FOR
AGENDA

SM/82/45

CONTAINS CONFIDENTIAL
INFORMATION

March 3, 1982

To: Members of the Executive Board

From: The Secretary

Subject: Spain - Recent Economic Developments

This paper provides background information to the staff report on the 1981 Article IV consultation discussions with Spain, which was circulated as SM/82/43 on February 23, 1982.

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INTERNATIONAL MONETARY FUND

SPAIN

Recent Economic Developments

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Approved by the European Department

February 26, 1982

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Basic Domestic Data

Population (December 1980)	37,412,000
Labor force (September 1981)	12,860,000
GDP per capita (1980)	Pta [illegible]2,970 (SDR 4,318)

	1980 In billions of pesetas	1980 In per cent	1978	1979	1980	1981 1/	1982 2/
			Percentage changes				
Demand and output							
Private consumption	10,632	70.5	1.5	0.9	1.2	-0.8	0.2
Public consumption	1,704	11.3	5.5	3.8	3.2	2.4	2.6
Fixed investment	2,887	19.1	-1.1	-2.0	0.5	1.0	3.1
Stockbuilding 3/	236	1.6	-0.5	0.3	0.3	-0.6	--
Total domestic demand	15,459	102.5	0.8	0.9	1.6	-0.7	1.0
Foreign balance 3/	-383	-2.5	1.9	-0.3	-0.4	1.4	0.9
GDP	15,076	100.0	2.7	0.6	1.5	0.7	2.0
Industrial production	...	...	...	0.1	1.4	1.0	...
Wages, costs, and prices (nonagricultural sector)							
Wage rate per man	...	...	25.4	22.5	16.9	15.0	13.0
Unit labor costs	...	...	20.5	19.5	13.2	10.5	8.8
CPI	...	...	19.8	15.7	15.5	14.5	12.0
GDP deflator	...	...	20.3	15.4	12.9	12.7	12.4
Labor market							
Employment	...	...	-1.9	-2.4	-3.2	-3.0	-1.5
Unemployment rate (levels)	...	...	7.7	9.6	12.6	14.6 4/	...
Participation rate (levels)	...	...	49.6	49.3	48.5	48.2	...
Disposable income of households	...	...	23.0	15.7	15.6	13.6	12.2
Savings ratio (levels)	...	...	10.0	8.6	7.3	7.2	7.2
Main financial aggregates			(As per cent of GDP)				
General government sector							
Tax receipts	...	...	24.2	25.3	26.0	26.6	26.9 5/
Current expenditure	...	...	25.5	26.9	28.7	30.0	28.9 5/
Current balance	...	...	1.5	1.2	0.1	-0.4	1.0 5/
Overall balance	...	...	-1.8	-1.9	-3.4	-4.3	-3.2 5/
Overall cash balance	...	...	-2.4	-2.5	-3.0	-4.7	...

	Dec. 1980 In billions of pesetas	1978	1979	1980	1981 6/
Money and quasi-money (M3)	12,243.4	19.9	18.0	16.7	15.0
Total domestic credit	12,917.7	15.5	17.2	20.3	19.2
Credit to the private sector	11,513.5	13.7	15.6	18.4	16.3

Basic External Data

	1978	1979	1980	1981 1/	1982 2/
Balance of payments (in millions of U.S. dollars)					
Exports, f.o.b.	13,480	18,352	20,928	20,426	23,082
Imports, f.o.b.	17,505	24,022	32,389	31,288	33,040
Trade balance	-4,025	-5,670	-11,461	-10,862	-9,958

Basic External Data (continued)

Balance of payments (in millions of U.S. dollars)	1978	1979	1980	1981 1/	1982 2/
Services (net)	4,001	5,014	4,424	3,837	4,291
Transfers (net)	1,656	1,782	2,048	1,732	1,839
Current balance	1,632	1,126	-4,989	-5,293	-3,828
As percentage of GDP	1.1	0.6	2.4	2.8	1.9
Net long-term capital inflow	2,017	3,220	4,201	4,662	
Of which:					
Investment	1,114	1,349	1,277	1,465	
Borrowing	1,299	1,498	2,750	2,653	
Public	-396	373	174	544	
Net short-term capital inflow 7/	171	-2,243	-757	-5	
Overall balance	3,820	2,103	-1,545	636	
Change in net foreign position of commercial banks	139	1,335	829	30	
Change in foreign reserves	-3,959	-3,438	716	606	
External in long-term debt outstanding 8/	17,158	19,461	23,695	26,242 4/	
Net official reserves 9/	10,015	13,117	12,358	11,879 10/	
Exchange rate (peseta/U.S. dollar)	76.7	67.1	71.7	92.3	
Change in U.S. dollar/peseta	-0.9	14.3	-6.4	-22.3	
Change in effective exchange rate	-8.7	10.6	-6.3	-11.7	

Sources: Data provided by the Spanish authorities; and staff estimates and projections.

1/ Estimate.
2/ Forecast.
3/ As percentage of previous year GDP.
4/ September 1981.
5/ Initial budget.
6/ Twelve months ending October 1981.
7/ Including errors and omissions.
8/ Valued at market exchange rate (end of period).
9/ With gold valued at SDR 35 per ounce (end of period).
10/ November 1981.

I. Domestic Economy

1. Main trends

The adjustment of the Spanish economy to the impact of the 1973-74 energy crisis was quite belated. Financial policies until 1977 continued to provide a moderate support to demand in order to cushion the deflationary impact of the oil price increases. As a result, real GDP increased in the years 1974-77 at an annual average rate of 3 per cent, 1 per cent above the rate of growth experienced by the OECD countries. At the same time inflation accelerated to over 24 per cent in 1977, while the current deficit reached 1.8 per cent of GDP.

The effects of a stabilization program introduced in mid-1977 became fully apparent in 1978. The combination of a sharp devaluation of the peseta and a substantial tightening of monetary policy led to a marked deceleration in domestic demand and made possible the transfer of real resources abroad that was required by the change in the terms of trade entailed by the first increase in oil prices. However, most of the adjustment in domestic demand took place at the expense of gross fixed investment, which declined from 22 per cent of GDP in 1976 to about 20 per cent in 1979.

The ensuing marked improvement in the current account, which showed a surplus in 1978, the deceleration in the rate of inflation to 16 per cent by the end of 1978, and the sharp increase in unemployment, prompted the authorities to ease the stance of financial policies in 1979. However, demand showed little response and imports, spurred by the appreciation of the peseta in the first half of the year and by speculative factors, rose by more than 12 per cent in volume. Thus, the growth of real GDP declined from 2.7 per cent in 1978 to 0.6 per cent in 1979 and the unemployment rate increased to 9.6 per cent. Little further progress was recorded on the inflation front, as increases in domestic energy prices and attempts by enterprises to reconstitute profit margins offset the favorable impact of the appreciation of the peseta and of a significant moderation in labor costs.

Although the increased public sector deficit provided a substantial stimulus to demand, economic growth remained unsatisfactory in 1980. Real GDP grew by only 1.5 per cent as a modest recovery of domestic demand was partially offset by a marked worsening of the real foreign balance (Table 1). In spite of the rise in unemployment to 12.6 per cent of the labor force, private consumption was sustained by a further decrease in the household savings ratio. Fixed investment recorded a small increase, the first since 1974, reflecting an improvement in profits and the effort by enterprises to replace equipment that had been made obsolete by the development of the relative cost of labor and energy. The inflation rate showed little change in 1980, a fairly good result against the background of an increase in import prices of over 37 per cent. A further deceleration in unit labor costs and an exceptional harvest helped offset external inflationary pressures.

The gradual deceleration of inflation and of wage costs, and the partial restoration of profit margins since 1978, indicate that the Spanish economy is in the process of correcting some of the disequilibria that had persisted after the 1973-74 oil crisis. In addition, the introduction of a National Energy Plan in 1979 and the more realistic energy pricing policy implemented since then will undoubtedly have positive effects in the near future. However, the more favorable relationship between prices and costs in the productive sector of the economy has been accompanied by a sharp increase in public sector deficit. Enterprises have managed to improve their profitability in the years 1978-80 through productivity gains achieved by accelerating the shedding of labor; in turn, the fast growing unemployment rate has been one of the main factors responsible for the increase in public sector dissaving. As a result, domestic savings, negatively affected also by declines in the household savings ratio, have continuously decreased since 1978 and a sizable current account deficit of the balance of payments has re-emerged in 1980.

In the first half of 1981 the level of activity declined, mainly as a result of the fall of private consumption. The latter reflected both the moderation of wage increases and the marked decline in employment. However, growth appears to have picked up significantly in the second part of the year on the strength of exports and investments. On the whole, the estimated real rate of GDP growth decelerated to 0.7 per cent in 1981, as a result of a marked decline in domestic demand. However, unlike in 1980, the real trade balance improved sharply and represented the only source of growth last year. The unemployment rate reached 14.6 per cent at the end of September 1981, although the rate of decline in employment appears to be decelerating: total employment fell by about 190,000 in the first nine months of 1981, compared with over 300,000 in the same period a year earlier. Finally, the rate of inflation decelerated further from 15.6 per cent in 1980 to 14.5 per cent last year.

Faced with the problems of rising unemployment, modest rates of growth, and a relatively high rate of inflation, the Spanish authorities have designed a policy aimed primarily at halting the decline in employment. A tripartite agreement (ANE) has been concluded in June 1981 among labor, employers and the Government, calling for a rate of contractual wage increases of 9-12 per cent in 1982, which should result in a decline in real wages of perhaps 2 per cent, coupled with certain budgetary actions, particularly in the field of public investment, designed to create, directly and indirectly, 350,000 new jobs by the end of 1982.

2. Domestic demand

Domestic demand was the primary factor supporting economic activity in 1979 and 1980. The contribution of the foreign balance, which had been positive in both 1977 and 1978, turned negative in 1979 and 1980, as the increase in imports outpaced significantly the growth of exports.

Preliminary estimates for 1981 point to a decline of domestic demand in real terms, while the real trade balance improved substantially, mainly as a result of an upsurge of exports in the second half of the year (Table 1).

Private consumption grew by about 1 per cent in both 1979 and 1980 despite a virtual stagnation of real disposable income of households (Table 3). The decrease in the savings ratio primarily reflected changes in income distribution in favor of groups with a relatively high propensity to consume, such as recipients of social transfers. Social security benefits increased at an average annual rate of 29 per cent each year in the period 1977-80, while gross wages rose on average by 18 per cent a year in the same period. As a result, the share of social security benefits in disposable income increased from around 14 per cent in 1977 to over 18 per cent in 1980, while the share of gross wages, which represented 72.5 per cent of disposable income in 1977, decreased to 71.8 per cent in 1980. These trends continued in 1981, as social security benefits increased by 21.2 per cent and the growth of wages, given the decline in employment and the moderation in per-capita compensations, decelerated further to 11.6 per cent. However, the decreasing trend in the savings ratio seems to have come to a halt in 1981, as private consumption and real disposable income fell approximately by the same amount (0.8 per cent and 0.9 per cent, respectively). The reasons for this development are difficult to assess, although the increase in interest rates on financial assets connected with the measures introduced in January 1981 to liberalize the financial system, seems to have played a significant role.

Public consumption, which had increased by 3.2 per cent in 1980, grew by 2.4 per cent in 1981, as a result of the slower nominal increase in purchases of goods and services (20 per cent in 1981 as compared with 28 per cent in 1980) and the more moderate expansion of public employment (3.5 per cent in 1980 and 2.1 per cent in 1981).

Gross fixed investment showed a positive rate of growth in 1980 for the first time since 1974. The main contribution to this increase was provided by public investment which rose by over 5 per cent. Investment in construction continued to decline markedly, essentially reflecting the contraction of private demand for housing. Investment in equipment goods, on the other hand, increased by nearly 7 per cent. Contrary to what had happened in 1979 when the increased demand for investment goods was largely met from abroad, in 1980 it also had an impact on domestic production. According to preliminary estimates, gross fixed investment increased by a further 1.0 per cent in 1981, with private investment rising by 0.3 per cent and public investment by 6.9 per cent. The lack of private demand for housing continued to affect investment in construction, which fell by 0.5 per cent. Investment in equipment goods, on the other hand, continued to expand, although at a slower rate than in 1980, and the 3.9 per cent increase in demand was more than met by the increase in domestic production, as imports of investment goods fell markedly.

However, it is difficult to assess whether this recovery in productive investment is likely to be sustained. The moderation of unit labor costs and the apparent improvement of profits since 1978 might contribute to explaining the increase in investment in the last two years. However, given the persistence of low levels of capacity utilization (Chart 1), primarily reflecing the weakness of demand (Chart 2), it appears likely that the upturn in investment was largely aimed at rationalizing production processes through replacement of obsolete capital with more labor- and energy-saving machinery.

There were sizable increases in inventories in both 1979 and 1980, partly reflecting speculative factors, as well as the easing of credit conditions. This movement was largely reversed in 1981, as speculation on the exchange rate subsided and the cost of credit rose significantly in real terms. In addition, there was a substantial depletion of agricultural stocks due to adverse impact of weather conditions on output in the primary sector during 1981.

3. Output

The weakness of demand has been reflected in industrial production, which rose by only 1.4 per cent in 1980 and virtually stagnated in 1981 (Table 4). This behavior of the aggregate index masks, however, a wide variation by sectors. The production of investment goods rose strongly in both years while that of consumer goods showed little increases in 1980 and a substantial decline in 1981. The production of intermediate goods continued to stagnate through the third quarter of 1981.

Real value added in industry expanded by 1.1 per cent in 1980 and by an estimated 1 per cent in 1981, compared with an average annual increase of 2.4 per cent in the years 1974-78. Real value added in construction fell by 4 per cent in 1980, the sixth consecutive decrease, but a modest increase has been estimated for 1981. The service sector, which grew in the 1970s at a faster pace than other sectors, rose by 1.2 per cent in 1980, the lowest increase in the decade, partly reflecting a marked deterioration in tourism and in industrial activities, and it is estimated to have increased by 1.7 per cent in 1981. Finally, value added in agriculture increased in real terms by 9 per cent in 1980 as a result of an exceptional harvest. However, the adverse weather conditions which prevailed in 1981 are likely to have entirely nullified the gains obtained in 1980.

