	-465	0	-525
Sept	500	515	-3,104	653	-290	0	-3,119
Oct	0	328	100	813	0	0	-428
Nov	850	328	2,435	305	560	0	2,957
Dec	(4,750)	(1,573)	(3,509)	1,626	723	0	(6,686)
1991 – Jan	(900)	(2,204)	(2,432)	-2,021	-350	0	(-3,736)
			Treasu	y credit certif	icates		
1987	5,868	2,108	2,590	0	-2,415	0	1,169
1988	2,594	733	3,251	0	237	37	5,112
1989	2,161	2	2,061	0	2,725	383	4,220
1990	(1,230)	(6,216)	(–7,086)	0	-513	-420	(-12,072)
1990 – Jan.	0	0	9,278	0	10,777	-420	9,278
Feb	15	0	-2,652	0	-2,368	0	-2,636
Mar	25	0	-8,457	0	8,256	398	-8,433
Apr	30		-4,970	0	-3,115	1,106	-4,940
May	17	0	410	0	305	-1,034	426
June	0	0	189	0	3,247	370	189
Juły	14	152	5,372	0	5,607	-100	5,234
Aug	41	244	-5,685	0	-5,406	275	-5,888
Sept	956	128	6,101	0	-3,703	145	-5,273
Oct	38	64	225	0	50	-40	199
Nov	21	3,814	4,399	0	5,669	705	605
Dec	(73)	(1,812)	(907)	0	-3,220	-1,085	(–832)
1991 – Jan	(14)	(1,476)	(6,070)	0	5,438	0	(4,608)

Table a23 cont.

BI-UIC operations in government securities

(billions of lire)

	Primary r	market		Open	market		
				of which:	repurchases agr	eements	
i i	Subscriptions	Redemptions	Total	Financing of subscriptions	Other purchases	Sale	Variations in BI-UIC portfolio
			Other ge	wornmont.co	writion		
4007	5 70 4	0.400		weinnent set	unues	•	0.400
1987	5,704	2,429	-1,081	-	-189	0	2,193
1988	4,777	4,294	-1,349	_	-398	50	-007
1989	2,042	(0,777)	(9,444)	-	1 579	50	3,200 (2,916)
1990	(4, 149)	(0,777)	(0,444)	_	1,576		(3,010)
1990 – Jan.	633	625	4,201	-	3,390	-50	4,210
Feb	272	261	791	-	1,226	0	802
Mar	695	201	-1,129	-	-2,394	100	~636
Apr	49	1,264	185	-	-50	25	-1,030
Мау	577	1,502	469	-	-50	-25	-1,395
June	13	38	~686	_	307	-100	-712
July	988	2,265	4,359	-	3,359	. 0	3,082
Aug	229	218	231	_	-2,328	200	-220
Sept	460	114	-1,983	—	-1,338	-150	-1,637
Oct	125	368	1,472	-	50	50	1,229
Nov	56	1,436	3,116	-	1,610	-50	1,735
Dec	(53)	(484)	(–1,181)	-	248	-50	(–1,612)
1991 – Jan	(18)	(263)	(1,614)	-	2,074	100	(1,369)
				TOTAL			
1987	43.410	30.558	-14.004	-1.035	3.105	0	-1.152
1988	31.383	21.811	-10.601	614	415	37	-1.029
1989	23,091	16,540	-2,106	1,342	3,032	433	4,445
1990	(21,129)	(25,437)	(2,133)	49	2,348	470	(-2,175)
1990 – Jan.	633	644	11.166	-1.826	14.950	470	11,155
Feb	1.687	1.867	-1.875	479	-3.997	0	-2.055
Mar	2,919	2.519	-11.992	-723	-11.030	498	-11.592
Apr	1,078	2,340	-4,539	910	-3.165	1.131	-5.801
May	593	1,532	764	910	255	-1.059	-1.703
June	2,313	393	1,912	1,170	3,579	470	3,831
July	2,302	4,008	11,819	20	9,696	-100	10,112
Aug	1,721	1,166	-7,187	-900		475	6,632
Sept	1,916	758	-11,188	653	-5,331	5	-10,030
Oct	163	760	1,597	813	0	10	1,000
Nov	927	5,578	9,950	305	7,839	655	5,298
Dec	(4,876)	(3,869)	(3,235)	1,626	-2,249	-1,135	(4,242)
1991 – Jan	(932)	(3,943)	(5,252)	-2,021	7,162	100	(2,241)

Bank of Italy repurchase agreements

			Maturity	(days)	Yie	lds
	Amount offered	Amount taken up	Minimum	Maximum	Minimum	Weighted average
		J				
1989 – 4 Dec.	4.000	3.813	3	9	10.75	11 18
1989 – 5 "	4.000	4.000	2	7	11.95	12.15
1989 – 11 "	1.000	1.000	7	7	13.05	13.05
1989–15 "	2,000	2,000	6	7	13.35	13.66
1989–27 "	3,500	3,500	2	6	13.45	13.80
1990-17 Jan.	2,000	2,000	28	28	13.05	13.24
1990–23 "	2,000	2,000	22	23	13.10	13.25
1990 – 24 "	8,000	8,000	1	22	11.00	12.80
1990–25 "	6,000	6,000	13	19	11.90	12.28
1990 – 2 Feb.	2,000	2,000	10	10	12.10	12.64
1990 – 7 "	2,500	2,500	20	22	12.70	12.92
1990–12 "	2,500	2,500	3	17	12.75	13.01
1990–13 "	1,250	1,250	6	16	12.80	13.06
1990–14 "	2,500	2,500	6	8	12.75	13.11
1990–23 "	4,500	4,500	6	21	12.75	12.97
1990–26 "	6,000	5,340	2	21	11.55	12.29
1990–19 Mar.	2,000	2,000	2	14	12.95	13.15
1990–26 "	2,000	2,000	2	7	12.95	13.17
1990-18 May	1,250	1,250	3	14	13.25	13.39
199024 "	1,000	1,000	6	7	12.05	12.22
1990–25 "	1,750	1,750	5	6	12.00	12.17
1990 – 4 June	6,000	5,220	9	10	10.55	11.71
1990 – 5 "	7,000	5,680	2	8	9.00	10.78
1990–12 "	1,000	1,000	1	8	10.50	10.51
1990–14 "	4,000	4,000	5	7	9.85	10.27
1990–25 "	5,500	5,085	1	16	9.50	10.39
1990 – 3 July	2,000	2,000	3	10	10.50	10.62
1990 – 5 "	4,000	4,000	6	7	9.25	9.81
1990–24 "	8,000	8,000	13	16	9.30	9.55
1990–25 "	5,000	5,000	7	16	9.25	9.43
1990 – 6 Aug.	2,000	2,000	11	11	9.25	9.39
1990 – 8 "	1,000	1,000	13	13	9.35	9.45
1990 – 9 "	3,500	3,500	12	25	9.25	9.38
1990–22 "	3,500	2,045	11	11	7.35	8.06
1990 – 27 "	6,000	5,827	2	7	8.05	8.56
1990 – 5 Nov.	1,500	1,500	8	8	11.00	11.47
1990–23 "	2,500	1,894	24	24	13.00	13.27
1990–26 "	3,000	3,000	21	21	13.15	13.36
1990–27 [°]	2,500	2,500	20	20	12.85	13.05
1990 – 5 Dec.	5,000	5,000	4	/	12.65	13.07
1990 – 2/	5,000	5,000	6	6	13.30	13.42
1991 - 23 Jan	4,000	4,000	27	27	12.20	12.39
1991–24 "	3,000	3,000	22	22	11.65	11.91
1991 – 25	6,500	5,268	1	1	11.15	11.60
1991 - 15 FeD	2,000	2,000	14	14	12.05	12.23
	4,000	4,000	10	10	12.25	12.43

Bank of Italy financing of purchases at Treasury bill auctions

(billions of lire)

	Maximum amount	Actual amount	Maturity (days)
		1	
1988 – 15 Nov.	 1,422	23	3
1988 – 30 "	 6,138	350	19
1988 – 15 Dec.	 1,159	148	5
1988-30 "	 9,226	728	3
1989–16 Jan.	 3,004	238	4
1989-30 "	 11,154	580	14
1989-14 Feb.	 3,614	782	3
1989–28 "	 6,884	966	2
1989 – 15 Mar.	 1,438	65	6
1989–15 May	 2,801	50	3
1989-30 "	 6,938	80	2
1989 – 15 June	 2,175	115	1
1989-30 "	 8,367	1,146	3
1989–14 July	 1,499	105	5
1989–31 "	 8,498	1,048	4
1989-16 Aug.	 3,163	760	2
1989–31 "	 7,891	605	5
1989 – 15 Sept.	 2,781	90	3
1989-29 "	 9,608	1,021	4
1989-16 Oct.	 3,145	620	2
1989–31 "	 9,011	710	2
1989-30 Nov.	 8,030	155	1
1989-15 Dec.	 2,880	558	7
1989–29 "	 3,601	2,070	4
1990–15 Jan.	 3,747	885	8
1990 30 "	 11,772	269	2
1990-14 Feb.	 4,396	628	7
1990–28 "	 9,265	723	1
1990-30 Apr.	 10,252	910	2
1990–15 May	 3,596	300	2
1990 – 15 June	 2,658	584	4
1990 – 28 "	 7,033	1,170	4
1990-16 July	 2,946	542	2
1990-31 "	 9,622	1,150	2
1990-16 Aug.	 3,268	55	5
1990–31 "	 8,172	250	3
1990 – 28 Sept.	 9,165	903	3
1990-15 Oct.	 4,175	87	2
1990-30 "	 10,216	610	3
1990-15 Nov.	 3,385	685	6
1990-30 "	 7,479	395	3
1990-14 Dec.	 2,187	782	7
1990-31 "	 8,536	2,005	2
1991-15 Jan.	 3,887	207	2
1991–30 "	 10,278	871	1
1991 – 14 Feb.	 3,916	477	4