4. Labor market

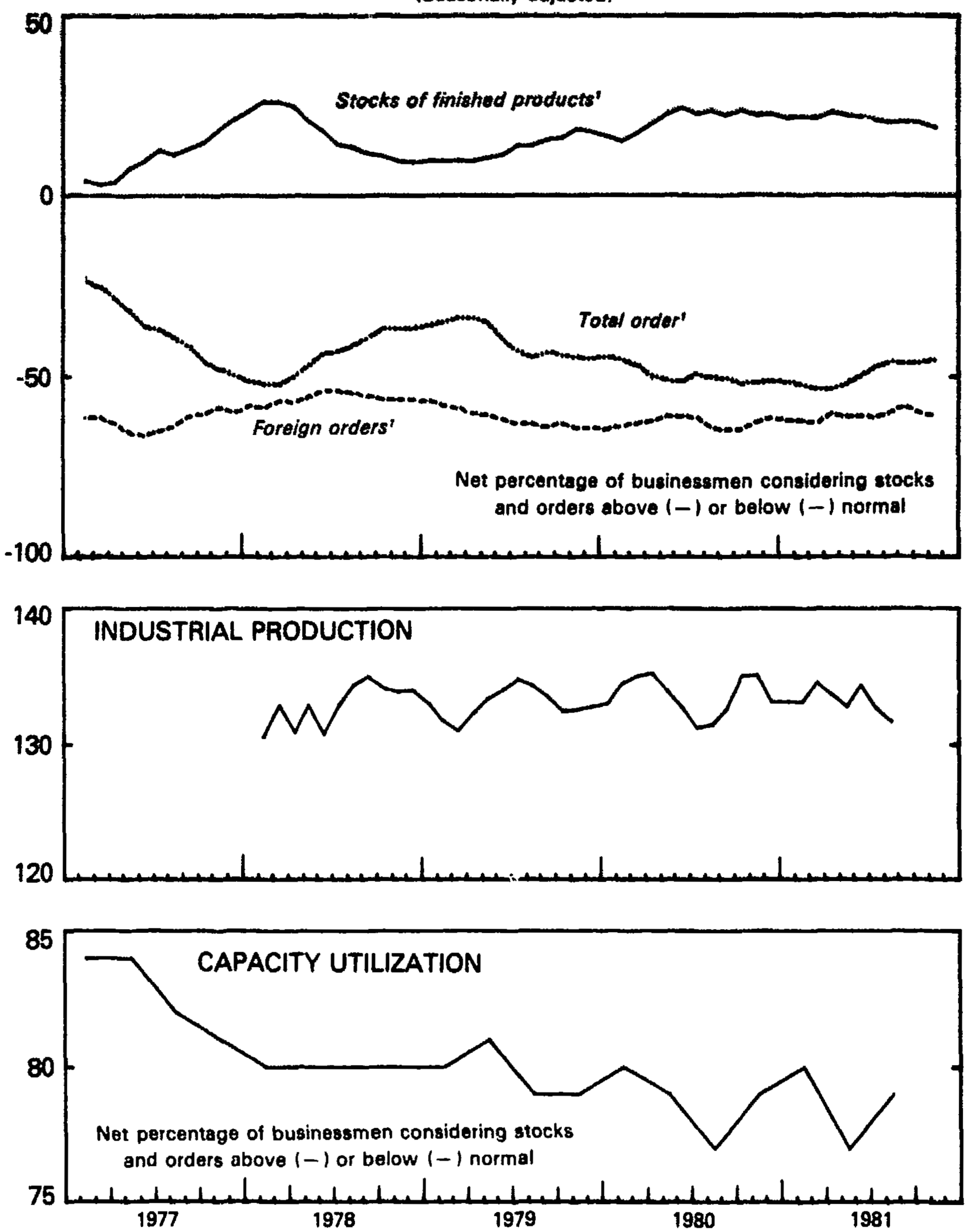
Labor market conditions continued to deteriorate in 1979 and 1980. Total employment fell by 2.0 per cent in 1979 and by nearly 4 per cent in 1980 (Table 6), somewhat accelerating the decline which had been evident since 1974 (Table 7). The decrease in total employment of about 690,000 between end-1978 and end-1980 is explained partly by the sharp drop in agricultural employment (about 280,000). Large declines occurred however, also in industry and construction, which recorded losses of

CHART 1

SPAIN

INDICATORS OF INDUSTRIAL ACTIVITY

(Seasonally adjusted)

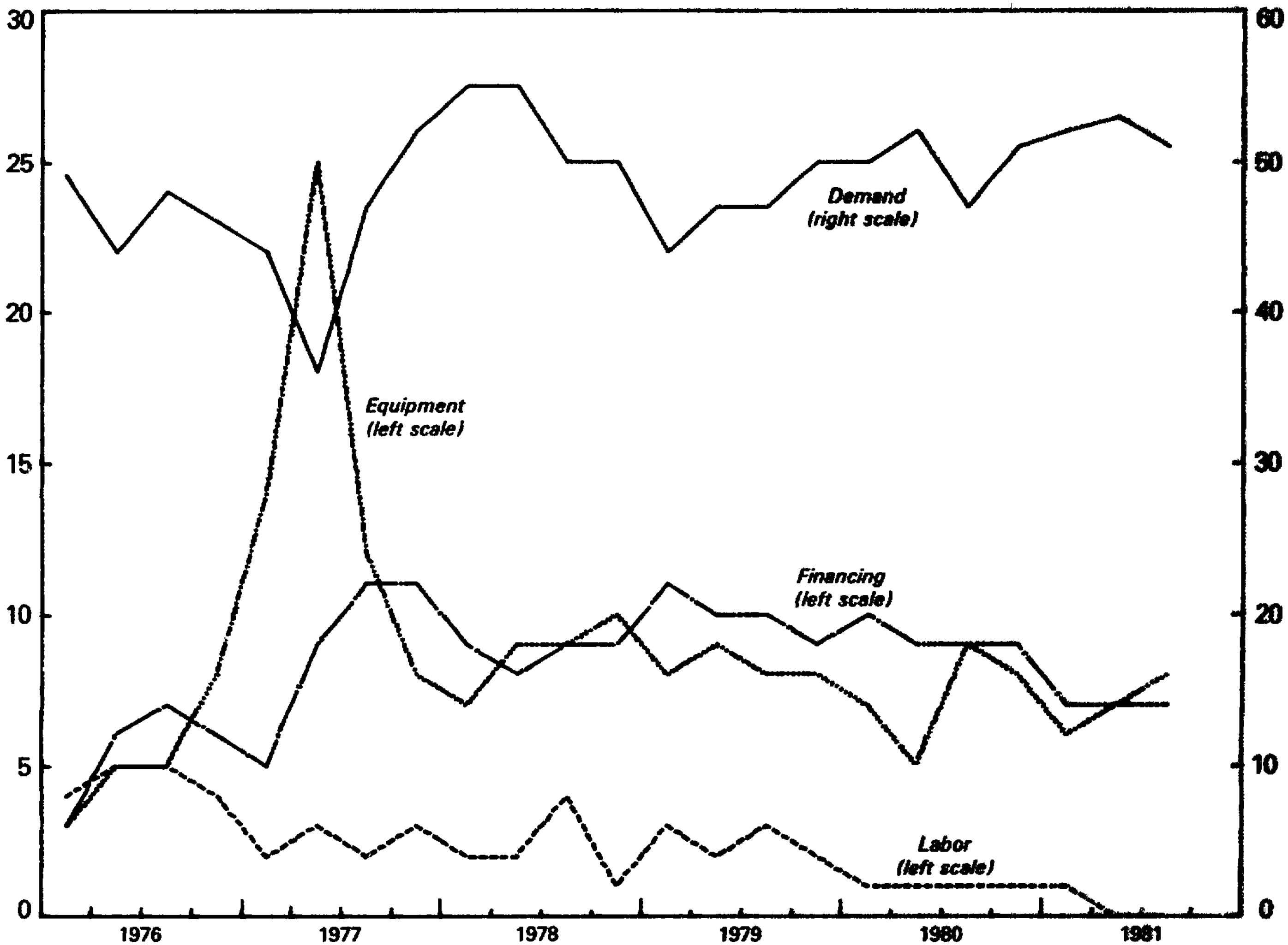


Source: Bank of Spain, *Statistical Bulletin*.

[1] Three-month moving average.

CHART 2
SPAIN

FACTORS IMPEDING THE GROWTH OF OUTPUT IN INDUSTRY[1]



Source: Bank of Spain, *Statistical Bulletin*.
[1]Difference between firms experiencing difficulties and thosewhich are not experiencing difficulties.

234,000 and 161,000 jobs, respectively. By contrast, employment remained fairly stable in services. In the first three quarters of 1981 employment continued to decrease but at reduced rates, since the number of jobs lost in that period amounted to about 197,000 as compared to about 310,000 in the same period a year earlier. Comparing September 1981 with end-1980, agricultural employment decreased by 95,000 (133,000 in the same period in 1980), employment in construction by 32,000 (44,000 in the corresponding period in 1980), while employment in the services increased by 47,000. On the other hand, industrial employment accelerated its decline last year (129,000 as compared with 73,000 in the first nine months of 1980).

In the period 1965-74, agricultural employment decreased at an average annual rate of 3.4 per cent, at a time when net outward migration totalled almost 280,000 people and the demand for labor in the construction and service sectors--traditional outlets for ex-farmers--increased at annual rates of over 3 per cent (Table 7). Agricultural employment declined at a faster pace in the second half of the 1970s, as a result of increased mechanization, reflected e.g. in the increased number of tractors, but also as a result of a reduced sectoral participation rate. Although the analysis of time series on the labor market is made difficult by methodological changes in data collection, 1/ available information indicates that agricultural participation in the overall labor force declined from 20.1 per cent in the third quarter of 1977 to 18.0 per cent in the first quarter of 1980 and probably recorded a further 1 per cent decrease in the next six quarters. This sharp decline in the supply of labor in agriculture in the past few years is hard to interpret in the face of the accelerating decline in employment in construction and the much slower rise in the number of service sector employees.

Industrial employment showed the slowest sectoral growth in the period 1965-74, when productivity increased at the highest rate (Table 7). This reflected the rapid modernization effort which took place in that period, when the sustained level of investment allowed an increased substitution of capital--for labor-intensive techniques and a redirection of activity away from traditional sectors. In spite of accelerating unit labor costs, employment continued to rise until 1977, reflecting positive expectations about future demand developments. However, the downturn in aggregate demand, together with rising labor costs, resulted in a marked profit squeeze. The latter explains the subsequent efforts to increase productivity by shedding excess labor, and to restore profitability. An element adding substantially to labor costs has been social security

1/ A cyclical analysis of labor market developments is affected by a methodological change introduced in the second quarter of 1980, after which labor statistics reflect the exclusion of population aged 14 and 15 years. An accordingly revised and consistent set of data is only available for the period 1978-80 (Table 6), whereas the sectoral breakdown of employment and productivity (Table 7) includes population aged between 14 and 15 years up to the first quarter of 1980 and only population over 16 years thereafter.

contributions. The latter, which accounted for 15 per cent of the wage bill in 1973, increased to 21.5 per cent in 1977 and to over 23 per cent in 1980. However, this financial burden on enterprises is being gradually eased as transfers from the Central Government to the social security system, planned to reach the level of 20 per cent of the latter's total revenues by 1984, are substituted for employers' contributions.

Employment in construction was negatively affected by the slowdown of tourism activity (through its side effect on the expansion of hotel capacity) and by the reduced internal population movements in the second half of the 1970s. A planned increase in the level of activity in this sector, through a program aimed at promoting some 571,000 housing starts in the years 1981-83, is expected to halt the decline of employment in this sector.

Finally, the service sector, which because of both its high rate of growth and its relatively low productivity had contributed most to creating new jobs during the 1960s and the first half of the 1970s, recorded a substantially lower absorption of workers thereafter, in spite of a significant rise in public employment after 1977. In 1980, employment fell in the sector by 0.5 per cent due to the deterioration in tourism and in related industrial activities, but started increasing again in the course of 1981.

The labor force, which had increased up to 1974, declined steadily in the subsequent years in the face of a stagnating economy. 1/ The increase in the working age population, due to the demographic growth during the 1960s and the return flows of emigrants, approximately 500,000 during the period 1973-79, was largely offset by the sharp drop in participation rates. Thus, the steady increase in the unemployment rate--from 7.7 per cent of the labor force in 1978 to more than 14 per cent in 1981--is primarily a reflection of the decline in employment.

The tripartite (employers, labor, Government) agreement concluded in June 1981 on wages and employment (Acuerdo Nacional sobre el Empleo or ANE) aims at arresting the deterioration in the labor market. Under the

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1/ The rise in the labor force during the first part of the 1970s was entirely due to the increasing participation rates of female workers, connected with sociological factors as well as with the rapid growth of increase in the working age population, due to the demographic growth in the Spanish economy. The uninterrupted decline in participation rates which has been experienced since then is due to the substantial number of "discouraged" workers, over 500,000 in 1980, mainly women, according to the Ministry of the Economy. Econometric estimations--limited to the later part of the 1970s because of lack of consistent time series--indicate that cyclical developments "discouraged" more female than male workers. While the participation rate equation for male workers showed a negative trend, that for female workers showed a positive trend, indicating a potential increase in the supply of labor of female workers in the case of an improvement in the economic climate.

agreement, nominal wage increase will be limited to between 9 per cent and 11 per cent in 1982, if inflation is contained to 12 per cent. A higher rate of inflation would lead to an upward adjustment of the range so as to limit the reduction in real wages to no more than 2 per cent on average. In exchange, the Government has committed itself to introduce some improvements in unemployment benefits (see Chapter III, Section 4) and to create 350,000 new jobs by implementing a substantial program of public investment. In the light of the anticipated decline of employment in other sectors, this is expected to stabilize overall employment in 1982.

5. Wages and incomes

The lack of a consistent set of wage and profit statistics prevents a firm assessment of the evolution of incomes in the Spanish economy. However, it appears that the profitability of enterprises has improved significantly in recent years, as evidenced by a comparison of the evolution of the GDP deflator with overall unit labor costs (Table 8).

The containment of labor costs was also significantly helped in the last two years by the decline in the rate of increase of social security contributions to 13 [illegible] per cent and to 13.6 per cent, respectively, from over 21 per cent in [illegible] (Table 10). This decline was due to several reasons: (a) a progressive takeover by the Central Government of a share of employers' contributions; (b) the fall in employment; and (c) delays in payments of contributions, and perhaps increased evasion, by a number of enterprises.

According to National Institute of Statistics estimates, the actual increase in wage per employee in the nonagricultural sector declined from 22.5 per cent in 1979 to 16.9 per cent in 1980. A further reduction in employment, in the face of stagnating demand, limited the increase in unit labor cost in the nonagricultural sector to around 13 per cent in 1980 (compared to 19.5 per cent in 1979) and to 10.6 per cent in 1981, according to preliminary estimates. The relative development of wages, prices and productivity provides indirect evidence of the behavior of profits in the nonagricultural sector. The ratio between the value-added deflator and unit labor costs, after improving in 1978, deteriorated by 2.0 per cent in 1979, but increased again by 1.7 per cent in 1980. An additional indicator of the evolution of profits in the industrial sector is provided in Table 9, which illustrates the development of industrial costs by components and of industrial prices in the period 1977-80; the ratio of the latter to the former indicates a restoration of profit margins in recent years.

The share of nonwage income in net national income has also been rising from 35.5 per cent in 1977 to 36.2 per cent in 1980 (Table 10). Nonwage income is, nonetheless, a complex item including corporate incomes, self-employed earnings and interests, and therefore, its evolution is difficult to assess. Its increased share in 1980, in addition to a decline in labor costs in industry, may also reflect higher profits in agriculture.

6. Prices

Consumer prices rose on average by 15.5 per cent in 1980, slightly less than in 1979, in spite of the substantial acceleration of import prices to over 37 per cent from about 4 per cent in 1979 (Table 11). This acceleration reflected the peseta depreciation as well as the increase in oil prices. The direct impact of the increase in import prices on the CPI was equal to about 4.5 percentage points in 1980. However, it was offset by some moderating factors of domestic origin, mainly agricultural prices which rose on average by 9 per cent in 1980, down from 10 per cent a year earlier, thanks to an exceptional harvest. In addition, unit labor costs decelerated substantially reflecting gains in productivity as well as moderation in wage settlements. Consumer prices continued to decelerate slightly in 1981. The CPI increased by 14.5 per cent despite the sharp acceleration in food prices, caused by adverse weather conditions, as the rate of growth of nonfood prices declined significantly, largely reflecting wage moderations.

It is difficult to establish the main trends in producer prices as the wholesale price index was discontinued in mid-1980, while the new industrial price series does not cover 1977 and 1978. However, the new series seem to have moved in line with the CPI series in 1980 and in the first half of 1981.

Table 1. Spain: National Accounts, 1978-81

	1980	1978	1979	1980	1981 1/
	In billions of pesetas at current prices	Percentage change in volume			
Private consumption	10,632.5	1.5	0.9	1.2	-0.8
Public consumption	1,703.8	5.5	3.8	3.2	2.4
Gross investment	3,122.7	-3.3	-0.4	2.5	-2.1
Fixed capital formation	2,887.1	-1.1	-2.0	0.5	1.0
Stockbuilding 2/	235.6	-0.5	0.3	0.3	-0.6
Gross domestic expenditure	15,459.0	0.8	0.9	1.6	-0.7
Export of goods and services	2,378.8	10.6	10.0	3.9	4.5
Import of goods and services	2,761.9	-1.1	12.2	2.5	-4.1
External balance 2/	-383.1	1.9	-0.3	-0.4	1.4
Gross domestic product at market prices	15,075.9	2.7	0.6	1.5	0.7
Factor composition of GDP					
Agriculture 3/	1,070.2	6.6	-4.3	9.0	-9.0
Industry	4,107.6	2.2	1.7	0.8	1.0
Construction	1,049.0	-4.0	-2.5	-4.0	0.5
Services	8,160.4	3.7	2.0	1.2	1.7
GDP at factor cost	14,387.2	2.7	0.8	1.5	0.7
Memorandum item:					
GDP deflator	12.9	20.0	15.4	12.9	12.7

Sources: Data provided by the Spanish authorities.

1/ Estimate.
2/ Change expressed as a percentage of previous year's GDP.
3/ Including forestry and fishing.

Table 2. Spain: Flow of Funds, 1978-81

(Per cent of GDP at market prices)

	1978	1979	1980	1981
Domestic savings	1.1	0.6	-2.4	-2.8
Private sector	1.9	1.4	-0.3	-0.2
Savings	20.6	19.8	18.4	18.3
Households	7.6	6.5	5.6	5.5
Companies	12.9	12.9	12.7	12.8
Statistical discrepancy	0.1	0.4	0.1	--
Investment	-18.7	-18.4	-18.7	-18.5
Public sector 1/	-0.8	-0.8	-2.1	-3.0
Savings	1.3	1.0	-0.1	-0.8
Investment	-2.1	-1.8	-2.0	-2.2
Foreign savings	-1.1	-0.6	2.4	2.8

Sources: Bank of Spain, Annual Report; and data provided by the Spanish authorities.

1/ Public administration only, excludes public enterprises.

Table 3. Spain: Household Disposable Income, 1978-81

	1978	1979	1980	1981 1/	1978	1979	1980	1981 1/
	In billions of pesetas at current prices				Percentage change			
Wages	6,264.5	7,233.1	8,240.2	9,194.5	24.0	15.5	13.9	11.6
Nonwage income	2,999.2	3,461.0	3,669.3 2/	4,219.7 2/	21.5	15.4	...	...
Social security and social assistance benefits	1,391.8	1,766.5	2,128.3	2,580.4	40.6	26.9	20.5	21.2
Current transfers (net)	83.2	60.8	89.3	93.6	27.8	-26.9	46.9	4.8
Change in the actuarial reserves for pensions	6.2	7.0	11.2	12.8	-27.1	12.9	60.0	14.3
Current receipts	10,744.9	12,528.4	...	...	25.2	16.6	...	...
Interest payments	339.9	349.6	...	...	36.6	2.8	...	...
Social security contributions	1,447.7 3/	1,753.8 3/	1,977.9 3/	2,235.0 3/	28.7	21.1	12.8	13.0
Direct taxes on income and property	376.7	497.1	687.1	832.8	62.8	32.0	38.2	21.2
Private consumption	7,721.9	9,070.7	10,632.5	12,078.2	21.1	17.5	17.2	13.6
Current disbursements	9,886.2	11,671.2	...	...	23.9	18.1	...	...
Household savings 4/	858.7	857.2	840.8	942.2	42.2	-0.2	-1.9	12.1
Disposable income 5/	8,574.4	9,920.9	11,473.2	13,020.4	23.0	15.7	15.6	13.5
Savings ratio (in per cent)	10.0	8.6	7.3	7.2	...	...	...	...

Sources: Bank of Spain, Annual Report; and data provided by the Spanish authorities.

1/ Estimate.
2/ Net of interest payments.
3/ Includes contributions of financial enterprises.
4/ Current receipts minus current disbursements.
5/ Household savings plus private consumption minus change in the actuarial reserves for pensions.

Table 4. Spain: Industrial Production, 1978-81 1/

	1978	1979	1980	1981	1978	1979	1980	1981
	Index 1972 = 100; not seasonally adjusted				Percentage change over the previous quarter 2/			
First quarter	133.2	134.6	138.4	135.5	...	-1.6	1.4	-1.5
Second quarter	136.6	137.4	137.8	136.7	1.8	1.3	-0.4	-0.3
Third quarter	118.4	118.3	118.2	117.9	1.1	0.7	-1.8	-0.8
Fourth quarter	141.5	140.1	143.3	...	-0.3	-1.3	2.8	...
Average	132.4	132.6	134.4	...	...	0.1	1.4	...

Source: Bank of Spain, Annual Report and Statistical Bulletin.

1/ Excluding construction.
2/ Seasonally adjusted.

Table 5. Spain: Industrial Production by Sectors, 1979-81 1/

(Quarterly rate of changes)

	1979				1980					1981		
	I	II	III	IV	I	II	III	IV	Ave.	I	II	III 2/
Consumption goods	...	1.4	0.7	0.6	2.2	-3.7	-0.1	3.2	1.3	-5.5	-0.9	-4.0
Investment goods	...	-5.4	-1.6	2.7	3.1	3.9	-2.5	8.5	6.6	0.3	7.4	-0.3
Intermediate goods	...	1.4	-0.2	-0.1	1.0	-1.3	-2.1	3.2	-0.2	-1.1	-1.8	1.8

Source: Bank of Spain, Annual Report and Statistical Bulletin.

1/ Seasonally adjusted.

Table 6. Spain: Population and Employment, 1978-81

(End of period in thousands)

	1978	1979	1980	1981 1/
Population	36,858	37,133	37,412	...
Population over 16 years of age	26,061	26,240	26,521	26,715
Labor force	12,928	12,927	12,860	12,887
Employment 2/	11,825	11,577	11,136	10,939
Unemployment	999	1,235	1,620	1,878
Unemployment rate 3/	7.7	9.6	12.6	14.6
Unemployed receiving unemployment benefits 4/	47.3	48.2	45.6	...
Labor force participation rate 5/	49.6	49.3	48.5	48.2

	1979				1980				1981			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Registered unemployment 6/	972	1,030	1,093	1,130	1,222	1,244	1,313	1,416	1,518	1,504	1,594	...
Estimated unemployment 6/	1,059	1,058	1,132	1,235	1,374	1,439	1,494	1,620	1,742	1,783	1,877	...
Seeking a new job	708	696	723	793	923	947	943	1,042	1,146	1,162	1,168	...
Seeking a first job	351	362	409	442	451	492	551	578	596	621	709	...
Unemployment rate 3/ 6/	8.2	8.2	8.8	9.6	10.6	10.7	11.6	12.6	13.5	13.9	14.6	...

Sources: Bank of Spain, Statistical Bulletin; and National Institute of Statistics, Statistical Bulletin.

1/ Through September.
2/ Excluding marginal workers.
3/ As a percentage of labor force.
4/ As a percentage of total unemployment.
5/ Labor force as a percentage of population over 16 years of age.
6/ Not seasonally adjusted.

Table 7. Spain: Sectoral Employment and Productivity, 1965-80 1/

(Percentage changes)

	Employment							Output per man						
	1965-74	1975	1976	1977	1978	1979	1980	1965-74	1975	1976	1977	1978	1979	1980
Total	0.9	-1.7	-1.8	-0.5	-1.9	-2.4	-3.2	5.6	3.1	5.2	3.6	4.9	3.1	4.9
Agriculture	-3.4	-6.9	-7.6	-5.0	-3.5	-6.3	-6.8	5.7	7.2	13.0	0.6	10.5	1.8	17.0
Nonagricultural sectors	2.5	--	-0.1	0.7	-1.5	-1.4	-2.3	3.9	1.5	3.3	3.2	4.1	2.5	3.3
Industry	1.1	0.5	0.6	-0.2	-2.1	-3.2	-3.6	7.6	-1.1	2.9	4.8	4.4	3.8	4.9
Construction	3.2	-2.3	-1.4	2.5	-3.5	-5.7	-6.9	3.6	-1.7	-2.5	-4.4	-0.6	3.4	3.1
Services	3.4	0.3	-2.0	0.9	-0.6	0.8	-0.5	2.2	3.6	6.1	3.5	4.3	1.2	1.8

Sources: Bank of Spain, Annual Report, 1980; and Ministry of Economy and Commerce, La Economía Española en 1980 y las Perspectivas a Corto Plazo.

1/ As from 1980 data reflect the exclusion of employees aged between 14 and 15 years of age.

Table 8. Spain: Indicators of Labor Costs, 1978-81

(Annual percentage changes)

	1978	1979	1980	1981 1/
Wage bill	24.0	15.5	14.5	11.6
Unit labor costs (total economy) 2/	20.5	14.6	12.8	10.1
GDP (at factor cost) deflator	20.3	16.5	12.9	12.6
Dependent labor income per employee (nonagricultural sector) 3/	25.4	22.5	16.9	15.0
Productivity (nonagricultural sector)	4.1	2.5	3.3	4.0
Unit labor costs (nonagricultural sector)	20.5	19.5	13.2	10.6
Value-added deflator (nonagricultural sector) 4/	22.2	17.2	15.2	...
Profit per unit of output (nonagricultural sector) 5/	1.4	-2.0	1.8	...

Sources: Bank of Spain, Annual Report; and Ministry of Economy and Commerce, La Economia Española en 1980 y las Perspectivas a Corto Plazo, 1981.

1/ Data provided by the Spanish authorities.
2/ Compensation of employees, including social security contributions, divided by GDP at factor cost, at constant prices.
3/ Compensation per employee, including social security contributions, in industry, services and construction.
4/ Value-added deflator in industry, services and construction.
5/ Ratio of value-added deflator in industry, services, and construction over unit labor costs.

Table 9. Spain: Costs and Prices in the Industrial Sector, 1977-80

(1977=100)

	Weights 1977	1979	1980
Unit labor costs	29.4	139.5	155.8
Import prices (industrial products excluding oil)	19.8	123.1	147.8
Intermediate product prices	45.1	127.8	147.6
Net indirect taxes	5.7	137.8	148.1
Total industrial costs	100.0	130.9	150.1
Industrial prices	100.0	138.3	165.3
Profit margins (ratio of industrial prices to industrial costs	100.0	105.6	110.1

Source: Ministry of Economy and Commerce, La Economia Española en 1980 y las Perspectivas a Corto Plazo, 1981.

Table 10. Spain: Composition of National Income, 1978-80

	1980	1978	1979	1980	1978	1979	1980
	In billions of pesetas	Percentage change over previous year			Percentage share in national income		
Dependent labor income 1/	8,281.9	24.0	15.5	14.5	64.1	63.9	63.8
Of which:							
Wages	6,353.0	22.9	15.1	12.9	50.0	49.7	48.9
Social security contributions	1,928.9	29.4	21.2	13.4	14.1	14.2	14.9
Income from capital, independent labor, and enterprise income 1/	4,703.9	26.3	16.5	15.1	35.9	36.1	36.2
National income at factor cost	12,985.8	24.8	15.8	14.7	100.0	100.0	100.0

Source: Bank of Spain, Annual Report.

1/ Includes net income from abroad.

Table 11. Spain: Prices, 1978-81

(Average rate of changes) 1/

	Consumer Price Index 1976 = 100			Wholesale Price Index 1975 = 100			Industrial Prices 1974 = 100		
	Total	Food 2/	Nonfood	Total	Food, beverages, and tobacco 3/	Other	Total	Food, beverages, and tobacco 4/	Other
1978									
Average	19.7	19.2	20.1	14.0	14.9	12.8	...	...	...
1979									
I	16.4	13.4	18.4	11.6	13.1	8.5	...	...	...
II	15.5	12.1	17.8	11.6	12.6	10.2	...	...	...
III	15.2	7.5	20.5	11.1	7.9	15.5	...	...	...
IV	15.6	8.1	20.6	9.6	6.9	15.1	...	...	...
Average	15.7	10.1	19.4	10.9	9.8	12.4	...	...	...
1980									
I	16.7	9.0	21.6	12.7	7.3	20.4	20.4	8.7	22.4
II	15.6	7.1	20.9	5.1	-2.0	15.3	19.6	8.4	21.4
III	15.1	8.8	19.0	...	...	...	17.7	7.7	19.3
IV	15.0	11.4	17.1	...	...	...	16.7	10.6	18.1
Average	15.6	9.1	19.5	...	...	...	15.8	8.9	20.2
1981									
I	14.7	13.7	15.2	...	...	...	14.3	12.2	14.6
II	14.9	13.4	15.8	...	...	...	17.0	13.3	17.5
III	14.3	13.5	14.8	...	...	...	16.3	16.5	16.3
IV	14.4	13.8	14.7						
Average	14.5	13.6	15.1						

Source: Bank of Spain, Monthly Bulletin.