Bank of Italy reverse repurchase agreements

			Maturity	(days)	Yiel	ds
	Amount offered	Amount taken up	Minimum	Maximum	Maximum	Weighted average
I	I	I		l	I	
1989 - 6 Oct	2 000	2 000	19	25	13.00	12 74
1989 - 11 *	1 750	1 750	14	20	12.00	12.74
1989 – 12 "	1,700	1,500	13	19	12.50	12.00
1989 - 13 "	1,550	1,300	12	18	12.00	12.40
1989 - 18 "	1,750	1,700	7	7	12.70	12.02
1989 – 3 Nov	1,500	1,000	12	12	11 70	11.33
1989	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 – 11 Jan	1,500	1,500	13	14	12.65	12 55
1990 – 7 Mar.	2.000	2,000	16	19	13.00	12.84
1990 – 12 "	2.500	2.500	7	11	12.80	12.69
1990 – 2 Apr.	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 – 2 May	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 2 Sept	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 – 1 Oct.	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 – 8 Nov	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 – 8 Jan	/50	/50	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	12.00	11.82
1991 - I Feb	2,000	2,000	4	4	10.00	14.15

Treasury bill auctions

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	M	laturing bill	s				Bills a	lotted at a	uction		Yie	eld
	Market	BI	Total	Bills offered	Maturity (days)	Market demand	Market	ВІ	Total	Price	Simple	Com- pound
			1	-		1	l					
						3-me	onth					
1990 – mid-Aug	3,275	225	3,500	3,000	91	4,252	3,000	0	3,000	97.32	11.05	11.51
end- "	8,247	209	8,456	9,500	91	11,247	9,500	0	9,500	97.28	11.21	11.70
mid-Sept	1,970	30	2,000	4,250	91	10,220	4,250	0	4,250	97.43	10.58	11.01
end- "	8,523	477	9,000	10,500	94	12,835	10,500	0	10,500	97.50	9.96	10.33
mid-Oct	2,980	20	3,000	4,000	92	5,520	4,000	0	4,000	97.36	10.76	11.20
end- "	11,276	224	11,500	12,500	92	12,609	12,500	0	12,500	97.25	11.22	11.70
mid-Nov	2,950	50	3,000	4,000	91	6,039	4,000	0	4,000	97.11	11.94	12.48
end- "	9,455	45	9,500	10,500	90	10,743	10,500	0	10,500	97.93	12.84	13.48
mid-Dec	4,030	220	4,250	5,250	90	5,855	4,950	300	5,250	97.82	13.32	14.00
end- "	10,201	299	10,500	12,500	88	15,311	12,500	0	12,500	97.88	13.36	14.05
1991 – mid-Jan	3,641	359	4,000	4,250	90	6,669	4,250	0	4,250	97.02	12.46	13.05
end- "	11,570	930	12,500	12,500	90	11,463	11,288	500	11,788	97.07	12.24	12.82
mid-Feb	3,895	105	4,000	4,250	90	5,181	4,250	0	4,250	96.95	12.76	13.39
						6-ma	onth					
1990 – mid-Aug	4,741	9	4,750	5,250	182	4,932	4,800	450	5,250	94.60	11.45	11.78
end- "	13.279	221	13,500	13,500	181	13.623	13,494	0	13,494	94.46	11.83	12.18
mid-Sept	4,250	0	4,250	4,500	181	7,091	4,500	0	4,500	94.49	11.76	12.11
end- "	13,000	0	13.000	14.000	182	19.091	13,999	0	13,999	94.53	11.60	11.94
mid-Oct.	4,750	0	, 4,750	5,750	182	6,673	5,750	0	5,750	94.57	11.52	11.85
end- "	13,975	25	14,000	15.000	182	16.285	15,000	0	15.000	94.60	11.45	11.78
mid-Nov	4,000	0	4,000	4,500	181	4,763	4,500	0	4,500	94.54	11.65	11.99
end- "	10,967	33	11,000	11,500	181	10,873	10,650	850	11,500	94.38	12.01	12.37
mid-Dec	3,910	90	4,000	4,750	182	3,444	3,255	1,300	4,555	94.11	12.55	12.95
end- "	12,536	964	13,500	14,250	179	11,901	11,309	2,750	14,059	93.93	13.18	13.62
1991 – mid-Jan	4,635	865	5,500	5,250	181	7,167	5,250	0	5,250	93.81	13.31	13.75
end- "	12,500	0	12,500	12,750	181	15,812	12,750	0	12,750	94.15	12.53	12.93
mid-Feb	4,748	502	5,250	5,500	183	5,544	5,499	0	5,499	94.05	12.62	13.02
						12-m	onth					
1990 — mid-Aua	1,980	20	2,000	2,500	365	2,914	2,500	0	2,500	89.25	12.04	
end- "	8.980	20	9.000	10.000	364	9.608	9.000	1.000	10.000	88.95	12 46	_
mid-Sept.	2,500		2,500	2,750	367	3,922	2,750	.,500	2,750	88.95	12.36	_
end- "	9,492	8	9,500	10,500	367	12.046	10.000	500	10,500	89.00	12 29	-
mid-Oct.	2.995	5	3.000	3.750	365	4.556	3.750	0	3.750	89.00	12.36	_
end- "	10.497	3	10,500	11,500	365	12,648	11,500	0	11,500	89.00	12.36	_
mid-Nov.	3.000	õ	3,000	3,500	364	3,784	3,500	õ	3,500	89.00	12.39	_
end- "	9,300	200	9,500	10,000	364	9,633	9,633	ů 0	9,633	88.90	12 52	_
mid-Dec.	1,750		1,750	2,500	367	2,669	2,300	200	2,500	88.55	12.86	_
end- "	10,500	ő	10,500	11,250	365	11,699	11.050	200	11,250	88 45	13.06	-
1991 – mid-Jan	4,230	20	4,250	4,500	365	5,388	4,100	400	4,500	88 40	13 12	_
	.,200		.,200	.,000	000	0,000	4,100	400	-,500	00.40	10.12	
end- "	13,750	0	13.750	13,750	365	14,540	13.750	0	13.750	88 55	12 93	_