1/ From corresponding period of previous year.
2/ Accounts for 40.52 per cent of the index.
3/ Accounts for 52.30 per cent of the index.
4/ Accounts for 14.63 per cent of the index.

II. Balance of Payments

1. Main trends

In spite of the increasing deficits recorded by the Spanish balance of payments since 1974, a consistent effort toward correcting the external imbalance did not start until the introduction of the stabilization program in mid-1977. However, the external position, which strengthened markedly in 1978 and in the first half of 1979 in response to this program, was once again affected by a renewed wave of massive oil price increases. As a result, the current account shifted from a surplus of US$1.1 billion in 1979 to a deficit of around US$5 billion in 1980. The doubling of the trade deficit with respect to 1979 largely reflected the sharp deterioration in the terms of trade, although a poor performance of exports, which for the first time showed a loss in market shares, also played a role. In addition, the traditional surplus on the services account declined from US$5 billion in 1979 to US$4.4 billion in 1980, reflecting a slowdown in tourism receipts, and an increase in the cost of servicing external debt. The current deficit was financed mainly through resort to foreign loans, so that the loss of reserves was limited to about US$600 million during the year. The exchange rate, which had begun to decline already in the second half of 1979, accelerated its depreciation in the course of 1980 and, by year-end, it stood at 16.5 per cent vis-à-vis the U.S. dollar and about 10 per cent in effective terms below the end-1979 levels.

Estimates for 1981 point to some improvement in the competitive position, owing to the more flexible management of the exchange rate (the peseta depreciated by over 22 per cent with respect to the U.S. dollar in 1981) and to the containment of unit labor cost increases. As exports recovered, especially in the second half of the year, and import volumes declined, the real trade balance strengthened markedly, making a substantial contribution to GDP growth in 1981. However, the current account deficit is estimated to have increased to the equivalent of 2.8 per cent of GDP (about US$5.3 billion), reflecting an estimated 6 per cent terms of trade loss and a further reduction in the surplus on the services and transfers account. Continued large external borrowing once again limited the loss of reserves. Total medium-term and long-term debt outstanding reached the equivalent of US$26.2 billion by September 1981, compared with US$19.5 billion at the end of 1979.

2. Exchange rate policy

Spain has maintained a managed floating of the peseta since 1974. Interventions in the exchange market, which were at times significant, limited the fluctuations of the peseta through 1976. After a 20 per cent devaluation in July 1977 and especially in the first half of 1978, the authorities intervened on a sizable scale to moderate the upward pressure on the exchange rate brought about by the strength of the current account and by tight credit conditions. In the second half of the year and through May 1979, however, concern with the implications of the capital inflow for monetary management prompted them to accept a sizable appreciation of the exchange rate. As pressures eased and ultimately reversed in the second half of 1979 and during 1980, the authorities allowed a gradual slide of the rate and largely limited intervention to smoothing operations. In January 1981 they also moved to dismantle some exchange restrictions; foreign accounts in peseta for payments in Spain (the so-called "A" accounts) and foreign accounts in convertible peseta (the so-called "B" accounts) held by nonresidents were abolished, and peseta balances in these accounts were made freely convertible into foreign currency. The liberalization of exchange controls, along with the easing of speculative pressures on the rate, was reflected in a substantial decline of the forward discount, which narrowed to around an average 1 per cent in 1981 (Table 12).

Since the experience of mid-1977, when the sharp depreciation of the peseta was perhaps overdone and possibly laid the basis for the subsequent appreciation, the Spanish authorities have resisted large discrete changes in the exchange rate aimed at fostering an export-led growth. Fearing the adverse impact of a rapid depreciation on domestic inflation, they have favored gradual changes in the effective exchange rate, largely aimed at offsetting price differentials. Alternatively, they have relied mainly on financial policies to improve the competitive position through a moderation of domestic costs and prices.

From December 1979 to December 1981, the peseta depreciated by 31.4 per cent with respect to the U.S. dollar and by almost 16 per cent in effective terms, improving somewhat the competitive position. The real effective exchange rate, as measured by relative consumer prices adjusted for exchange rate changes, depreciated by nearly 3 per cent in the first half of 1980, broadly stabilizing thereafter. By the end of 1981 it still remained about 12 per cent above the level in the third quarter of 1977 which represented a peak in competitiveness. In addition, there was some loss of competitiveness with respect to several EC currencies, especially in the first three quarters of 1981 as the real effective exchange rate for the peseta appreciated with respect to them. The improvement in the competitive position vis-à-vis the U.S. dollar area contributed to a marked redirection of trade to that area and away from the EC during 1981.

3. Developments in the current account

Following a current account surplus equivalent to 1.1 per cent of GDP in 1978, external constraints began to re-emerge in the second half of 1979 as a result of the sharp increase in oil prices, superimposed on a substantial loss of competitiveness. The current account balance swung from a surplus of US$1.1 billion (0.6 per cent of GDP) in 1979 to a deficit of about US$5 billion in 1980 (2.4 per cent of GDP). This renewed deterioration of the external balance took place against the background of a near stagnation of activity. The adjustment to the second oil shock is further complicated by the fact that Spain remains a

relatively closed economy. 1/ The additional release of real resources abroad required to pay for the higher oil bill is, therefore, made more complex by the difficulty of containing the rising trend of imports (Chart 3a) stemming from the increasing integration of Spain in the international markets. Under these circumstances, Spanish exports are required an additional effort, as the services and transfers account surpluses seem to have little prospect for further substantial growth. The more flexible management of the exchange rate and the deceleration of industrial costs in 1981 appear to have laid the foundation for an improved external performance. As a result of the recovery of exports and of the decline of import volumes, the trade deficit, after doubling in 1980 to US$11.5 billion, is estimated to have decreased to US$10.9 billion in 1981 despite a large deterioration of the terms of trade. However, the invisibles account, affected by the poor tourism performance and by the increased cost of servicing external debt, has continued to record unsatisfactory results. On the whole, the current account deficit is estimated to have increased to US$5.3 billion (2.8 per cent of GDP) in 1981 (Table 13).

a. The trade account

After a remarkable improvement in 1978 and in the first half of 1979, the trade deficit deteriorated sharply in the second half of the year, when the adverse impact of the terms of trade, associated with the oil price increases, was compounded by a rapid expansion of the volume of imports (Table 14). Exports, which had increased in volume by 12.2 per cent in 1979, rose by only 2.4 per cent in 1980, recording a significant loss in market shares (Table 14 and Chart 3b). 2/ The lagged effect of the appreciation of the peseta through May 1979 was probably largely responsible for the poor export performance (Table 15). In the past, Spanish enterprises attempted to seek external outlets more aggressively when faced with a stagnation of domestic demand. By contrast, despite a deceleration in the growth of labor costs, which contributed to the containment of increases in domestic industrial prices to less than 15 per

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1/ In 1980 imports of goods still represented only 16.2 per cent of GDP and exports of goods accounted for 9.9 per cent of GDP, while, on average, the former percentage was 22.7 per cent and the latter 21.0 per cent in the major four EC countries.

2/ A firm assessment of trade account developments in 1980 and in 1981 is hampered by a number of factors including a change in the customs recording procedures of exports in April 1979, strikes at main ports in July and August 1980, the provisional character of import and export unit values for 1980, and new changes in the customs recording procedures for imports and exports, introduced in the first quarter of 1981 to conform with the EC branch nomenclature. Table 13 shows annual estimates by the Bank of Spain; however, quarterly results shown in that table are based on the series of unit values of imports and exports prepared by the Ministry of Economy and Commerce. The latter, thus, are not consistent with the annual results. Because of methodological changes introduced in 1981, the Ministry of Economics and Commerce has discontinued the publication of import and export unit values.

cent in 1980, export prices rose by almost 20 per cent in domestic currency, in line with the increase in export prices of partner countries. It appears, then, that a restoration of profit margins rather than a defense of market shares was the strategy adopted by Spanish exporters in 1980.

The commodity composition of exports indicates a significant increase in the share of raw materials and intermediate products since 1978, at the expense of the more traditional food and consumer exports (Table 16). T e geographic composition of exports did not change much in 1980, with exports to OPEC increasing at the expense of the United States and of the socialist countries. Exports to the EC continued to rise and, in 1980, they accounted for almost 50 per cent of the total (Table 17).

Imports rose in value terms by almost 44 per cent (4.7 per cent in volume) in 1980 compared with a 19 per cent increase in 1979. Several factors contributed to this acceleration. The 76 per cent increase in oil prices played a major role. In addition, speculative factors related to the exchange rate expectations stimulated stockpiling in the first part of the year. Imports of consumer goods, which increased by over 16 per cent in volume, were also affected by import liberalization measures introduced in mid-1979 and by some tariff reductions in 1980. Imports of capital goods rose by 11 per cent in volume, in response to the increased demand for productive investment. Finally, although the increase in the volume of energy imports moderated substantially in the course of 1980, the large carryover from the second half of 1979 led to a year-on-year rise of nearly 4 per cent.

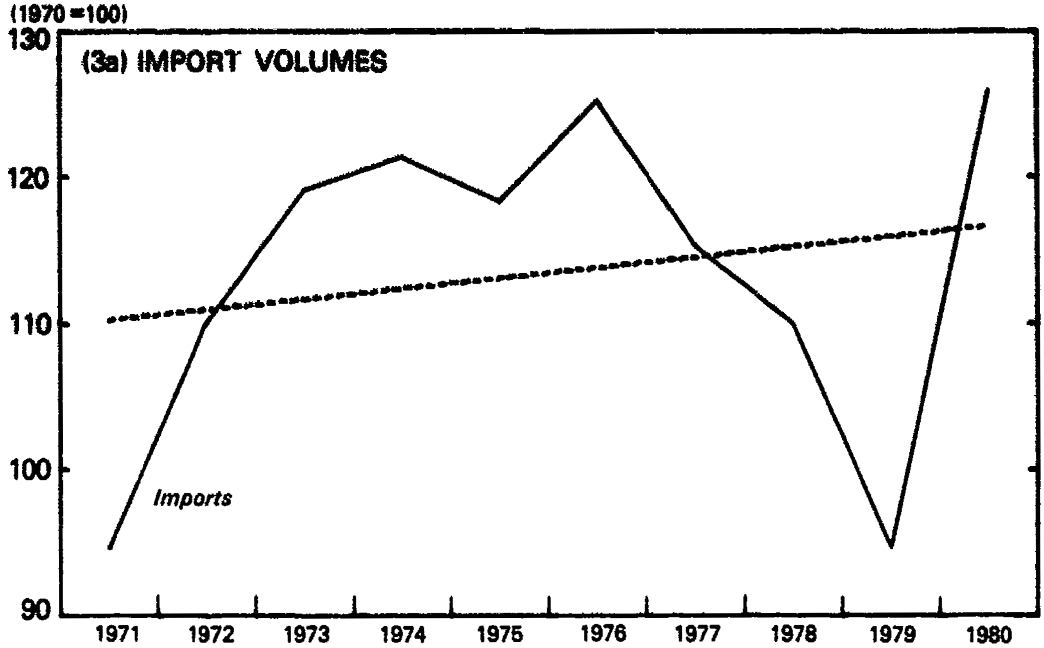
The task of interpreting developments in the trade balance during 1981 is made difficult by the lack of price and volume indices and of the commodity breakdown of imports and exports, due to reclassifications in the customs statistics. During the first 11 months of last year, peseta imports rose in value by 22.9 per cent and exports by 29.8 per cent over the same period in 1980, leading to a small increase of the trade deficit on a customs basis from Pta 906 billion to Pta 1,026 billion. Preliminary estimates suggest that this deterioration reflected mainly a further loss in the terms of trade, as a result of the depreciation of the peseta vis-à-vis the U.S. dollar. For the year as a whole, import prices in peseta are estimated to have risen by about 30 per cent and export prices in peseta by about 22 per cent. According to these estimates, the real trade balance improved substantially in 1981, as import volumes declined by over 5 per cent, while export volume increased by over 6 per cent. Provisional estimates of the balance of payments point to a decline of the trade deficit from US$11.5 billion in 1980 to US$10.9 billion in 1981.