Interest rates

	Rates on	BI loans			Yie	lds		
	Base	Actual on fixed term advances	Treasury bill 3-month	Treasury bill 6-month	Treasury bill 12-month	Treasury bill average	Treasury bonds	Bonds of industrial credit institutions
i]					1	ł	
1986	12 00	13.03	10.81	10.25	10.01	10.25	10.05	0.05
1987	12.00	12.37	11 64	11 66	11.39	11 55	10.00	11 10
1988	12.50	14.05	12.08	11.44	11.51	11.68	10.00	11.15
1989	13.50	14.74	13.50	13.37	13.04	13.32	12.30	12.08
1990 – Jan	13.50	14.21	12.97	12.99	12.90	12.95	12.28	11.83
Feb	13.50	14.44	12.74	12.63	12.77	12.71	12.41	12.03
Mar	13.50	13.50	13.28	13.02	13.12	13.13	12.43	12.15
Apr	13.50	-	12.73	13.00	13.12	12.94	12.20	12.11
May	12.50	14.21	12.02	11.91	12.29	12.05	11.97	12.18
June	12.50	12.62	11.07	11.28	11.77	11.37	11.32	12.07
July	12.50	12.86	11.54	11.58	11.90	11.66	11.26	11.69
Aug	12.50	13.00	11.65	12.08	12.37	12.03	11.79	12.02
Sept	12.50	-	10.53	11.98	12.31	11.60	11.60	12.05
Oct	12.50	12.50	11.58	11.80	12.36	11.89	11.58	11.92
Nov	12.50	13.35	13.20	12.26	12.49	12.65	11.69	12.00
Dec	12.50	14.16	14.04	13.47	13.03	13.56	11.96	12.29
1991 – Jan	12.50	13.04	12.88	13.17	12.97	13.01	12.04	12.28
				Bank rates				
		Lending in lire		Bank rates Deposi	it rates	Certificates	of deposit	
	ABI prime rate	Lending in lire Minimum	Average	Bank rates Deposi Maximum	t rates Average	Certificates 6-month	of deposit	Interbank rates
	ABI prime rate	Lending in lire Minimum	Average	Bank rates Deposi Maximum	it rates Average	Certificates 6-month	of deposit 12-month	Interbank rates
	ABI prime rate	Lending in lire Minimum	Average	Bank rates Deposi Maximum	t rates Average	Certificates 6-month	of deposit	Interbank rates
1986	ABI prime rate 13.00	Lending in lire Minimum 12.54	Average 13.93	Bank rates Deposi Maximum 10.69	t rates Average 7.61	Certificates 6-month 10.69	12-month	Interbank rates 11.51
1986 1987	ABI prime rate 13.00 13.00	Lending in lire Minimum 12.54 12.34	Average 13.93 13.79	Bank rates Deposi Maximum 10.69 9.81	t rates Average 7.61 6.94	Certificates 6-month 10.69 10.18	of deposit 12-month 10.34 10.29	Interbank rates 11.51 10.76
1986 1987 1988	ABI prime rate 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34	Average 13.93 13.79 13.67	Bank rates Deposi Maximum 10.69 9.81 9.62	t rates Average 7.61 6.94 6.77	Certificates 6-month 10.69 10.18 9.98	12-month 10.34 10.29 10.06	Interbank rates 11.51 10.76 11.73
1986 1987 1988 1989	ABI prime rate 13.00 13.00 13.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99	Average 13.93 13.79 13.67 14.18	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92	t rates Average 7.61 6.94 6.77 7.01	Certificates 6-month 10.69 10.18 9.98 10.75	12-month 12-month 10.34 10.29 10.06 10.54	Interbank rates 11.51 10.76 11.73 12.76
1986 1987 1988 1989	ABI prime rate 13.00 13.00 13.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99	Average 13.93 13.79 13.67 14.18	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92	t rates Average 7.61 6.94 6.77 7.01	Certificates 6-month 10.69 10.18 9.98 10.75	12-month 12-month 10.34 10.29 10.06 10.54	Interbank rates 11.51 10.76 11.73 12.76
1986 1987 1988 1989 1990 – Jan	ABJ prime rate 13.00 13.00 13.00 14.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01	Average 13.93 13.79 13.67 14.18 14.29	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 0.88	t rates Average 7.61 6.94 6.77 7.01 7.05 6.90	Certificates 6-month 10.69 10.18 9.98 10.75 10.77	12-month 12-month 10.34 10.29 10.06 10.54 10.56	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.00
1986 1987 1988 1989 1990 – Jan Feb	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 12.12	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.52	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 0.01	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81	12-month 12-month 10.34 10.29 10.06 10.54 10.56 10.58 10.58	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.05
1986 1987 1988 1989 1990 – Jan Feb Mar	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 12.13	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.82	12-month 12-month 10.34 10.29 10.06 10.54 10.56 10.58 10.63 10.63	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64
1986 1987 1988 1989 1990 – Jan Feb Mar Apr	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.13	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.54	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 0.06	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 7.07	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81	12-month 12-month 10.34 10.29 10.06 10.54 10.56 10.58 10.63 10.66 10.66	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64
1986 1987 1988 1989 1990 – Jan Feb Mar Apr May	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 13.25 12.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.46 14.54	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 0.54	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52	12-month 12-month 10.34 10.29 10.06 10.54 10.56 10.58 10.63 10.66 10.66 10.66	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.08
1986 1987 1988 1989 1990 – Jan Feb Mar Apr June June	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.20	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.46 14.18 14.29	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 0.55	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.54	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.66 10.66 10.46 10.46 10.48	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.79
1986 1987 1988 1989 1990 – Jan Feb Mar Apr May June July	ABJ prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.39	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.54 14.46 14.18 13.88 12.90	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 0.55	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.50	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.66 10.66 10.46 10.46 10.48 10.41	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72
1986 1987 1988 1989 1990 – Jan Feb Mar Apr May June June July Aug	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.39 12.35	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.54 14.54 14.46 14.18 13.88 13.80 13.21	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 9.55	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.58 6.58	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45 10.44	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.66 10.66 10.46 10.48 10.41 10.41	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72 11.60
1986 1987 1988 1989 1990 – Jan Feb Mar Apr June June July Aug Sept	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.39 12.35 12.31	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.54 14.54 14.54 14.8 13.88 13.80 13.81 12.07	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 9.55 9.55 9.55	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.58 6.63 6.63	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45 10.44 10.50	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.66 10.46 10.46 10.48 10.41 10.48 10.52	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72 11.60 10.90
1986 1987 1988 1989 1990 – Jan Feb Mar Apr May June July Sept Oct	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.39 12.35 12.31 12.19	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.54 14.46 14.18 13.88 13.80 13.81 13.67 12.01	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 9.55 9.55 9.55 9.58 9.60	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.58 6.63 6.65 6.65	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45 10.44 10.50 10.48	12-month 12-month 10.34 10.29 10.06 10.54 10.56 10.58 10.63 10.66 10.66 10.46 10.48 10.41 10.48 10.52 10.52	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72 11.60 10.90 10.45
1986 1987 1988 1989 1989 1990 – Jan. Feb. Mar. Apr. May. June July Aug. Sept. Oct. Nov. Doc	ABI prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00 13.00 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.03 12.65 12.39 12.35 12.31 12.19 12.20	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.46 14.53 14.54 14.46 14.18 13.88 13.80 13.81 13.67 13.61 12.77	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 9.55 9.55 9.55 9.58 9.60 9.60 9.60	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.58 6.63 6.65 6.66 6.70	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45 10.45 10.44 10.50 10.48 10.49	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.66 10.46 10.46 10.48 10.41 10.48 10.41 10.48 10.52 10.58	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72 11.60 10.90 10.45 10.94
1986	ABJ prime rate 13.00 13.00 13.00 14.00 14.00 14.00 14.00 14.00 14.00 14.00 13.25 13.00 13.00 13.00 13.00 13.00 13.00 13.00	Lending in lire Minimum 12.54 12.34 12.34 12.99 13.01 13.12 13.13 13.13 13.03 12.65 12.39 12.35 12.31 12.19 12.20 12.37 12.47	Average 13.93 13.79 13.67 14.18 14.29 14.46 14.53 14.54 14.46 14.53 14.54 14.46 14.18 13.88 13.80 13.81 13.67 13.67 13.61 13.77 12.00	Bank rates Deposi Maximum 10.69 9.81 9.62 9.92 9.87 9.88 9.91 10.00 9.96 9.54 9.55 9.55 9.55 9.55 9.55 9.58 9.60 9.60 9.60	t rates Average 7.61 6.94 6.77 7.01 7.05 6.99 7.01 7.07 7.01 6.54 6.56 6.58 6.63 6.65 6.66 6.73 6.83	Certificates 6-month 10.69 10.18 9.98 10.75 10.77 10.79 10.81 10.83 10.81 10.52 10.45 10.45 10.44 10.50 10.48 10.49 10.50	12-month 12-month 10.34 10.29 10.06 10.54 10.58 10.63 10.66 10.46 10.46 10.48 10.41 10.48 10.52 10.58 10.52 10.58 10.59 10.59 10.59	Interbank rates 11.51 10.76 11.73 12.76 12.85 12.92 13.06 12.64 12.32 11.98 11.72 11.60 10.90 10.45 10.94 12.39

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Principal assets and liabilities of banks

(billions of lire)

	ASSETS										
		Lo	ans		Securities						
					of which:	of which:					ĺ
	Bank reserves	in lire	in foreign currency		Treasury bills	Other govern- ment securities	Shares and equity interests	Bad debts	Interbank accounts	Accounts with special credit in- stitutions	Interest- bearing external assets
		ſ	I	1	I	ſ	1 I		ł	I	i
1986	88,557	245,735	28,523	214,764	27,802	113,354	11,640	21,105	97,121	8,861	77,871
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	116,823	374,248	52,935	200,395	22,171	112,658	19,599	26,166	104,171	10,420	100,608
1990 – Jan	127,674	379,638	53,506	161,139	11,247	86,162	19,426	26,703	75,191	9,136	83,258
Feb	124,150	376,012	55,461	155,924	11,270	81,971	19,381	26,851	66,833	8,507	82,269
Mar	125,914	368,308	57,146	163,040	15,146	86,161	19,339	26,545	72,872	7,871	87,386
Apr	123,960	373,764	58,086	171,675	20,147	90,403	19,737	26,963	66,115	7,993	85,980
May	127,266	378,594	60,675	168,853	14,479	92,965	19,736	27,174	71,920	7,964	89,921
June	121,156	383,619	61,409	166,642	16,342	89,556	20,204	27,231	70,077	8,720	96,859
July	126,478	396,986	61,126	152,215	14,455	79,473	20,064	27,579	63,391	8,081	86,769
Aug	125,661	387,540	60,291	160,215	16,455						
Sept	123,865	383,214	61,503	174,215	19,955						
Oct	128,418	397,716	60,207	173,315	23,855						
Nov	134,085	410,240	58,721	164,715	22,355						
Dec	127,566	438,240	58,321	186,915	23,255						
1991 – Jan	131,196	434,640	57,571	147,915	7,255			••••			