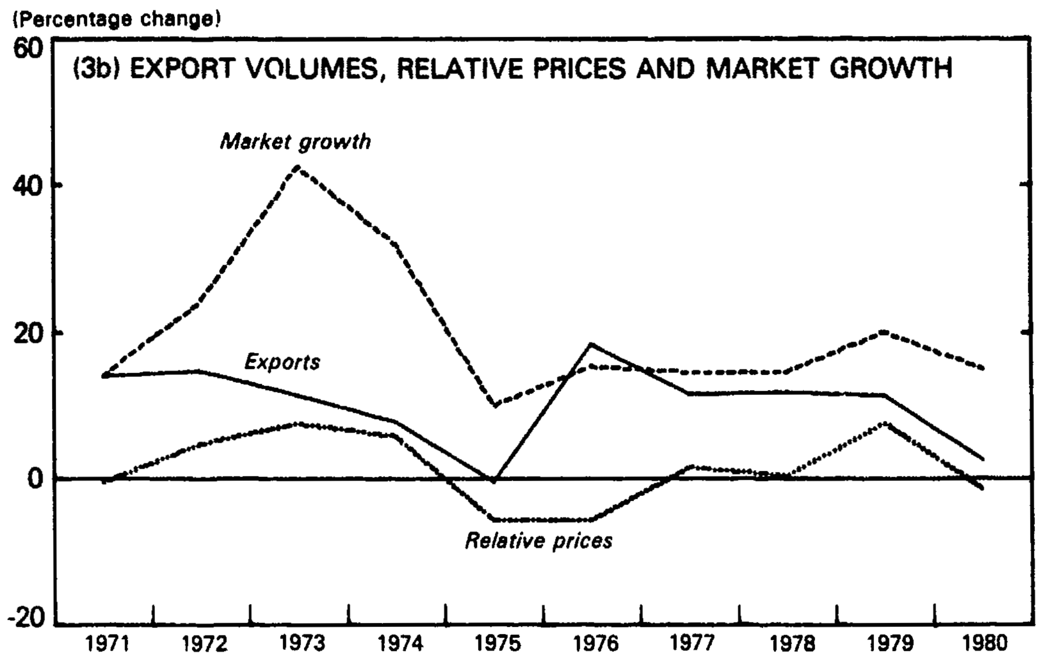
The strong export performance, especially in the middle quarters of 1981, in the face of a deceleration in the level of activity in other EC countries and of the modest expansion of the world demand in 1981, might suggest the possibility of a bias due to export deflators as they have

CHART 3

SPAIN

FOREIGN TRADE AND DETERMINANTS, 1971-80





Source Bank of Spain, *Statistical Bulletin*, IMF, *International Financial Statistics;* and Staff calculations.

been estimated by the Spanish authorities. On the other hand, the geographic distribution of exports in the first eight months of the year (Table 17) indicates that Spanish exports in 1981 were helped by a redirection toward markets, like OPEC countries and the United States, which have been growing relatively faster and in which the marked depreciation of the peseta vis-à-vis the U.S. dollar had led to a more pronounced improvement in competitiveness than on average. On the contrary, exports toward the EC countries, where competitiveness deteriorated especially in the first part of the year, have drastically declined, comparing the first eight months of 1981 with the same period in 1980.

b. Invisibles

The surplus on the services account decreased from US$5 billion in 1979 to US$4.4 billion in 1980 (Table 13). Receipts from tourism showed only a modest increase, 7.2 per cent in U.S. dollar terms, compared with an average annual increase of 26 per cent in the previous three years. The number of tourists, which decreased by nearly 4 per cent in 1979, fell again by 1 per cent in 1980; thus, the increase in receipts reflected higher expenditures per capita. The tourism account in 1980 was adversely affected by a 33 per cent increase in payments by Spanish tourists abroad. The deficit on capital income rose sharply in 1980, as a result of the higher private and public external debt and of higher interest rates. Private transfers, which probably had been affected in the second half of 1979 by adverse exchange rate expectations, recovered somewhat in 1980, and increased by about 15 per cent in 1980 in U.S. dollar terms.

Preliminary estimates for 1981 indicate that tourism receipts declined in U.S. dollars by about 5 per cent, due to the appreciation of the latter vis-à-vis the peseta, although the number of tourists might have increased by about 3.5 per cent with respect to 1980. On the other hand, payments for tourism showed a sharper decline, which largely contributed to keeping the surplus of the tourism balance at about the same level as in 1980 (US$5.7 billion in 1980 and US$5.6 billion in 1981). The deficit on capital income is estimated to have risen from about US$1.5 billion in 1980 to almost US$2.1 billion in 1981, reflecting the increase in external debt outstanding and the higher cost of debt servicing. Finally, private transfers are estimated to have decreased to about US$1.7 billion in 1981.

4. The capital account

The traditional surplus on the long-term capital account rose from US$2 billion in 1978 to US$3.2 billion in 1979 and to US$4.2 billion in 1980 (Table 13). While the increase in 1979 was mainly a reflection of inflows of direct and portfolio investment, that in 1980 was primarily due to increased resort to external borrowing by public and private enterprises. Net direct investment increased in 1980 at a slower rate than usual as the growth of foreign investment in Spain decelerated significantly while that of Spanish investment abroad accelerated, partly as a result of liberalization measures taken in 1978. Foreign borrowing by Spanish companies, on the other hand, increased at a rapid pace throughout 1980. The stepped up resort to medium-term and long-term borrowing abroad, against a background of relatively easy domestic credit conditions, was probably a reflection of the traditional scarcity of longer-term finance in Spain, as well as of the liberalization of authorization procedures for foreign borrowing. As a result, by year-end external medium-term and long-term debt reached the equivalent of US$23.7 billion, compared with US$19.5 billion a year earlier (Table 19).

The short-term capital account (including errors and omissions) showed a significant deficit, probably mainly reflecting speculative outflows in the form of leads and lags. The net capital inflow through the banking system was significantly smaller in 1980 than in 1979 (Table 13). This was largely the result of a marked deceleration in the growth of short-term credits in foreign currency to residents as the covered interest rate differential favored domestic borrowing except during the second quarter. On the whole, the surplus on the capital account limited the loss of international reserves during the year to under US$650 million. At the end of 1980 total reserves, excluding gold, stood at the equivalent of US$11.7 billion (about four months of imports) (Table 20). Gold amounted to 14.6 million ounces.

Against the background of a further deterioration in the current account, long-term inflows accelerated in the first 11 months of 1981, owing not only to an increase in net investments, but also to borrowing by the State which reached a high level in the second quarter (Table 18). Thus, external debt rose significantly and by September 1981 it stood at over US$26 billion. The short-term capital account showed a substantial surplus, as opposed to a virtual balance in the corresponding period of last year, in response to the rise of domestic interest rates. Foreign exchange reserves declined in the first five months of the year but recovered strongly during the seasonally favorable summer months and stood at US$10.6 billion at the end of November 1981, compared with US$11.2 billion at the end of 1980 (Table 20). 1/

1/ Gold holdings were revalued in January 1982, retroactive to December 31, 1981, from US$42.2 per ounce to US$297.9 per ounce.

Table 12. Spain: Exchange Rate Developments, 1977-81 1/

	Peseta/U.S. Dollar Rate	Effective Exchange Rate 2/	3-Month Forward Premium (+)/ Discount (-) of U.S. Dollar	Relative Consumer Prices (Adjusted for Exchange Rate Changes) 2/
	1975 = 100		In per cent	1975 = 100
1977	76.4	80.7	12.4	98.3
1978	75.2	73.7	6.7	99.3
1979				
I	82.9	78.7	3.4	109.2
II	86.2	83.2	2.2	116.4
III	87.0	82.1	13.1	115.0
IV	86.6	81.9	4.3	114.7
Year	85.7	81.5	5.7	113.8
1980				
I	85.5	80.9	4.5	114.1
II	81.2	77.2	6.6	108.9
III	79.7	74.5	11.0	106.4
IV	75.1	72.4	5.4	105.6
Year	80.4	76.3	6.9	108.8
1981				
I	68.4	69.2	0.2	104.4
II	63.1	68.1	1.6	104.4
III	58.7	66.4	0.8	104.3
IV	59.9	65.7	2.1	103.3
Year	62.5	67.3	1.2	104,1

Sources: IMF, International Financial Statistics; and staff calculations.

1/ Trade weighted.
2/ Weighted by the shares of the 14 most industrialized countries in Spanish exports.

Table 13. Spain: Summary Balance of Payments, 1978-81

(Transactions basis; in millions of U.S. dollars)

	1978	1979 1/	1980 1/	1981 2/
Exports, f.o.b.	13,480	18,352	20,928	20,426
Imports, f.o.b.	17,505	24,022	32,389	31,288
Trade balance	-4,025	-5,670	-11,461	-10,862
Services	4,001	5,014	4,424	3,837
Of which:				
Transports	431	857	692	...
Tourism	4,917	5,559	5,720	5,629
Capital income	-1,109	-1,088	-1,548	-2,074
Technical assistance and royalties	-324	403	464	...
Transfers	1,656	1,782	2,048	1,732
Current balance	1,632	1,126	-4,988	-5,293
Long-term capital	2,017	3,220	4,201	4,662
Of which:				
Direct investment	483	623	1,277 3/	1,465 3/
Portfolio investment	631	726	...	...
Commercial credits	-220	-57	...	...
Borrowing	1,555	1,591	2,750 4/	2,653 4/
Public	-396	373	174	544
Basic balance	3,649	4,346	-788	-631
Short-term capital	5	87	-44	560
Errors and omissions	166	-2,330	-713	-565
Changes in the net foreign position of banks	139	1,335	829	23
Changes in the net foreign position of monetary authorities	-3,889	-2,915	716	613
Of which:				
Changes in reserves	3,889	-2,985	639.5	540

Sources: Bank of Spain, Annual Report; and data provided by the Spanish authorities.

1/ Provisional.
2/ Estimate.
3/ Includes portfolio and real estate investment.
4/ Includes commercial credits.

Table 14. Spain: External Trade and Its Determinants, 1978-81 1/ 2/

(Percentage change over previous period; seasonally adjusted)

	1978	1979	1980	1981 3/	1979				1980				1981		
					I	II	III	IV	I	II	III	IV	I	II	III
Exports, f.o.b. (in pesetas)	29.2	21.9	22.3	29.8	9.7	2.6	5.9	4.9	3.0	6.8	-2.5	25.4	-17.6	26.4	20.2
Unit values (in pesetas)	15.0	8.6	19.4	...	2.2	-0.9	1.3	7.4	1.2	13.1	1.9	1.9	...	...	...
Volumes	12.3	12.2	2.4	...	7.3	3.5	4.5	-2.4	1.7	-5.6	-4.4	23.1	...	...	...
Imports, c.i.f. (in pesetas)	6.0	19.0	43.8	22.9	2.0	1.4	21.3	10.8	7.2	11.2	4.1	9.5	-6.1	17.8	-2.1
Unit values (in pesetas)	10.9	3.6	37.3	...	1.9	1.5	7.8	6.4	22.5	6.7	8.0	8.0	...	...	...
Volumes	-4.4	14.8	4.7	...	0.1	-0.1	12.6	4.1	-12.5	4.2	-3.6	1.4	...	...	...
Trade balance (in billions of pesetas)	-430	-483	-957	-1,026	-85	-85	-141	-173	-202	-251	-269	-243	-286	-313	-215
Market growth 4/	7.5	7.4	4.2	3.1	...	...	...	...	...	...	...	...	...	...	...
Export prices of partner countries (in U.S. dollars, import weighted) 4/	11.1	14.6	12.2	-1.9	...	...	...	...	...	...	...	...	...	...	...
Nominal exchange rate	-0.9	14.2	-6.4	-22.3	1.9	4.0	1.0	-0.4	-1.4	-5.0	-1.8	-5.9	-8.9	-7.7	-7.0

Sources: Bank of Spain, Annual Report and Statistical Bulletin; Ministry of Economics and Commerce, Información Comercial Española and La Economía Española en 1980 y las Perspectives a Corto Plazo, 1981; and staff estimates.

1/ Customs basis, pesetas.
2/ Bank of Spain estimates. Because of a change in customs recording procedures in April 1979 and the provisional character of the unit value series available for 1980, the 1980 quarterly changes shown in the table are not consistent with the 1980 revised annual results as computed by the Bank of Spain.
3/ Through November 1981.
4/ Staff estimates.

Table 15. Spain: Competitiveness in Manufacturing, 1976-81

(1976 = 100)

	Relative Export Unit Values 1/	Relative Wage Costs 1/2/
1976		
I	100.9	94.8
II	101.2	101.2
III	100.1	101.7
IV	97.8	102.3
Average	100.0	100.0
1977		
I	105.2	111.2
II	109.5	112.8
III	95.4	92.8
IV	99.0	95.8
Average	102.3	103.1
1978		
I	98.3	101.4
II	97.7	101.6
III	103.7	107.8
IV	104.7	114.0
Average	101.1	106.2
1979		
I	101.8	120.0
II	105.5	135.2
III	100.0	129.2
IV	100.5	126.6
Average	102.0	127.7
1980		
I	101.8	126.6
II	109.4	131.7
III	104.9	119.7
IV	102.9	121.1
Average	104.7	124.9
1981		
I		121.9

Sources: Bank of Spain, Statistical Bulletin; Ministry of Economy and Commerce, Informatión Commercial Española; IMF International Financial Statistics; and staff calculations.

1/ Adjusted for changes in the effective exchange rate.
2/ Hourly earnings.

Table 16. Spain: Commodity Composition of Trade, 1978-80

	1978	1980	1978	1979	1980 1/	1978	1979	1980 1/
	Percentage share of total		Percentage change in volume			Percentage change in prices		
Exports								
Energy	2.5	3.9	-26.2	-11.7	60.2	18.1	18.2	39.3
Food	19.6	18.0	7.0	9.2	-3.8	12.5	15.5	12.6
Raw materials and intermediate goods	31.4	34.2	3.5	12.4	6.4	8.6	9.2	24.2
Capital goods	18.7	18.3	6.7	24.3	-8.5	16.1	2.6	25.6
Consumer goods	27.8	25.5	11.1	14.7	3.8	19.2	1.0	14.0
Imports								
Energy	28.4	38.5	-0.6	14.0	3.8	6.7	11.1	76.3
Food	16.2	12.2	23.1	5.1	3.8	-8.1	1.4	17.0
Raw materials and intermediate goods	28.6	24.5	-5.7	12.5	1.3	9.4	7.2	19.9
Capital goods	18.2	15.9	-11.3	9.8	11.0	16.0	1.7	20.2
Consumer goods	8.6	8.9	0.4	31.2	16.3	8.9	-2.9	20.0

Source: Bank of Spain, Annual Report and Statistical Bulletin.

1/ Bank of Spain estimates.

Table 17. Spain: Geographic Distribution of Trade, 1978-81

(Percentage share of total)

	1978	1979	1980	1980 1/ Jan.-Aug.	1981 1/ Jan.-Aug.
Exports					
To EC	46.3	48.0	48.8	51.0	42.0
Of which:					
United Kingdom	6.5	7.2	7.1	...	...
France	16.6	16.1	16.6	...	...
Germany	10.7	10.3	10.3	...	...
Italy	5.0	6.5	7.8	...	...
To the United States	9.3	7.2	5.6	5.2	6.3
To other OECD countries	10.8	10.7	10.4	...	...
To OPEC	12.5	10.9	12.8	9.1 2/	10.9 2/
To socialist countries	3.7	4.4	3.2	2.7	4.9
To other countries	17.4	18.8	19.2	...	...
Imports					
From EC	34.7	35.9	30.5	32.1	28.6
Of which:					
United Kingdom	5.4	5.2	4.7	...	...
France	9.1	9.7	8.3	...	...
Germany	10.0	9.6	8.2	...	...
Italy	4.7	5.6	4.9	...	...
From the United States	13.3	12.5	13.1	13.8	13.3
From other OECD countries	9.7	9.1	8.7	...	...
From OPEC	25.9	24.9	29.7	24.7 2/	26.8 2/
From socialist countries	2.7	2.9	2.3	2.0	2.7
From other countries	13.7	14.7	15.7	...	...

Source: IMF, Direction of Trade.

1/ Data provided by the Spanish authorities.
2/ Middle East.

Table 18. Spain: Balance of Payments, 1978-81

(Settlement basis; in billions of pesetas)

	1978	1979	1980	1981 1/	1980				1981		
					I	II	III	IV	I	II	III
Exports	1,000.8	1,088.0	1,420.0	1,700.9	366.7	341.6	337.3	374.4	440.4	468.4	471.4
Imports	1,303.8	-1,578.4	-2,298.1	-2,589.5	553.7	575.0	583.5	585.9	693.5	746.4	701.0
Trade balance	-303.0	-490.4	-878.1	-888.6	-187.0	-233.4	-246.2	-211.5	-253.1	-278.0	-229.6
Services	326.5	344.9	353.2	311.1	54.5	69.3	148.5	80.9	45.7	51.6	174.9
Of which:											
Tourism	373.4	371.7	412.4	501.7	64.4	91.2	160.2	96.5	84.5	110.5	209.3
Transfers	110.9	101.4	143.4	142.6	30.7	34.7	42.2	35.9	38.0	34.6	42.8
Of which:											
Private	112.0	102.8	143.8	143.1	30.7	35.0	42.2	35.9	38.0	35.2	42.8
Current balance	134.4	-44.1	-381.5	-434.9	-101.8	-129.4	-55.5	-94.7	-169.3	-191.8	-11.9
Long-term capital	121.9	168.5	273.9	363.2	32.5	99.3	84.0	57.0	100.3	155.4	86.8
Of which:											
Investment	72.8	77.9	55.8	124.4	8.8	17.0	15.8	14.3	20.6	38.3	41.3
Credit	77.3	101.7	187.8	179.3	19.9	69.5	64.8	33.6	68.6	61.3	47.7
Public	-28.1	-11.0	30.1	59.5	3.8	12.8	3.4	9.1	11.1	55.8	-2.2
Short-term capital	11.6	-7.6	-3.2	57.1	-1.0	-5.6	9.3	-5.9	6.4	15.5	25.2
Errors and omissions	11.7	-29.6	0.5	-27.1	--	-5.8	5.7	0.9	-12.7	-9.8	11.9
Change in net foreign positions of banks	10.0	89.5	52.3	1.3	-5.7	62.7	-7.2	2.6	1.3	31.0	-33.9
Change in net foreign position of monetary authorities	-289.7	176.7	58.0	35.0	76.0	-21.2	-36.3	40.1	74.0	-0.3	-78.1

Source: Bank of Spain, Statistical Bulletin.

1/ Through November 1981.

Table 19. Spain: External Medium-Term and Long-Term Debt, 1978-81 1/

(In millions of U.S. dollars; end of period)

	1978	1979	1980				1981		
			I	II	III	IV	I	II	III
Public	6,219	7,262	7,505	8,096	8,443	8,869	9,262	9,853	10,373
Of which:									
State	1,545	1,440	1,268	1,222	1,216	1,323	1,351	1,799	1,822
RENFE	940	946	988	1,120	1,152	1,162	1,193	1,402	1,385
INI and its companies	2,936	3,600	3,897	4,263	4,471	4,763	5,044	4,931	5,428
Other	798	1,276	1,352	1,491	1,604	1,621	1,674	1,721	1,737
Private	7,766	9,111	9,500	10,362	11,259	11,842	12,605	13,627	13,977
Of which:									
State guaranteed	1,217	1,319	1,347	1,287	1,337	1,333	1,334	1,354	1,359
Total 2/	13,985	16,373	17,005	18,458	19,702	20,710	21,868	23,480	24,349
Of which:									
From:									
IBRD	240	231	231	223	224	212	215	206	205
EXIM bank	804	883	893	901	890	881	866	864	847
National government	84	76	73	73	225	221	217	213	206
Other public bodies	757	727	790	836	668	803	834	784	810
Private financial institutions	9,078	10,989	11,347	12,355	13,212	13,711	14,605	15,880	16,574
Private nonfinancial institutions	896	926	929	917	975	1,001	985	1,095	1,112
Through Spanish banks	2,126	2,541	2,742	3,153	3,508	3,880	4,147	4,438	4,595
Memorandum items:									
Total at market exchange rates 2/	17,158	19,461	19,390	21,877	23,071	23,695	24,352	25,236	26,242
As percentage of GDP	10.6	9.8	...	...	...	12.4 4/	...	...	14.1 4/

Source: Bank of Spain, Statistical Bulletin.
1/ Valued at central rates.
2/ Excluding debt to IMF.
3/ Including debt to IMF.
4/ With respect to annual GDP.

Table 20. Spain: International Reserves, 1978-81

(In millions of U.S. dollars; end of period)

	1978	1979	1980				1981			
			I	II	III	IV	I	II	III	November
Gold	613.1	616.7	616.7	616.7	616.7	616.7	616.7	616.7	616.7	616.7
IMF position	168.0	162.8	165.2	168.6	168.8	255.3	256.1	255.4	253.1	251.9
SDRs	123.9	252.5	349.3	368.1	377.1	286.3	338.4	328.0	367.4	408.0
Foreign exchange	9,110.4	12,084.6	10,980.6	11,229.9	11,787.8	11,199.8	10,393.6	10,349.3	11,073.1	10,602.1
Total	10,015.4	13,116.6	12,111.8	12,383.3	12,946.1	12,358.1	11,604.8	11,549.4	12,310.3	11,878.7

Source: Bank of Spain, Statistical Bulletin.

III. Public Finance

1. Major trends

The two principal subsectors of Spain's financial public sector are the General Government and the nonfinancial public enterprises. The General Government is made up of the Central Government and local governments. In turn, the coverage of the consolidated Central Government includes, besides the state operations, the administrative autonomous agencies and social security agencies. 1/ There are 151 state-owned enterprises (including commercial and industrial agencies of the Central Government) and 12 mixed ownership enterprises engaged in manufacturing, trade, and services, at the national level, and 126 enterprises operating at the local level.

Whereas public enterprises derive their income primarily from the sale of goods and services, the state depends mainly on revenue from taxes on income, production, consumption, and lottery proceeds, part of which it transfers to the autonomous agencies that also receive user fees for services rendered. The social security agencies' principal source of revenue is payroll taxation. The local governments rely on their own tax revenue and on central government transfers under a revenue sharing arrangement. 2/ In general, the public sector budget (including supplementary appropriations) is subject to legislative approval. However, the Minister of Finance may authorize extrabudgetary outlays up to 2 per cent of budgeted expenditures, and the Council of Ministers up to 5-10 per cent of budgeted expenditures, respectively, for the autonomous agencies and public enterprises. The Central Government may resort to short-term credit from the Bank of Spain, in an amount not in excess of 12 per cent of the budgeted expenditures of the state and autonomous agencies, while long-term borrowing requires legislative approval; all other short-term credit operations must be cancelled by the end of the fiscal year. Local governments may incur debt subject to the approval of the Fiscal and Financial Policy Council (made up of central and local government representatives).

Since the mid-1970s, Spain's fiscal policy has been guided predominantly by the objective of income redistribution; more recently, however, it has been used increasingly for demand management purposes as well. In the last two years, in particular, the Government has undertaken a commitment to spur private activity by stepping up the public investment effort and reversing the steady increase of the payroll tax burden on labor costs. In all, the share of the public sector in economic activity has grown significantly. Expenditures of the General Government are estimated to be

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1/ However, in Spain the social security scheme is not considered formally part of the Central Government.

2/ As an exception, the Basque country has jurisdiction to collect all taxes within its borders. From this revenue, it makes a lump sum transfer (cupo) to the Central Government to defray its share of common public expenditures (on defense, foreign relations, etc.).

around 34 per cent of GDP, as against 24 per cent of GDP in 1975. The single most important contribution to the growth in expenditure came from the sharp rise in social security benefits, which now comprise 43 per cent of government outlays and almost one fifth of personal disposable income. However, the rise in expenditure has not been matched by the increase in tax revenue which presently stand at about 26 per cent of GDP. Despite the doubling of revenue from taxes on income and property since 1978, Spain still relies excessively on payroll taxes for social security; revenue from the latter accounts for almost one half of total tax receipts-the highest proportion among OECD member countries--1/ and for about 24 per cent of gross compensation of employees (Table 21).

Between 1979 and 1981 the current balance of the General Government swung from a surplus of almost Pta 160 billion (1.2 per cent of GDP) to a deficit of more than Pta 60 billion (0.4 per cent of GDP), reflecting the acceleration of current outlays, particularly in the form of transfers to households and enterprises (Table 23). Over the same period added capital spending contributed to an increase in the overall deficit, in terms of national accounts, from just over Pta 250 billion to Pta 740 billion (4.3 per cent of GDP) in 1981. In the meantime, the sharp rise in net lending operations (offset in 1980 by the increase in net unpaid obligations) brought about almost a tripling of the cash deficit from Pta 334 billion in 1979 to an estimated Pta 800 billion in 1981, the bulk of which was financed with domestic bank credit (Table 24).

From a broader perspective, it appears that since 1976 there has been a sustained increase (interrupted only in 1979) in the expansionary fiscal stance. The expansionary nature of fiscal operations seems to have counteracted the cyclical downturn reflected notably in sluggish private investment. However, the increase in government recourse to bank credit, to the extent that it has not been accommodated by the steady growth in monetary aggregates, may have led to some financial, and perhaps real, crowding-out of the private sector. 2/

Unfortunately, data limitations regarding nonfinancial public enterprises preclude a comprehensive assessment of the role of the public sector in the Spanish economy. However, in general terms, the public sector accounts for slightly more than one fourth of gross domestic fixed investment and for less than one fifth of GDP at factor cost. Moreover, on the basis of fragmentary information, it can be determined that in 1980 the borrowing requirement of the public sector (consolidated on a cash basis) totaled close to Pta 780 billion, equivalent to 5 per cent of GDP 3/ (Table 22). In view of the expected rise in the overall cash deficit of the General Government (while assuming conservatively an unchanged deficit

1/ For a comparison, see Organization for Economic Cooperation and Development, Revenue Statistics of OECD Member Countries (Paris, 1980).

2/ For an estimate of the fiscal impact, see Appendix III.

3/ The financing requirement of public enterprises are probably understated because of incomplete coverage of financing from external and domestic nonbank sources.

for public enterprises), the borrowing requirement may have been around 7 per cent of GDP in 1981. As in recent years, most of this borrowing requirement was satisfied with domestic bank financing, although with a rising share being financed from abroad.

2. Developments in 1980

In 1980 global expenditures of the General Government rose in relation to GDP by an amount equal to 2 percentage points; almost one half of the increase was made up of current transfers to households and enterprises. In spite of the efforts to contain the social security benefits (through moderation in the rise in old-age benefit rates below the rate of inflation and increase in user fees charged on medical benefits), transfers to households rose, owing to a considerable extent to the decline in economic activity. Specifically, unemployment compensation payments 1/ rose by about Pta 100 billion (on account of an increase of 143,000 in unemployed recipients), while old-age pensions increased by Pta 120 billion due to stepped-up early retirement (about 250,000 persons retired from the labor force) induced at least in part by the slowdown of activity. Current transfers to ailing enterprises (both public and private) were raised by about Pta 60 billion.

The other major component of current spending, namely public consumption, increased by an amount equal to more than one half of a percentage point of GDP, almost entirely accounted for by the rise in the wage bill. The growth in public sector employment (of about 3.4 per cent) and wage rates was particularly pronounced in the local governments, where wages and salaries increased by more than 30 per cent in comparison to the state's wage bill which rose by 22 per cent. The growth in purchases of goods and services slowed down in 1980 everywhere in the General Government, except in the social security agencies where such purchases doubled in the wake of the decline in the preceding year. Interest payments on the public debt, which comprise practically the remainder of current outlays, increased by Pta 30 billion--totaling a little over Pta 100 billion as interest rates charged to the Government on bank credit has been kept artificially below market rates.

After a decline in real terms, fixed capital formation of the General Government increased significantly in 1980, although admittedly from a low base--still amounting to barely more than 2 per cent of GDP. Particularly sharp has been the increase in construction of schools and other infrastructure projects by the administrative and social security agencies, with a rise in investment expenditures of about 40 and 60 per cent, respectively. Capital transfers, mainly to nonfinancial public enterprises, rose by Pta 60 billion or over 36 per cent. As the fixed investment of public enterprises increased by about Pta 40 billion--accounted

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1/ Since 1980 responsibility for such payments has been assumed by the National Employment Institute (INEM) an autonomous agency, from the social security agencies previously responsible for administering development assistance (Tables 26 and 27).

almost solely by the State Railways (RENFE) and other directly-controlled enterprises--to almost Pta 450 billion, it appears that a substantial part of the rise in transfers was channelled to pay for their operating outlays.

On the revenue side, 1/ the largest gains were realized as regards taxes on income and property in an amount equivalent to nearly a full percentage point of GDP, which implies a buoyancy with respect to income in excess of unity. 2/ This outcome is impressive insofar as it was achieved during the tax reform toward global income taxation--a process that in many countries involves the risk of revenue loss. The explanation for this good revenue performance seems to lie in a number of administrative improvements (such as tighter definition of exemptions, etc.).

In contrast to direct taxation, the revenue gains from other taxes was not impressive. The yield of major indirect taxes, namely, the turnover tax and selective consumption taxes, increased by only 5 per cent and 16 per cent, respectively, in part due to changes in statutory rates and bases. Revenue from payroll taxes for social security, declined slightly in relation to both GDP and to compensation of employees, reflecting opposite trends in contributions earmarked for unemployment and other social security benefits. Specifically, the revenue from the tax earmarked for unemployment benefits increased by 37 per cent due to the sharp rise in the statutory tax rate (from 2.7 per cent to 4.0 per cent applied proportionately to taxable wages) introduced in July, whereas other social security tax revenue rose by only 10 per cent, partly as a result of a 3 per cent decline in the number of taxpayers and partly because of a reduction in the tax rate (from 34.3 per cent to 33.6 per cent of taxable wages, subject to a ceiling). 3/

Nontax revenue, mainly in the form of state receipts of property income and proceeds from the lottery increased more or less in line with GDP growth. Notably, within this inflow, dividends from public enterprises and official financial institutions rose only by about 8 per cent,

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1/ For a description of the Spanish tax system, see Spain: Recent Economic Developments (SM/80/32, 2/1/80), Appendix IV.