	Deposits	of which: current accounts	of which: CDs	Resi- dents' foreign currency accounts	Funds managed for public bodies	Loans from BI-UIC	Interbank accounts	Accounts with special credit institu- tions	Capital and reserves	Interest- bearing external liabilities	Other items	
	1	1	1	1					I —			
1986	496,101	277,188	21,465	1,328	3,521	4,412	108,168	5,109	61,799	99,322	14,416	
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	2,908	
1990 – Jan	603,878	335,521	92,832	2,927	1,557	9,956	81,609	6,656	96,709	138,215	-5,835	
Feb	594,871	327,211	96,784	3,302	1,547	4,890	75,646	6,337	95,990	139,324	-6,519	
Mar	598,021	329,631	99,786	3,066	1,528	4,866	82,302	6,816	95,015	143,962	-7,156	
Apr	606,019	337,237	100,944	3,212	1,571	4,844	74,969	6,240	93,988	139,637	3,792	
May	595,529	326,897	103,561	3,099	1,567	4,868	78,622	5,474	93,957	147,248	21,739	
June	606,867	336,386	105,961	3,372	1,534	5,560	78,447	6,386	94,221	149,931	9,597	
July	607,704	335,414	107,965	3,434	1,573	4,907	70,618	5,408	94,492	143,564	10,989	
Aug	606,088	331,171	109,240			4,921						
Sept	620,288	342,152	111,326			4,921						
Oct	628,133	345,003	116,923			4,910						
Nov	624,695	339,302	119,016			4,926						
Dec	684,195	388,102	119,916			7,584						
1991 – Jan	652,995	357,702	124,716			4,980						

Principal assets and liabilities of the special credit institutions (billions of lire)

	ASSETS												
	Cash and liq	uid assets		Loans				Securities		Foreign	activity		
	of which: interbank deposits		Total	of which: industrial	of which: real estate	On behalf of the Treasury	Total	of which: Treasury bills	of which: other govern- ment securities		of which: buyer credits		
	I	ļ		I	I			I	1				
1985	4,087	4,601	137,435	73,771	36,096	7,145	19,099	906	15,535	4,322	3,543		
1986	4,470	4,574	154,781	84,858	40,823	6,089	16,555	678	13,833	3,858	2,961		
1987	5,045	5,159	175,788	95,796	48,913	5,036	15,499	797	9,614	5,848	4,064		
1988	5,340	5,461	202,951	110,913	58,095	3,879	17,188	887	11,447	6,295	4,123		
1989 – Dec	4,947	5,099	238,558	136,277	68,353	2,791	14,146	590	9,120	9,681	4,344		
1990 – Jan	5,813	5,875	240,069	137,060	68,923	2,238	14,713	410	9,011	9,681	4,249		
Feb	5,687	5,736	244,380	139,834	70,107	2,238	15,158	436	8,976	9,681	4,262		
Mar	5,851	6,227	248,072	142,221	71,285	2,238	13,650	410	7,831	9,524	4,679		
Apr	5,918	5,973	250,399	143,471	72,304	2,238	13,477	478	7,599	9,524	4,698		
May	5,375	5,825	253,596	145,459	73,524	2,238	13,970	332	8,056	9,524	4,750		
June	5,404	5,768	253,626	145,877	73,701	1,757	15,619	361	9,467	9,282	4,993		
July	5,156	5,335	258,260	148,808	75,164	1,757	17,242	836	10,089	9,282	4,905		
Aug	5,597	5,748	261,490	150,196	75,917	1,757	16,897	523	10,299	9,282	4,995		
Sept	5,709	5,831	262,835	150,103	76,839	1,757	17,523	893	11,024	10,259	5,199		
Oct	6,055	6,179	266,787	152,005	78,377	1,757	16,632	747	10,226	10,259	5,222		
Nov	4,650	4,773	270,202	153,641	79,794	1,757	17,647	1,025	10,951	10,259	5,248		
Dec			(278,040)	(159,100)	(80,920)								

	LIABILITIES										
	Certificates	of deposits		Bonds	-			:			
	of which: maturing within 24 months		Total	of which: industrial	of which: real estate	Bonds on behalf of the Treasury	Interbank current accounts	Public funds and <i>Medio- credito</i> <i>centrale</i>	Foreign liabilities	Capital and reserves	Other
		i I		I	I	I			Ι.		
1985	18,046	25,549	95,022	37,736	36,192	7,145	6,010	7,886	21,978	18,105	-9,093
1986	20,837	28,258	102,193	41,234	39,693	6,089	5,779	9,245	24,210	21,225	-11,144
1987	24,375	30,878	113,681	46,137	45,944	5,036	6,104	10,575	29,959	23,609	-12,511
1988	33,376	43,837	121,239	47,574	51,720	3,949	6,656	11,451	36,528	25,957	-13,842
1989 - Dec	38,164	52,804	129,378	51,209	56,957	2,863	8,016	13,043	52,681	28,365	-16,875
1990– Jan	38,350	53,190	128,521	50,080	57,217	2,319	6,995	12,929	53,120	28,365	-12,863
Feb	39,478	54,758	129,814	50,077	58,024	2,305	6,681	12,851	53,850	28,365	11,431
Mar	40,365	56,345	129,981	50,067	58,167	2,262	6,427	12,790	56,511	29,117	-13,722
Apr	41,148	57,350	130,750	50,024	58,905	2,258	5,933	12,785	56,470	29,117	-13,053
Мау	42,115	58,660	131,346	50,016	59,490	2,258	6,118	12,760	58,024	29,117	-13,129
June	43,062	60,097	131,739	50,420	59,442	1,878	7,058	12,835	61,047	30,087	-18,689
July	43,635	60,894	131,250	49,759	59,641	1,878	6,623	12,790	62,446	30,087	-14,092
Aug	43,926	61,456	131,988	49,968	59,930	1,859	6,467	12,892	64,645	30,087	-14,220
Sept	44,200	62,198	132,785	50,015	60,282	1,761	5,777	12,805	66,101	30,342	-13,564
Oct	44,700	62,972	133,536	49,903	60,759	1,761	6,767	13,110	67,605	30,342	14,479
Nov	45,080	63,642	134,561	50,847	60,756	1,761	7,352	13,078	70,301	30,342	-16,399

Loans by branch of economic activity

(billions of lire; percentage changes)

December 1990

		BAN	KS		SPECIAL CRE		TINSTITUTIC	NS
	Enterp	rises	Prod house	ucer holds	Enter	prises	Prod house	lucer sholds
	Out- standing	12-month % change						
						Ι		I
Agricultural, forestry and fishery	0 779	16.3	5 434	14.2	7 699	27	4 915	10.7
Energy products	6 917	-21.6	49	36.1	6 934	29.7	10	42 9
Energy products	0,517	21.0	40	00.1	0,004	20.7	10	42.5
metals	7,704	-0.3	285	10.5	3,256	5.5	23	15.0
Non-metallic mineral products	7,774	20.8	1,541	12.1	3,595	15.6	192	12.3
Chemical products	8,916	-2.6	368	7.3	4,366	-4.0	38	15.2
Metal products except machinery and transport equipment	12,081	16.5	3,982	17.1	4,106	18.6	299	18.7
Agricultural and industrial machinery	13,756	10.1	1,742	15.1	8,219	7.2	335	7.0
Office and data processing machines;								
precision and optical instruments .	4,253	34.0	279	18.2	2,365	-4.4	25	78.6
Electrical goods	10,145	13.0	897	20.1	4,761	13.4	74	15.6
Motor vehicles	5,319	22.4	500	20.2	5,511	18.2	65	16.1
Food products, beverages and tobacco products	15,573	7.3	2,360	12.9	7,686	8.5	484	17.2
Textiles, leathers, footwear and clothing	23,877	13.1	5,147	13.5	4,644	9.6	401	21.5
Paper, products of printing and								
publishing	6,966	8.4	1,196	17.6	3,098	23.6	93	22.4
Rubber and plastic products	5,041	13.6	1,097	15.0	1,444	8.8	79	29.5
Other manufacturing products	8,347	16.4	3,624	14.1	2,167	8.7	347	18.4
Building and construction	31,666	23.5	10,313	16.3	21,409	5.6	2,791	8.9
Wholesale and retail trade	51,541	16.1	22,196	14.8	9,686	21.8	3,926	22.4
Lodging and catering services	3,672	40.7	2,863	25.8	3,117	18.0	1,644	23.8
Inland transport services	5,232	11.0	2,383	15.1	12,643	27.2	135	23.9
Maritime and air transport services .	1,290	23.9	50	19.0	1,903	4.8	16	11.1
Auxiliary transport services	2,133	26.1	263	12.4	2,124	17.9	39	25.8
Communication services	549	-3.2	15	50.0	9,383	17.4	1	
Other market services	28,822	35.4	5,429	20.9	14,269	33.9	1,315	30.8
TOTAL BORROWINGS	271,352	15.2	72,013	15.8	144,308	14.4	17,147	16.5
TOTAL FACILITIES GRANTED	506,978	6.9	97,661	14.4	192,740	17.6	18,678	15.1

Italian investment funds:

(end-of-period balance sheet

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	LIRA SECURITIES										
		Government	securities								
		of which: Treasury bills	of which: Treasury credit certificates	of which: Treasury bonds	Bonds	Shares	TOTAL				
			I		i i		I I				
1986	35,841	1,075	7,373	26,419	5,142	17,885	58,868				
1987	31,569	1,989	3,558	24,150	5,254	13,561	50,384				
1988	22,292	1,528	3,962	15,533	4,672	13,958	40,922				
1989 – Dec 1990 – Jan	18,630 17,820	1,429 1,090	2,887 2,805	12,429 12,071	4,394 4,374	14,879 14,339	37,903 36,533				
Feb	17,179	924	2,407	12,289	4,295	13,516	34,990				
Mar	16,919	827	2,005	12,617	4,417	13,898	35,234				
Apr	19,293	1,052	2,100	14,462	4,320	14,472	38,085				
Мау	20,070	725	2,760	14,709	4,379	15,621	40,070				
June	21,043	601	2,679	15,758	4,355	15,709	41,107				
July	22,083	745	2,342	16,849	4,313	15,090	41,486				
Aug	20,826	764	1,796	16,306	4,138	13,226	38,190				
Sept	21,142	1,420	1,368	16,555	4,125	11,716	36,983				
Oct	22,401	1,680	1,351	17,372	4,030	11,639	38,070				
Nov	22,484	1,927	1,276	17,226	3,862	10,401	36,747				
Dec	23,259	2,168	1,487	17,354	3,844	10,815	37,918				

securities portfolios and net assets

values; billions of lire)

	lum items:	Memorand				cy securities	Foreign current
	Net sales	Gross sales	NET ASSETS	Totai portfolio	Other financial assets	of which: shares	
							1
	37,543	46,327	65,077	62,747	145	2,305	3,734
	61	17,525	59,454	56,505	624	2,608	5,497
1988	12,960	6,279	51,565	49,482	638	3,485	7,922
1989 – Dec.	-436	579	49,165	45,828	1,053	4,958	6,872
1990 – Jan.	-684	891	48,228	44,224	1,121	5,011	6,570
FeD.	-385 -250	1,144	46,554	42,068	1,180	4,556	5,898
	-123	1,144	47.656	44.358	1,250	4.065	5.006
May	-127	1,265	49,522	46,777	1,171	4,592	5,536
June	189	1,383	50,353	47,828	1,155	4,473	5,566
July	652	1,678	50,561	48,301	1,160	4,536	5,655
Aug.	407	1,315	48,120	44,410	1,124	4,017	5,096
Sept.	171	960	46,727	42,938	1,145	3,420	4,810
Oct.	578	1,591	47,725	44,360	1,173	3,667	5,117
Nov.	265	1,281	46,528	43,106	1,179	3,625	5,180
Dec.	138	1,108	47,379	44,459	1,138	3,892	5,403

Net issues of securities

(billions of lire)

	ISSUERS			INVESTORS						
	Public sector	Special credit insti- tutions	Public agencies and firms	Total bonds and govern- ment securities	BI-UIC	Deposits and Loans Fund	Banks	Invest- ment funds	Other	Shares
1985	94,309	5,178	2,195	101,682	8,910	504	28,937	(11,656)	51,676	12,220
1986	88,043	6,805	6,071	100,919	7,911	830	7,427	27,723	57,029	18,872
1987	58,146	11,012	4,038	73,195	1,420	485	10,459	-3,845	64,677	10,432
1988	61,837	7,966	709	70,512	4,229	252	-8,122	-8,961	83,115	9,697
1989	65,547	8,205	35	73,786	7,957	6	9,660	-3,853	79,348	18,370
1990	76,048	(6,265)	-2,931	(79,383)				3,303		(16,036)
1988 – 4th qtr	24,735	1,573	-70	26,239	3,462	-116	8,907	-361	14,346	3,940
1989–1st qtr	5,970	237	-1,028	5,178	-1,826	-120	-12,800	-3,078	23,002	1,852
2nd "	18,189	3,353	675	22,217	6,396	203	-5,880	-435	21,933	2,441
3rd "	19,645	2,071	-21	21,695	-3,412	182	20	480	24,789	5,139
4th "	21,743	2,544	408	24,696	6,798	93	9,000	-820	9,624	8,937
1990 - 1st qtr	10,693	1,766	-628	11,831	2,587	-180	-30,310	-1,218	40,952	(4,042)
2nd "	25,872	1,644	262	27,778	-7,459	48	2,460	3,948	28,878	(3,782)
3rd "	10,615	(1,329)	-1,606	(10,337)	4,661	221	(3,930)	-664	(11,953)	(5,140)
4th "	28,869	(1,526)	-958	(29,437)				(1,237)		(3,072)
1989 – Dec	5,837	455	603	6,895	1,713	-125	12,840	186	-7,347	4,455
1990 – Jan	3,232	-857	-689	1,686	13,485	-19	-28,320	-519	17,059	(1,753)
Feb	5,137	2,458	93	7,689	-1,839	-132	5,150	-545	15,354	(1,491)
Mar	2,324	165	-32	2,456	9,059	-30	3,160	-154	8,539	(797)
Apr	5,476	637	-170	5,944	5,990	5	3,630	1,973	6,335	(1,902)
May	16,473	615	504	17,592	969	-12	2,960	1,117	14,496	(567)
June	3,923	392	-72	4,243	500	-31	-4,130	858	8,046	(1,313)
July	4,741	-555	-1,480	2,706	8,365	-173	-12,570	836	6,248	(4,061)
Aug	4,849	595	-103	5,341	-6,114	-10	(6,000)	-1,096	(6,561)	(401)
Sept	1,025	(1,289)	-24	(2,290)	-6,912	-38	(10,500)	-404	(—856)	(678)
Oct	10,042	(557)	-113	(10,486)	1,397	-39	(4,800)	893	(13,035)	(1,485)
Nov	9,122	(886)	-228	(8,008)	2,314	-17	(-7,100)	(–102)	(12,914)	(1,043)
Dec	9,705	(1,855)	-618	(10,942)				(446)		(545)

Table a33

Issue conditions of government securities

ABI number Maturity Date of issue Price at issue gross net Amount taken up (lire bn.) Spread gross ne Treasury credit certificates 13084 CCT 1.7.95 3.7.90 100.00 12.90 11.19 11,500 0.50 6.30 5.5	net 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125	gross 6.30 6.30 6.30 6.30	Spread 0.50 0.50	Amount taken up (lire bn.)	net	gross	Price at issue	Date of	faturity	M	ABI number
Treasury credit certificates 13084 CCT 1.7.95 3.7.90 100.00 12.90 11.19 11,500 0.50 6.30 5.5	5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125	6.30 6.30 6.30 6.30	0.50	ates				issue			
13084 CCT 1.7.95 3.7.90 100.00 12.90 11.19 11,500 0.50 6.30 5.5	5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125 5.5125	6.30 6.30 6.30 6.30	0.50 0.50		edit certifica	Treasury cr				I	
	5.5125 5.5125 5.5125 5.5125 5.5125 5.5125	6.30 6.30 6.30	0.50	11,500	11.19	12.90	100.00	3.7.90	1.7.95	сст	13084
13085 CCT 1.9.95 3.9.90 97.30 14.29 12.47 9,038 0.50 6.30 5.5	5.5125 5.5125 5.5125 5.5125 5.5125	6.30 6.30		9,038	12.47	14.29	97.30	3.9.90	1.9.95	ССТ	13085
13089 CCT 1.10.95 2.10.90 99.00 13.57 11.79 9,000 0.50 6.30 5.5	5.5125 5.5125 5.5125 5.5125	6.30	0.50	9,000	11.79	13.57	99.00	2.10.90	1.10.95	ССТ	13089
13090 CCT 1.11.95 2.11.90 99.20 13.60 11.82 8,500 0.50 6.30 5.5	5.5125 5.5125 5.5125		0.50	8,500	11.82	13.60	99.20	2.11.90	1.11.95	сст	13090
13092 CCT 1.12.95 3.12.90 98.10 14.14 12.31 6,000 0.50 6.30 5.5	5.5125	6.30	0.50	6,000	12.31	14.14	98.10	3.12.90	1.12.95	ССТ	13092
13093 CCT 1.1.96 7.1.91 98.40 14.55 12.67 5,500 0.50 6.30 5.5	5 5125	6.30	0.50	5,500	12.67	14.55	98.40	7.1.91	1.1.96	ССТ	13093
13095 CCT 1.2.96 1.2.91 98.25 14.35 12.50 7,000 0.50 6.30 5.5	0.0120	6.30	0.50	7,000	12.50	14.35	98.25	1.2.91	1.2.96	ССТ	13095
Yield at Coupon		ipon	Cou		Yield at issue						
ABI number Maturity Date of issue gross net Amount taken up (lire bn.) gross net	-	net	gross	Amount taken up (lire bn.)	net	gross	Price at issue	Date of issue	A aturity	N	ABI number
	-		ſ	1						l	
Treasury bonds					ary bonds	Treasu					
12666 BTP 1.5.94 2.5.90 96.60 14.08 12.27 5,500 6.25 5.4685		5.4685	6.25	5,500	12.27	14.08	96.60	2.5.90	1.5.94	BTP	12666
12667 BTP 1.6.94 1.6.90 98.80 13.29 11.55 2,500 6.25 5.4685		5.4685	6.25	2,500	11.55	13.29	98.80	1.6.90	1.6.94	BTP	12667
12668 BTP 1.6.97 1.6.90 97.50 13.46 11.70 1,500 6.25 5.4685		5.4685	6.25	1,500	11.70	13.46	97.50	1.6.90	1.6.97	BTP	12668
12669 BTP 16.6.97 18.6.90 98.50 13.50 11.74 7,500 6.25 5.4685		5.4685	6.25	7,500	11.74	13.50	98.50	18.6.90	16.6.97	BTP	12669
12670 BTP 1.7.94 2.7.90 99.50 13.06 11.34 10,500 6.25 5.4685		5.4685	6.25	10,500	11.34	13.06	99.50	2.7.90	1.7.94	BTP	12670
12671 BTP 1.9.94 4.9.90 96.30 14.23 12.42 10,419 6.25 5.4685		5.4685	6.25	10,419	12.42	14.23	96.30	4.9.90	1.9.94	BTP	12671
12672 BTP 1.11.94 2.11.90 98.05 13.56 11.78 6,000 6.25 5.4685		5.4685	6.25	6,000	11.78	13.56	98.05	2.11.90	1.11.94	BTP	12672
12673 BTP 1.11.97 5.11.90 94.75 14.17 12.36 6,500 6.25 5.4685		5.4685	6.25	6,500	12.36	14.17	94.75	5.11.90	1.11.97	BTP	12673
12674 BTP 1.1.96 4.1.91 96.30 14.02 12.21 5,000 6.25 5.4685		5.4685	6.25	5,000	12.21	14.02	96.30	4.1.91	1.1.96	BTP	12674
12675 BTP 1.1.98 8.1.91 94.15 14.35 12.53 7,500 6.25 5.4685		5.4685	6.25	7,500	12.53	14.35	94.15	8.1.91	1.1.98	втр	12675
Yield at Coupon	upon	Cou			d at ue	Yiel					
ABI number Maturity Date of Price at issue gross net Amount Lira/ecu (ecu mill.) rate gross net at issue gross net	net	gross	Lira/ecu exchange rate at issue	Amount taken up (ecu mill.)	net	gross	Price at issue	Date of issue	A aturity	N	ABI number
Treasury certificates in ecus	1		I	ecus	tificates in	 [reasury cer	ייין ד			1	
13062 CTE 26.10.94 26.10.89 100.00 10.14 8.88 1.000 1.505.22 10.15 8.6	8.8810	10.15	1,505.22	1.000	8.88	10.14	100.00	26.10.89	26.10.94	CTE	13062
13066 CTE 22.11.94 23.11.89 100.00 10.70 9.36 1,000 1,501,85 10.70 9.3	9.3625	10.70	1,501,85	1,000	9.36	10.70	100.00	23.11.89	22.11.94	CTE	13066
13071 CTE 24.1.95 25.1.90 100.00 11.15 9.76 1,000 1,515,83 11.15 9.7	9.7560	11.15	1,515,83	1,000	9.76	11.15	100.00	25.1.90	24.1.95	CTE	13071
13075 CTE 27.3.95 27.3.90 100.00 11.99 10.49 1,000 1,502,52 12.00 10.5	10.5000	12.00	1,502,52	1,000	10.49	11.99	100.00	27.3.90	27.3.95	CTE	13075
13081 CTE 29.5.95 29.5.90 100.00 11.54 10.10 750 1,510,05 11.55 10.1	10.1060	11.55	1,510,05	750	10.10	11.54	100.00	29.5.90	29.5.95	CTE	13081
13087 CTE 26.9.95 26.9.90 101.15 11.57 10.10 2,500 1,543,10 11.90 10.4	10.4125	11.90	1,543,10	2,500	10.10	11.57	101.15	26.9.90	26.9.95	CTE	13087

Treasury credit certificates, Treasury certificates in ecus, Treasury discount certificates, index-linked Treasury certificates, Treasury bonds and investment funds

		E	pected yield	ds		Total return indices					
	Treasury credit certifi- cates	Treasury certifi- cates in ecus	Treasury discount certifi- cates	Index- linked Treasury certifi- cates	Treasury bonds	Treasury credit certifi- cates	Treasury certifi- cates in ecus	Treasury discount certifi- cates	Index- linked Treasury certifi- cates	Treasury bonds	Invest- ment funds
		l	í I		ſ	ĺ	ſ	l.			
1985	14.68	9.88	_	4.61	13.78	226.18	162.52	_	101.12	126.89	117.10
1986	12.41	8.52		4.49	11.47	259.08	187.57		117.76	146.91	161.60
1987	10.66	8.44	-	4.57	10.52	289.14	207.29	-	132.34	163.43	169.68
1988	11.25	8.11	11.67	5.39	10.47	316.26	233.11	101.02	141.33	180.86	167.63
1989	12.71	9.32	12.96	6.65	11.58	348.83	238.78	108.48	148.24	198.46	189.77
1990	12.31	9.99	12.41	6.87	11.85	397.58	255.49	124.16	164.87	221.95	201.58
1988 4th qtr	11.66	8.30	11.74	5.88	10.65	328.23	238.85	103.57	142.61	187.39	176.90
1989–1st qtr	12.04	8.77	12.21	6.10	10.99	334.76	238.63	105.09	145.03	191.48	180.19
2nd "	12.61	9.51	13.08	6.27	11.54	343.31	236.10	106.08	148.02	195.63	184.85
3rd "	12.83	9.30	12.88	6.71	11.67	353.28	238.59	110.43	149.83	200.98	197.59
4th "	13.36	9.70	13.65	7.52	12.10	363.99	241.78	112.33	150.10	205.74	196.43
1990 – 1st qtr	12.99	9.94	13.39	7.82	12.22	376.31	245.54	116.2 1	153.24	211.50	199.79
2nd "	12.37	10.13	12.36	7.10	11.76	391.55	248.80	122.55	161.23	219.04	208.07
3rd "	11.79	9.97	11.77	6.45	11.60	405.41	259.30	127.40	168.88	225.71	204.42
4th "	12.08	9.93	12.14	6.12	11.81	417.03	268.31	130.49	176.13	231.57	194.06
1990 – Jan	13.14	9.94	13.12	7.75	12.12	371.79	245.03	115.90	152.06	209.74	200.83
Feb	12.93	9.85	13.47	7.95	12.26	375.87	246.22	115.81	152.63	211.40	198.72
Mar	12.90	10.04	13.58	7.76	12.29	381.28	245.38	116.93	155.03	213.36	199.81
Apr	12.86	10.12	13.02	7.27	12.11	386.88	246.11	119.96	158.87	215.97	203.22
Мау	12.55	10.21	12.53	7.30	11.91	391.0 7	247.79	122.23	160.36	218.67	207.55
June	11.69	10.07	11.53	6.74	11.27	396.70	252.50	125.46	164.46	222.48	213.43
July	11.52	9.87	11.35	6.29	11.26	402.60	256.75	127.23	168.02	224.56	213.45
Aug	11.87	9.83	11.94	6.64	11.81	404.39	259.50	126.89	168.08	224.97	202.29
Sept	11.98	10.21	12.04	6.43	11.74	409.24	261.66	128.09	170.53	227.59	197.53
Oct	11.88	10.14	11.97	5.99	11.67	413.73	265.18	129.46	174.04	229.84	195.88
Nov	11.96	9.91	11.93	6.05	11.75	417.54	268.66	130.97	176.10	231.85	192.45
Dec	12.40	9.75	12.52	6.31	12.00	419.82	271.08	131.03	178.24	233.03	193.84
1991 – Jan	12.61	9.73	12.60	6.25	12.13	424.10	273.01	132.46	180.37	235.05	191.97