2/ The buoyancy of tax revenue with respect to its effective base (as opposed to its legal base) measures the percentage change in revenue as a proportion of a given percentage change in that base (income, value of output, etc.), without excluding the revenue effect of discretionary tax measures. The elasticity of tax revenue, on the other hand, represents the percentage change in revenue as a proportion of the percentage change in the effective base, net of the revenue change attributable to discretionary measures. Given the brief history of the new Spanish income tax structure, it seems premature to attempt estimating its elasticity at this stage.

3/ Because of the transfer of responsibility over the unemployment fund from the social security agencies to INEM, the social security tax revenue of the former subsector shows a very small increase, as against the revenue of the autonomous agencies which increased sharply.

to less than Pta 80 billion--a relatively small increase which may reflect in part subsidization granted through preferential interest rates and prices of public services, not recorded explicitly in the state budget.

In sum, the General Government's current surplus of Pta 160 billion in the preceding year, virtually disappeared in 1980, and the overall deficit, on a national accounts basis, doubled to over Pta 500 billion. Had it not been for a small reduction in the deficit of the local governments (from almost Pta 70 billion to Pta 40 billion), the overall deficit of the General Government would have been even higher. 1/ However, the increase in the General Government's cash deficit was far less pronounced, namely of around Pta 110 billion to a level of Pta 450 billion. This was accomplished by a sharp accumulation of net unspent authorizations. There was, on the other hand, a significant increase in net lending operations primarily in the form of state credit to the Official Credit Institution 2/ for preferential onlending to enterprises.

A large fraction of the deficit was financed with domestic bank credit, with a falling share utilized by local governments. The amount of the drop in bank financing to the latter was Pta 35 billion, as against a Pta 200 billion increase in credit extended to the Central Government. The Government met, however, some success in increasing nonbank domestic credit financing; net state debt to insurance companies and other nonbank investors increased from less than Pta 50 billion in 1979 to Pta 70 billion in 1980. No resort was made to foreign borrowing; instead, there was a small net amortization of external credit.

3. Developments in 1981

In 1981 general government expenditure experienced a further significant rise, equivalent to more than 1 1/2 per cent of GDP. About two thirds of that increment can be ascribed to the growth in transfers to households, especially in the form of unemployment compensation and other social security benefit payments. This increase was triggered largely by further layoffs and early retirements, as well as the establishment of civil war veterans' pensions. The surge in benefits was, however, somewhat dampened by the adoption of stricter eligibility requirements for unemployment compensation, following the October 1980 labor legislation, 3/ and the increase in moderator fees charged to recipients of health care benefits (from 30 per cent to 40 per cent of cost).

1/ Again, the shift from a deficit to a surplus position of the social security agencies and the reverse shift for autonomous agencies is explained by the transfer of jurisdiction over unemployment assistance to INEM.

2/ Computed net of borrowing through cédulas para inversión issued almost entirely to the banking system.

3/ Effective January 1981, the compensation period was limited to one half of the length of prior employment, up to a maximum of 18 months; previously the compensation period was not related to the length of prior

The deepening recession contributed to the rise not only in social security benefits but also in transfers to enterprises, estimated at 21 per cent and 16 per cent, respectively; these expenditure categories constititute the largest overruns in the 1981 budget. 1/ The increased subsidization of enterprises, both through direct transfers and preferential loans, is being provided under sectoral agreements negotiated so far with enterprises in the integrated steel, textile and electrical appliance industries. Such agreements, undertaken in the framework of a medium-run industrial restructuring program launched in June 1981, involve a package of financial, labor-related, and investment (or divestment) measures agreed upon among business, labor and government representatives.

As regards the Government's operating costs, the rise in the size of the work force (of more than 2 per cent) as well as conversion of part-time to full-time employment and upgrading of positions, particulary in the state and local governments, led to an estimated 17 per cent increase in the wage bill. Likewise, the growth of purchases of goods and services has decelerated from the previous year, to an estimated 20 per cent on average. Certain state outlays increased at a substantially lower rate. In contrast, the increase in military and social security spending was much more pronounced; the latter reflects the start up of new health care facilities and services.

Capital expenditures are estimated to have risen by 26 per cent, which represents a shortfall from the budgeted amounts though implying higher realization rates than in preceding years. 2/ There was a marked slowdown in investment by social security and autonomous agencies (especially in the construction of schools), albeit the General Government's share in fixed capital formation has reached 11 per cent of aggregate fixed capital formation, up from 9 1/2 per cent two years earlier. Also significant was last year's rise in capital transfers to public and private enterprises, estimated at 29 per cent. The growth in capital outlays is attributable in part to more efficient budgetary implementation, but perhaps more importantly to the establishment of the Public

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3/ (cont'd from p. 38) employment. The compensation rate was changed from 75 per cent of previous wages and salaries during the first 6 months and 60 per cent in the following 12 months of unemployment, to 80 per cent in the first 6 months, 70 per cent in the next 6 months, and 60 per cent in the final 6 months of unemployment.

1/ Other transfers to households are comprised mainly of gross lottery payments, while gross lottery receipts are classified under nontax revenue (along with property income and other revenue). Unusually low figures under these entries in the 1981 budget suggest that lottery revenue and payments may have been classified on a net basis.

2/ In 1980 the realization rates were 82 per cent for fixed investment and 91 per cent for capital transfers, up from the 1979 rates of 74 per cent and 87 per cent, respectively. In 1981, the January-August realization rates were 1 per cent higher than during the same period in 1980 for investment and 8 per cent higher for transfers.

Investment Committee (CIP), entrusted with the formulation of investment policy, and the Public Investment Review Committee (CISP), in charge of overseeing the execution and coordination of investment projects. 1/

The rate of increase in revenue decelerated in real terms, as indicated by one half a percentage point increment in relation to GDP. However, income and property tax receipts are estimated to grow by 21 per cent notwithstanding the alleviation of the personal income tax burden (through a 10 per cent reduction in marginal rates and a Pta 2,000 increase in exemptions) and the effect of the recent profit squeeze on company income tax liabilities. The relatively strong revenue performance is due to a large extent to more efficient use of the Data Processing Center; also, there has been a very sharp increase in the taxpaying population primarily as a consequence of the income tax reform.

Although the revenue increase in indirect taxes and social security taxes was less impressive, it was noteworthy in relation to the rise in private consumption and compensation of employees, respectively. This outcome reflects the increase in the turnover tax rate partly offset by reductions in the base (including the exemption of exports) and the acceleration in the payment of certain specific duties withheld by state enterprises. At the same time, it reflects the lagged impact of the preceding year's rate increase in the payroll tax for unemployment combined with a further reduction (of 0.5 percentage point effective January) in the general social security tax rate.

As a result of these developments, the General Government is expected to net a current deficit (for the first time in many years) of over Pta 60 billion, and an overall deficit of Pta 740 billion. On account of increased net lending (owing in part to industrial restructuring agreements) partially dampened by an increase in net unpaid obligations, this deficit is translated into an estimated cash financing requirement of Pta 800 billion, four fifths of which is estimated to have been met with domestic bank credit. An increased proportion of the financing came from abroad (about Pta 60 billion), and one tenth from domestic nonbank sources (Pta 100 billion).

4. The 1982 budget

The overall fiscal policy guidelines remain broadly the same as in previous years: stimulation of productive investment and employment, mobilization of financial savings, regional decentralization, income redistribution, and rationalization of the tax structure. As a complement to private investment and stimulus to effective demand, budgeted public investment (including capital transfers) is 22 per cent higher than last year, equivalent to an increment of about 10 per cent in real

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1/ Also, the 1981 budget law entrusted the Council of Ministers with authority to approve direct contracting of projects valued at less than Pta 500 million by the interested government departments. For a description of the investment programming mechanism, see Appendix IV.

terms. Consistent with the criteria adopted for the 1982-84 plan, 1/ a number of projects included in this year's public investment program are concentrated in energy, agriculture, housing and transportation. The budget law also provides for a 5 per cent marginal investment tax credit (calculated on the difference between investment in new assets and depreciation) on top of the existing 10 per cent general investment tax credit, and for a general tax credit of 15 per cent on research and development expenditures.

In addition to these measures, the National Employment Agreement (ANE), coupled with the industrial restructuring scheme, is expected to help sustain the July 1981 employment level through the end of this year. The Government's committment under the ANE includes: 9 per cent ceiling on the nominal increase of government wages and salaries; 1 per cent cut in the social security tax rate (to 32.1 per cent as of January of this year); 10 per cent ceiling on the increase of social security pensions; wage subsidy equivalent to 90 per cent of the social security tax liability of previously unemployed workers; and various income support measures affecting unemployed workers. The cost of these measures is to be defrayed in part by administrative improvements in the delivery of welfare services (through reduction of fraud, especially in unemployment compensation payments), and by a 1 percentage point increase in the payroll tax rate for unemployment (to 5 per cent).

In 1982, the Spanish authorities expect to conclude industrial restructuring arrangements in the basic steel, paper, and shipbuilding industries, totaling nearly Pta 40 billion in current budgetary subsidies. Additional equity transfers by the INI Group to cover the 1981 losses of its enterprises will amount to Pta 55 billion; the state will further assume Pta 120 billion of INIs financial obligations, at an annual servicing cost of Pta 15 billion, with a commitment from INI to abstain from recurring to supplementary appropriations. Official financial institutions are, however, supposed to make available Pta 30 billion in guaranteed loans to ailing industries. Beyond its immediate employment effect, the restructuring program is aimed at enhancing the long-run competitiveness of Spanish industry.

In order to facilitate the flow of household savings into productive investment, a tax credit to savers in private sector financial instruments has been introduced at the rate available on public sector bonds. The amount of the credit against personal income tax is equivalent to 15 per cent of deposits in three-year tax savings accounts (between limits of Pta 100,000 and Pta 500,000 for 1982) placed with commercial or savings banks. Meanwhile, the previously existing credit rates on public sector bonds have now been reduced (from 22 per cent on state debt and 20 per cent on issues by local governments and public enterprises) to 15 per cent. These measures should result in both mobilization of new savings and more efficient allocation of existing savings.

1/ For a more detailed discussion, see Appendix IV.

In conformity with the goal of greater administrative and economic decentralization, this year's budget contains for the first time appropriation for the Regional Compensation Fund established for correcting regional imbalances. The initial endowment of Pta 180 billion, which represents roughly 40 per cent of the state capital budget (excluding maintenance and upkeep investment and military outlays), is to be distributed in inverse relationship with regional per capita income. Sectorally, this appropriation is to be allocated mainly to public works, transportation, and agriculture. As a further step in revenue sharing, the one half of the yield of the planned 1 percentage point increase in the turnover tax will be transferred to the local authorities. Effective since June of last year, the Basque country is provided full jurisdiction over tax collection within its borders; in turn, the Central Government is expected to receive a transfer (cupo) of nearly Pta 60 billion for the Basque country's share in general government operations.

The income redistribution objective is to be pursued through the extension of income-maintenance schemes to the unemployed, but more importantly through further sharpening the progressivity of personal income tax. Specifically, the budget envisages simultaneous increases of Pta 2,000 in each personal exemption and of 2 per cent in the marginal tax rates, 1/ without loss in net yield. In addition, the equity goal is pursued through the method of allocating resources from the Regional Compensation Fund.

In the context of Spain's intended entry into the EC, the Government expects to continue the reform of the tax system. To this effect, further steps will be taken to raise the share of indirect taxes in government revenue. This policy involves the aforesaid increase in the turnover tax rate in anticipation of the introduction of the value-added tax--scheduled for early 1984--and increases in other indirect levies 2/ on the one hand, and increases in preferences (i.e., investment and savings incentives) under personal and company income taxation on the other. In particular, the containment of social security tax rates (through the envisaged cut in the general rate, offset by the increase in the rate of the unemployment levy) is part of the broader effort to replace eventually payroll taxes with the value-added tax. 3/

1/ From 14.8 per cent to 15.1 per cent in the bottom bracket and from 65.1 per cent to 66.4 per cent in the top bracket.

2/ The budget now provides for upward adjustments (in excess of the rate of inflation) in the base values used for calculating the luxury tax and in specific tax rates on alcoholic beverages.

3/ This is consistent with the policy whereby the state now assumes 40 per cent of the financing of unemployment compensation payments, and by 1984 it will take over 20 per cent of the financing of other social security benefits in accordance with the Moncloa Pact.

Although the 1982 budget figures are not fully comparable to either the corresponding estimates or budget amounts of the previous year, 1/ it may be noted that the targeted overall deficit of the General Government is about Pta 630 billion or 3.2 per cent of projected GDP--a key underlying assumption being that the mid-1981 level of employment will be attained by the end of 1982.

1/ In view of the timing of its preparation (in early fall of the preceding fiscal year), the budget is elaborated combining macro forecasts with annualized mid-year actual revenue collections and with the previous year's budgeted expenditures. Moreover, the coverage of the budget excludes local government expenditures other than those financed through the state budget, whereas the estimated outcome involves a comprehensive institutional coverage. With increasing regional fiscal autonomy, the degree of undercoverage of the budget is bound to increase over time.

Table 21. Spain: Selected Fiscal Indicators, 1977-81

(In per cent)

	1977	1978	1979	1980	1981 Estimate
Public sector borrowing requirement as per cent of GDP	...	...	4.2	5.1	...
General government overall balance as per cent of GDP	-0.6	-1.8	-1.9	-3.4	-4.3
General government expenditure as per cent of GDP	27.2	28.8	30.0	32.3	34.0
General government tax revenue as per cent of GDP	23.6	24.2	25.3	26.0	26.6
Indirect taxes as per cent of private consumption	9.6	9.0	9.1	8.7	9.0
Taxes on income and property as per cent of national income	6.0	6.6	7.2	8.2	...
Social security taxes as per cent of gross compensation of employees	21.5	22.4	23.5	23.3	23.7
Social security benefits as per cent of personal disposable income	13.7	15.6	17.1	18.0	19.3
Current subsidies to enterprises as per cent of entrepreneurial and property income	4.7	6.1	5.5	6.0	...
Public sector fixed investment as per cent of aggregate fixed investment	25.0	26.1	26.0	26.0	...
General government fixed investment as per cent of aggregate fixed investment	11.8	10.3	9.4	10.4	11.1

Sources: Spanish authorities and Fund staff estimates.