Liquid assets held by the non-state sector

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		End-of-perio	od amounts		Percentage changes				
	M 1	M2A	M2	МЗ	M1	M2A	M2	МЗ	
	1				- 1	ł			
1982	212,029	398,642	398,642	472,249	17.1	18.3	18.3	18.4	
1983	239,210	444,264	447,521	536,580	12.8	11.4	12.3	13.6	
1984	269,575	495,010	502,557	613,241	12.7	11.4	12.3	14.3	
1985	297,951	545,205	558,514	684,579	10.5	10.1	11.1	11.6	
1986	331,039	590,655	612,120	742,069	11.1	8.3	9.6	8.4	
1987	357,151	632,795	664,762	828,394	7.9	7.1	8.6	11.6	
1988 – Nov	348,928	619,366	674,134	881,766	6.5	5.0	8.6	12.1	
Dec	386,038	667,746	723,675	931,290	8.1	5.5	8.9	12.4	
1989 – Jan	363,562	644,618	708,120	930,386	6.7	5.1	8.9	13.3	
Feb	358,671	636,425	704,253	935,316	7.4	5.9	9.8	14.1	
Mar	362,212	639,096	711,120	942,551	8.0	6.5	10.6	14.2	
Apr	370,739	647,159	721,839	958,715	9.0	7.0	11.3	15.5	
May	361,227	636,031	713,137	954,112	7.2	5.9	10.3	14.9	
June	374,733	647,631	726,802	964,18 1	9.1	6.5	10.9	14.7	
July	378,693	654,409	734,872	972,162	7.9	5.7	10.2	13.5	
Aug	372,242	648,685	730,371	973,380	7.7	5.4	9.9	13.1	
Sept	378,158	653,611	735,853	983,619	7.2	5.0	9.2	12.4	
Oct	380,685	656,589	741,618	990,159	6.8	4.7	9.0	11.7	
Nov	377,008	653,299	739,501	993,521	8.0	5.5	9.7	12.7	
Dec	433,057	718,738	804,831	1,053,688	8.8	5.7	9.4	11.7	
1990 – Jan	404,743	692,462	785,294	1,050,784	11.3	7.4	10.9	12.9	
Feb	395,668	679,847	776,632	1,045,773	10.3	6.8	10.3	11.8	
Mar	397,412	679,807	779,592	1,051,907	9.7	6.4	9.6	11.6	
Apr	406,082	688,528	789,472	1,061,586	9.5	6.4	9.4	10.7	
Мау	393,258	673,472	777,033	1,057,496	8.9	5.9	9.0	10.8	
June	405,495	684,489	790,451	1,066,747	8.2	5.7	8.8	10.6	
July	408,370	689,214	797,179	1,074,096	7.8	5.3	8.5	10.5	
Aug	400,429	683,499	792,739	1 ,071,036	7.6	5.4	8.5	10.0	
Sept	411,240	694,155	805,481	1,088,527	8.7	6.2	9.5	10.7	
Oct	414,557	698,241	815,164	1,100,380	8.9	6.3	9.9	11.1	
Nov	408,602	692,317	811,334	1,098,476	8.4	6.0	9.7	10.6	
Dec	465,755	761,013	880,930	1,166,901	10.9	7.8	11.3	12.1	

(amounts outstanding in billions of lire; % changes on corresponding period)

Financial assets held by the non-state sector and their counterparts

			F	Financing of	the non-sta	te sector by	:				
	Financial assets	Banks	Special credit in- stitutions	Bonds	State sector	Shares	Other domestic liabilities	Foreign sector	State sector	Foreign sector	Unclassi- fied
	ŀ]									l
1985	. 145,929	33,059	11,409	1,700	11,837	9,877	4,339	3,108	97,325	-7,761	-18,963
1986	. 168,069	23,951	16,896	5,120	9,216	20,534	5,217	1,797	97,480	-1,311	-7,237
1987	. 168,153	22,318	20,161	3,640	8,489	7,422	4,839	3,331	102,277	-3,144	1,180
1988	. 192,788	53,750	24,196	233	10,705	-1,921	1,839	12,735	111,002	-12,285	-7,467
1989	. 220,610	77,572	30,366	454	12,475	3,661	2,054	21,625	118,350	(–25,709)	-19,330
1990	·· ···	74,343	36,219	-3,506					129,788	••••	
1988 – Nov	. 6,907	11,474	2,058	546	1,041	-1,101	-137	1,215	14,725	-1,834	-21,080
Dec	. 54,231	11,304	3,869	277	680	-321	-760	791	6,052	-1,916	36,169
1989 – Jan	. 4,853	9,354	-97	405	1,832	117	-413	-41	807	(-2,489)	-3,812
Feb	. 13,506	2,509	3,012	30	2,364	-373	502	1,244	9,320	(4,420)	682
Mar	15,884	-1,853	3,266	-560	1,530	22	192	3,440	12,652	(-3,634)	874
Apr	21,239	7,202	1,273	656	883	-768	434	5,403	12,149	(3,173)	-2,822
May	1,728	9,098	2,962	49	814	-1,189	154	2,031	11,703	(-2,370)	-21,217
June	. 17,522	5,940	-323	-200	567	658	712	2,520	-13,452	(2,145)	24,561
July	19,451	12,905	3,441	-763	506	1,573	219	-436	12,009	(611)	-9,391
Aug	9,093	6,458	2,351	1,012	605	609	510	452	8,168	(1,165)	1,896
Sept	15,077	-1,159	2,669	-249	942	1,860	573	1,866	17,233	(-2,242)	-6,417
Oct	17,776	7,649	3,596	286	921	1,432	389	1,144	11,298	(2,061)	6,305
Nov	. 17,956	14,952	3,005	-337	1,221	115	-185	2,810	17,931	(2,493)	-19,063
Dec	66,526	17,435	5,212	599	290	2,182	726	1,190	18,531	(-1,236)	23,049
1990 - Jan	11,933	7,016	1,499	-764	1,351	-1,188	850	4,893	-5,678	(220)	3,733
Feb	13,401	-2,688	3,569	-178	2,699	1,789	1,521	1,612	12,038	(3,472)	-3,490
Mar	19,412	5,413	3,760	4	1,643	-112	-202	8,662	14,362	(-2,264)	-1,028
Apr	18,699	8,392	2,348	22	246	20	738	6,137	16,036	(3,598)	-11,642
Мау	6,744	7,735	2,923	458	-345	567	-844	1,605	13,322	(–1,496)	-17,182
June		6,305	-1,573	43	1,054	1,313	769	4,568	-10,231	(2,375)	
July		15,497	4,030	-1,587	-1,137	4,061	18	3,235	5,849	(–1,151)	
Aug		-10,903	3,229	-165	1,171	401	252	3,323	9,887	(332)	
Sept		-3,685	1,353	-343	863	678	708	6,878	18,404	(–1,614)	
Oct		13,544	3,935	-113	1,294	1,484	480		23,491		
Nov		11,052	3,305	-178	1,660		153		15,792		
Dec		27,490	7,841	618					16,516		

(changes in billions of lire)

Total domestic credit

(changes in billions of lire; % changes)

				Total domestic credit		Loans to the non-state sector	
	Total domestic credit	Loans to the non-state sector	State sector borrowing requirement	3-month	12-month	3-month	12-month
							<u> </u>
1985	153,435	46,168	107,268	_	17.8	_	12.6
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	230,184	107,485	122,699	_	15.2	-	18.6
1990	233,989	107,056	126,933	-	13.4	-	15.6
1988 – Nov	28,959	14,078	14,881	4.5	15.2	4.1	15.9
Dec	21,133	14,896	6,237	3.3	15.0	3.4	15.7
1989 – Jan.	10,220	8,851	1,368	3.0	15.4	3.9	16.6
Feb	18,538	5,550	12,988	2.9	16.1	3.9	18.1
Mar	13,834	852	12,982	3.5	15.5	4.5	17.6
Apr	21,274	9,132	12,143	4.2	15.0	4.4	16.5
Мау	23,772	12,110	11,662	4.1	15.2	4.6	17.2
June	-7,068	5,417	-12,485	2.5	14.5	4.7	17.7
July	26,346	15,583	10,763	2.3	14.3	4.4	17.6
Aug	4,372	-3,095	7,467	2.0	14.1	4.2	17.9
Sept	18,077	1,261	16,816	3.8	13.7	4.1	17.6
Oct	20,271	10,959	9,312	3.6	13.6	3.9	17.4
Nov	38,615	17,619	20,996	4.4	14.0	4.0	17.6
Dec	41,933	23,246	18,687	4.6	15.2	4.2	18.6
1990 – Jan.	2,014	7,751	-5,737	3.6	14.5	4.2	18.1
Feb	11,491	702	10,788	2.6	13.9	3.2	17.1
Mar	16,452	1,649	18,100	2.3	14.0	2.5	16.7
Apr	23,600	10,762	12,838	3.6	13.9	3.1	16.7
Мау	22,984	11,116	11,868	3.9	13.7	3.7	16.2
June	-4,838	4,688	-9,526	2.4	13.9	4.1	16.0
July	20,168	17,941	2,227	1.7	13.3	3.8	16.0
Aug	1,738	-7,840	9,577	1.5	13.1	3.4	15.3
Sept	16,246	-2,675	18,921	2.9	12.8	3.0	14.6
Oct	39,802	17,366	22,437	4.2	13.8	3.5	15.4
Nov	31,698	14,179	17,519	4.5	13.1	3.3	14.5
Dec	52,635	34,713	17,922	5.1	13.4	5.1	15.6

Notes to the Tables

Table a1

Sources: National bulletins, IMF and OECD.

Real GNP: GNP for the United States, Japan and Germany; GDP for France, the United Kingdom, Italy and Canada.

From July 1990 on 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: producer 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: the 3-month Treasury bill rate; Japan: the rate on 2-month private sector securities; Germany, France and the United Kingdom: the 3-month interbank rate; Italy, gross annual yield on 6-month Treasury bills on a deferred basis, weighted according to the amounts sold to operators; 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 maturities of more than 4 years

(secondary market); France: long-term government bonds; the United Kingdom: long-term government bonds (20 years); Italy: average gross yield of Treasury bonds quoted on the Milan stock exchange with residual maturities of more than 12 months (weighted according to the amount of outstanding debt). Interest was entirely tax exempt until 1987, subsequently yields are stated gross of withholding tax at the rate of 12.50 per cent. Canada: end-of-period yield on public sector securities with maturities 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 (prices at the close).

Table a7

Source: BIS.

US dollar forward premiums and discounts: the differences between the rates shown in the upper part of the table.

Table a8

Sources: Bank of Italy and IMF. Gold prices: end of period.

Table a9

Source: Based on Bank of Italy and IMF data.

Nominal effective exchange rates: based on the shares of international trade of the 15 leading industrial countries. For the method of calculation, see the article "New Indices of Real and Nominal Effective Exchange Rates" in Banca d'Italia, *Economic Bulletin*, no. 8, February 1989.

Table a10

Source: Based on IMF, Istat and OECD data.

Real effective exchange rates: based on the wholesale prices of manufactures of the 15 leading industrial countries. For the method of calculation, see the article "New Indices of Real and Nominal Effective Exchange Rates" in Banca d'Italia, *Economic Bulletin*, no. 8, February 1989.

Source: Based on Bank of Italy, Istat, OECD and IMF data.

Intra-EEC real effective exchange rates: the countries included in the EEC 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 Nominal 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; the claims are those in respect of loans granted directly to non-residents excluding those granted by branches abroad in the currency of the country in which local operators are resident.

Country grouping: that adopted by the BIS.

Table a13

Source: Istat, seasonally adjusted.

Other domestic uses: comprises government consumption and change in stocks.

Table a14

Source: Based on Istat and Isco data.

Industrial production: the indices are 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.

Unemployment rate: the annual figures, except for the adjusted unemployment rate, are the average of raw quarterly data and may not coincide with the seasonally adjusted annual averages.

Table a16

Source: Istat.

Table a17

Goods: imports, cif; exports, fob.

Bank capital flows: includes those of special credit institutions from 1989 on.

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

Balance: short-term assets less short-term liabilities; the balances expressed in dollars may not coincide with the sum of the component items owing to translation roundings.

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 those 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 the settlements of debts incurred by state sector bodies.

Other operations: includes the balance of other Treasury operations and those of the Deposits and Loans Fund, 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 Savings 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

BI-UIC financing: as stated in the Bank of Italy's accounts.

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 acquired by non-residents, which are included in the respective categories of domestic debt. It also includes Treasury credit certificates in ecus stamped as being for foreign circulation. **Monetary base financing:** adjusted for Bank of Italy sales of securities to banks in connection with advances granted under the Ministerial Decree of 27.9.1974. 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 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 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

BI-UIC, government securities: includes the securities sold in connection with advances granted under the Ministerial Decree of 27.9.1974. The end-of-year figures are adjusted for revaluation deficits.

Deposits with the Bank of Italy: until September 1990 comprise compulsory reserves, free reserves and deposits against overshoots of the ceiling on lending and as surety for bank money orders. From October 1990 on they comprise the reserve account, compulsory reserves on net foreign currency fund-raising, the free deposits of banks not subject to reserve requirements and deposits against overshoots of the ceiling on lending and as surety for bank money orders.

Compulsory reserves: from October 1990 on comprise the average reserve requirement in the maintenance period, which includes the last day of the month in question, and the compulsory reserve on net foreign currency fund-raising.

Other items: comprise cash on hand and undrawn ordinary advance facilities; until December 1988 they also

include deposits with the Treasury and compulsory stockpiling bills not discounted with the Bank of Italy.

Rounding may cause discrepancies in totals.

Table a22.2

Open market sales: excludes the securities sold in connection with advances granted under the Ministerial Decree of 27.9.1974.

Deposits with the Bank of Italy: until September 1990 comprise compulsory reserves, free reserves and deposits against overshoots of the ceiling on lending and as surety for bank money orders. From October 1990 on they comprise the reserve account, compulsory reserves on net foreign currency fund-raising, the free deposits of banks not subject to reserve requirements and deposits against overshoots of the ceiling on lending and as surety for bank money orders.

Compulsory reserves: from October 1990 on comprise the average reserve requirement in the maintenance period, which includes the last day of the month in question, and the compulsory reserve on net foreign currency fund-raising.

Other items: comprise cash on hand and undrawn ordinary advance facilities; until December 1988 they also include deposits with the Treasury and compulsory stockpiling bills not discounted with the Bank of Italy.

Rounding may cause discrepancies in totals.

Table a23

Portfolio variations: differ from those given by BI-UIC accounts since they do not include open market sales of securities in connection with advances granted under the Ministerial Decree of 27.9.1974.

Final figures are given at book values. Rounding may cause discrepancies in totals.

Table a24

Repurchase agreements based on competitive bid auctions.

Yields in percentages and amounts in billions of lire.

Table a25

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.

Reverse repurchase agreements based on competitive bid auctions.

Yields in percentages and amounts in billions of lire.

Table a27

Yield: Average competitive bid yields, gross of withholding tax. From the end of September 1986 until September 1987 this tax was levied at the rate of 6.25 per cent, since then it has been levied at the rate of 12.5 per cent. Prices and yields are expressed in percentages, amounts in billions of lire.

Table a28

Actual rate on fixed-term advances: is the average rate weighted on the basis of new operations.

Treasury bill yields: before tax. From the end of September 1986 until September 1987 withholding tax was levied at the rate of 6.25 per cent, since then it has been levied at the rate of 12.5 per cent.

Treasury bill average yield: refers to the weighted average of auction rates.

Treasury and special credit institution bond yields: the former refer to securities with residual maturities of more than one year. Both sets of yields are given net of withholding tax and based on Milan Stock Exchange prices.

Bank rates: based, apart from the ABI prime rate, on ten-day returns and calculated as a centred monthly average. For the definition of bank interest rates, see the note to Table aD27 in the statistical appendix to the *Relazione annuale della Banca d'Italia*.

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 percentage point per quarter.

Annual rates refer to the month of December.

Table a29

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: are those defined for supervisory purposes and include 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 a30

Loans of industrial credit institutions: Crediop acquired the public works special credit section of Istituto Bancario S. Paolo di Torino in December 1989.

Annual figures refer to the month of December.

Table a31

Source: Bank of Italy Central Credit Register.

Loans: of less than 80 million lire are excluded.

A new classification of bank customers was adopted in January 1989. See the note published in Banca d'Italia, *Supplemento al Bollettino Statistico*, no. 14, 30 July 1990.

Table a33

Public sector: excludes issues of Treasury bills and Treasury bills in ecus as well as the fixed rate Treasury credit certificates issued to settle the debts of Local Health Units and municipal transport companies.

Table a34

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.

For Treasury bonds and Treasury credit certificates the date, price and yield at issue refer to the first tranche.

For the Treasury certificates in ecus issued after September 1990, the date, the price, the yield and the exchange rate refer to the placement of the first tranche.

Table a35

Expected yields: 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: 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 a36

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 a37

Foreign sector: current account balance on a settlements 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 budget and Deposits and Loans Fund financial transactions and of 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 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 a38

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' purchases of securities and repurchase agreements with customers.

3-month growth rates: calculated on the basis of seasonally adjusted lending 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

- various Italian systems of wage indexation. The mechanism introduced in 1986 is based on the trade union cost-of-living index and half-yearly adjustments. It provides 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.) is not indexed.

In the event of an increase in indirect taxes, unions, employers and the Government may agree that a portion of the effect is to be excluded 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).

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List of abbreviations

ABI		Associazione bancaria italiana Italian Bankers' Association
AIMA	<u> </u>	Azienda di stato per gli interventi sul mercato agricolo Government Agency for Intervention in the Agricultural Market
BI-UIC		Banca d'Italia – Ufficio italiano dei cambi 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	<u>.</u>	Comitato interministeriale prezzi Interministerial Committee on Prices
CIPE		Comitato interministeriale per la programmazione economica Interministerial Committee for Economic Planning
Confindustria	—	Confederazione generale dell'industria italiana Confederation of Italian Industry
Consob	_	Commissione nazionale per le società e la borsa Companies and Stock Exchange Commission
EAGGF	· <u> </u>	European Agricultural Guidance and Guarantee Fund
EFIM	—	Ente partecipazioni e finanziamento industria manifatturiera Shareholding and Financing Agency for Manufacturing Industry
ENEL		Ente nazionale per l'energia elettrica National Electricity Agency
ENI		Ente nazionale idrocarburi National Hydrocarbon Agency
Iciap	<u> </u>	Imposta comunale per l'esercizio di imprese e di arti e professioni Municipal tax on businesses and the self-employed
Ilor		Imposta locale sui redditi Local income tax
INAIL	_	Istituto nazionale per l'assicurazione contro gli infortuni sul lavoro National Industrial Accidents Insurance Institute
INA	—	Istituto nazionale delle assicurazioni National Insurance Institute
INPS		Istituto nazionale per la previdenza sociale National Social Security Institute
INVIM		Imposta sull'incremento di valore degli immobili Capital gains tax on property
IRI	—	Istituto per la ricostruzione industriale Institute for Industrial Reconstruction
Irpef		Imposta sul reddito delle persone fisiche Personal income tax
Irpeg		Imposta sul reddito delle persone giuridiche Corporate income tax
Isco		Istituto nazionale per lo studio della congiuntura National Institute for the Study of the Economic Situation
Istat		Istituto centrale di statistica Central Institute for Statistics
SACE		Sezione per l'assicurazione dei crediti all'esportazione 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 28 February 1991

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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Vincenzo DESARIO	 Central Manager for Banking Supervision
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