Table 22. Spain: Public Sector Borrowing Requirement, 1979-80

(In billions of pesetas; as per cent of GDP in parentheses)

	1979				1980			
	Total cash Financing	External Financing	Domestic Bank Financing	Domestic Nonbank Financing 1/	Total Cash Financing	External Financing	Domestic Bank Financing	Domestic Nonbank Financing 1/
Central Government 2/	251.5 (1.9)	-0.4 (--)	202.5 (1.5)	49.4 (0.4)	425.8 (2.8)	-22.2 (-0.1)	401.6 (2.7)	46.4 (0.3)
Local governments	82.6 (0.6)	-- (--)	69.3 (0.5)	13.3 (0.1)	22.9 (0.2)	-- (--)	34.4 (0.2)	-11.5 (0.1)
Nonfinancial public enterprises 3/	219.2 (1.7)	47.0 (0.4)	146.6 (1.1)	25.6 (0.2)	326.4 (2.2)	94.7 (0.6)	206.5 (1.4)	25.2 (0.2)
Consolidated public sector borrowing requirement	553.3 (4.2)	46 6 (0.4)	418.4 (3.2)	88.3 (0.7)	775.1 (5.1)	72.5 (0.5)	642.5 (4.3)	60.1 (0.4)
Memorandum item: General government transfers to public enterprises	315.0 (2.4)				405.2 (2.7)			

Source: Spanish authorities.

1/ Includes unallocable domestic financing (Pta 3.5 billion in 1979 and minus Pta 47.8 billion in 1980).
2/ Consists of state, administrative autonomous agencies, and social security.

3/ Excluding external and domestic nonbank financing of all enterprises owned by local governments and several enterprises owned by the State.

Table 23. Spain: General Government Operations, 1979-82

(In billions of pesetas; per cent of GDP in parenthesis)

	1979	1980	1981	1981	1982
			Estimate	Initial Budget	
Revenue	3,695.8	4,340.7	5,080.0	4,986.5	5,893.6
	(28.1)	(28.8)	(29.6)		
Indirect taxes	824.0	929.3	1,090.0	1,107.4	1,410.3
	(6.3)	(6.2)	(6.4)		
Taxes on income and property 1/	807.3	1,065.2	1,290.0	1,107.3	1,389.4
	(6.1)	(7.1)	(7.5)		
Social security taxes	1,700.7	1,928.9	2,180.0	2,312.9	2,489.9
	(12.9)	(12.8)	(12.7)		
Nontax revenue 2/	363.8	417.3	520.0	458.9	603.9
	(2.8)	(2.8)	(3.0)		
Current expenditure	3,537.7	4,320.5	5,145.0	4,697.9	5,684.9
	(26.9)	(28.7)	(30.0)		
Wages and salaries	1,146.0	1,396.3	1,630.0	1,634.6	1,845.2
	(8.7)	(9.3)	(9.5)		
Purchases of goods and services	218.9	279.9	335.0	308.9	408.6
	(1.7)	(1.9)	(1.9)		
Transfers to enterprises	222.8	281.0	325.0	238.8	340.7
	(1.7)	(1.9)	(1.9)		
Social security benefits	1,702.5	2,069.5	2,510.0	2,353.8	2,644.5
	(12.9)	(13.7)	(14.7)		
Other transfers to households	162.0	183.4	205.0	58.1	309.6
	(1.2)	(1.2)	(1.2)		
Other payments 3/	85.5	110.4	410.0	104.2	136.2
	(0.7)	(0.7)	(0.8)		
Current balance	157.4	19.4	-65.0	286.4	207.0
	(1.2)	(0.1)	(-0.4)		
Capital expenditure	411.3	535.6	675.0	686.5	834.9
	(3.1)	(3.6)	(3.9)		
Fixed investment 4/	246.6	310.8	385.0	412.2	484.8
	(1.9)	(2.1)	(2.2)		
Capital transfers	164.7	224.8	290.0	274.3	350.0
	(1.3)	(1.5)	(1.7)		
Overall balance 5/	-253.2	-515.4	-740.0	-398.0	-626.2
	(-1.9)	(-3.4)	(-4.3)		

Sources: Spanish authorities; and Fund staff estimates.

1/ Includes revenue from inheritance taxes.
2/ Includes very small amounts of grants and capital revenue.
3/ Consists almost entirely of interest payments.
4/ Includes net purchases of land.
5/ National accounts basis.

Table 24. Spain: Financing of General Government Operations, 1979-81

(In billions of pesetas; per cent of GDP in parentheses)

	1979	1980	1981 Estimate
Overall balance 1/	-253.2 (-1.9)	-515.4 (-3.4)	-740.0 (-4.3)
Less: Net lending	1.3	57.1	110.0
Plus: Change in floating debt 2/	-82.1	129.2	50.0
Plus: Miscellaneous adjustments	2.5	-5.4	--
Overall cash balance	-334.1 (-2.5)	-448.7 (-3.0)	-800.0 (-4.7)
Overall cash financing	334.1 (2.5)	448.7 (3.0)	800.0 (4.7)
External financing	-0.4 (--)	-22.2 (-0.1)	57.0 (0.3)
Domestic bank financing -/	271.8 (2.1)	436.0 (2.9)	643.0 (3.8)
Domestic nonbank financing	59.2 (0.4)	82.7 (0.5)	100.0 (0.6)
Unallocable financing	3.5 (--)	-47.8 (-0.3)	-- (--)

Sources: Spanish authorities; and Fund staff estimates.

1/ National accounts basis.
2/ Estimated change in the difference between unpaid obligations and uncollected receipts.
3/ Includes negotiable public debt issued to the banking system.

Table 25. Spain: State Operations, 1979-82

(In billions of pesetas)

	1979	1980	1981	1982
			Initial Budget	
Revenue	1,814.2	2,194.5	2,385.2	3,015.4
Indirect taxes	670.3	727.5	975.1	1,092.7
Taxes on income and property 1/	714.2	955.5	974.4	1,211.4
Social security taxes	128.9	174.2	223.9	227.6
Property income	116.6	136.3	112.6	169.7
Current transfers	182.7	198.1	98.1	314.0
Other	1.5	2.9	1.1	--
Current expenditure	1,631.8	2,146.5	2,202.0	2,949.5
Wages and salaries	698.5	852.4	1,013.9	1,131.6
Purchase of goods and services	149.6	175.4	172.2	227.9
Transfers to rest of General Government	210.5	373.8	418.9	677.9
Transfers to enterprises	197.5	250.9	217.2	293.3
Social security benefits	186.9	270.7	298.9	326.1
Other transfers to households	120.4	136.2	21.1	213.5
Interest payments	63.8	84.4	[illegible]7.3	73.4
Other payments	4.6	2.7	[illegible]	5.8
Current balance	182.2	47.1	182.[illegible]	66.0
Capital expenditure	353.9	431.3	575.1	688.2
Fixed investment 2/	87.1	103.0	175.1	211.8
Transfers to rest of General Government	110.5	116.4)	400.0	476.4
Transfers to private sector	156.3	211.9)		
Overall balance 3/	-171.5	-383.3	-391.9	-622.2
Less: Net lending	-2.1	52.4		
Plus: Change in floating debt 4/	-54.7	39.9		
Plus: Miscellaneous adjustments	2.5	-5.4		
Overall cash balance	-221.6	-401.2		
Overall cash financing	221.6	401.2		
External financing	-0.4	-22.2		
Domestic bank financing 5/	174.0	370.2		
Domestic nonbank financing	55.4	81.5		
Rest of General Government	-6.4	0.3		
Other	61.8	81.2		
Unallocable financing	-7.4	-27.7		

Source: Spanish authorities.

1/ Includes revenue from inheritance taxes.
2/ Includes net purchases of land.
3/ National accounts basis.
4/ Change in the difference between unpaid obligations and uncollected receipts.
5/ Includes negotiable public debt issued to the banking system.

Table 26. Spain: Operations of the Administrative Agencies, 1979-82

(In billions of pesetas)

	1979	1980	1981	1982
			Initial Budget	
Revenue	221.1	462.0	626.3	828.4
Indirect taxes	6.2	7.3	8.5	2.6
Taxes on income and property	--	--	0.4	--
Social security taxes	2.9	120.0	274.2	323.8
Property income	3.8	4.1	4.7	4.9
Current transfers	105.5	242.6	240.7	378.7
Capital transfers	102.7	88.0	97.8	118.4
Current expenditure	126.2	456.3	535.9	715.2
Wages and salaries	79.6	94.5	128.0	138.7
Purchase of goods and services	8.5	3.4	14.5	49.5
Transfers to rest of General Government	4.0	4.8	20.7	33.6
Transfers to enterprises	0.1	0.1	0.1	7.5
Social security benefits	1.0	312.1	350.0	400.5
Other transfers to households	30.6	38.6	19.0	81.5
Interest payments	2.1	2.4	3.2	3.3
Other payments	0.3	0.4	0.4	0.6
Current balance	-7.8	-82.3	-7.5	-5.2
Capital expenditure	73.1	104.1	99.9	125.8
Fixed investment 1/	67.7	94.2	85.3	101.1
Transfers to rest of General Government	1.1	1.6)	14.6	24.7
Transfers to private sector	4.3	8.3)		
Overall balance 2/	21.8	-98.4	-9.6	-12.6
Less: Net lending	3.3	3.9 3/		
Plus: Change in floating debt 4/	-12.1	17.1 3/		
Overall cash balance	6.4	-85.2		
Overall cash financing	-6.4	85.2		
Domestic bank financing	-11.7	7.3		
Financing by rest of General Government	--	77.9		
Unallocable financing	5.3	--		

Source: Spanish authorities.

1/ Includes net purchases of land.
2/ National accounts basis.
3/ Estimate.
4/ Change in the difference between unpaid obligations and uncollected receipts.

Table 27. Spain: Operations of the Social Security Agencies, 1979-82

(In billions of pesetas)

	1979	1980	1981	1982
			Initial Budget	
Revenue	1,726.8	1,798.4	2,060.1	2,312.8
Indirect taxes	8.4	2.7	10.9	12.2
Social security taxes	1,558.9	1,622.7	1,806.3	1,929.2
Property income	6.3	3.9	12.0	12.9
Current transfers	153.2	169.1	230.1	358.2
Capital transfers		--	0.8	0.3
Current expenditure	1,735.5	1,749.0	2,006.2	2,253.3
Wages and salaries	184.3	211.7	257.2	289.9
Purchase of goods and services	32.4	67.0	57.4	68.2
Transfers to rest of General Government	14.4	--	0.1	0.2
Social security benefits	1,501.1	1,469.7	1,691.4	1,894.9
Other transfers to households	3.0	0.6	0.1	0.1
Interest payments	0.3	--	--	--
Current balance	-8.7	49.4	53.1	59.2
Capital expenditure	27.2	41.5	50.3	50.9
Fixed investment 1/	23.1	36.9	50.3	50.9
Transfers to private sector	4.1	4.6	--	--
Overall balance 2/	-35.9	7.9	3.6	8.6
Less: Net lending	0.1	0.8		
Plus: Change in floating debt 3/	-1.1	53.5		
Overall cash balance	-37.1	60.6		
Overall cash financing	37.1	-60.6		
Domestic bank financing	40.2	24.1		
Financing by rest of General Government	--	-77.9		
Unallocable financing	-3.1	-6.8		

Source: Spanish authorities.

1/ Includes net purchase of land.
2/ National accounts basis.
3/ Change in the difference between unpaid obligations and uncollected receipts.

Table 28. Spain: Operations of the Local Governments, 1979-82

(In billions of pesetas)

	1979	1980	1981	1982
			Initial Budget	
Revenue	282.0	393.0	507.0	615.0
Indirect taxes	139.1	191.8	112.9	302.8
Taxes on income and property 1/	93.1	109.7	132.4	178.0
Social security taxes	10.0	12.0	8.5	9.2
Property income	13.6	25.0	32.5	21.0
Current transfers	16.6	23.7	173.7	63.0
Capital transfers	9.6	30.8	47.0	41.0
Current expenditures	281.4	357.0	401.3	487.0
Wages and salaries	183.6	237.7	235.4	285.0
Purchase of goods and services	28.4	34.1	64.9	63.0
Transfers to rest of General Government	8.4	9.7	10.0	10.0
Transfers to enterprises	25.2	30.0	21.0	40.0
Social security benefits	13.5	17.0	13.5	23.0
Other transfers to households	8.0	8.0	15.7	13.0
Interest payments	14.4	20.5	40.8	53.0
Current balance	-9.0	5.2	58.7	87.0
Capital expenditure	68.9	77.6	105.7	128.0
Fixed investment 2/	68.7	76.7	101.5	121.0
Transfers to rest of General Government	0.2	0.9	4.2	7.0
Overall balance 3/	-68.3	-41.6	--	--
Plus: Change in floating debt 4/	-14.2	18.7		
Overall cash balance	-82.5	-22.9		
Overall cash financing	82.5	22.9		
Domestic bank financing 5/	69.3	34.4		
Domestic nonbank financing	13.3	-11.5		
Rest of General Government	15.9	-13.0		
Other	-2.6	1.5		

Source: Spanish authorities.

1/ Includes revenue from inheritance taxes.
2/ Includes net purchases of land.
3/ National accounts basis.
4/ Estimated change in the difference between unpaid obligations and uncollected receipts.
5/ Includes negotiable public debt issues to the banking system.

IV. Money and Credit

1. The framework of monetary policy

Monetary policy has traditionally been the main instrument of demand management in Spain. Since mid-1973 the Spanish authorities have conducted monetary policy by setting, and from 1976 publicly announcing, quantitative annual targets for the growth of monetary aggregates. This approach was reinforced in the stabilization program of 1977. It was considered that such a policy, in particular through the announcement effects, would bring about a reduction in the rate of inflation at less cost than would other more activist types of monetary actions. By framing monetary policy in the form of medium-term targets for the growth of monetary aggregates, and announcing such targets, it was believed that price expectations of the public could be directly affected. Furthermore, such a policy would foster a gradual liberalization of the financial system which had been highly regulated in the past. In the context of a target-oriented monetary policy, interest rate policy would eventually have to be passive and movements in interest rates left to be determined by market forces.

Insofar as the particular aggregate for which the target value is defined, the Bank of Spain has chosen a broad definition of the money supply, that is, including currency in the hands of the public, demand deposits, and time and savings deposits at commercial, industrial and savings banks (M3), as the aggregate to target, on grounds that it bears a closer and more systematic relationship to nominal GDP than do other monetary aggregates. Moreover, the regulation of interest rates has resulted in a weakening of the traditional distinction between various kinds of deposits. The target value itself is chosen to achieve a growth of M3 that would be consistent with a projected increase in nominal GDP. This projection of nominal GDP is based on the expected rate of inflation, derived from information on the behavior of money-wages and the likely evolution of foreign prices, and a forecast of real GDP growth. Allowing for the possibility of small changes in income velocity due to interest rate developments, the value for the annual growth of M3 is calculated. The use of a band around a central value admits the possibility of some "fine-tuning" and allows the authorities greater flexibility should the projections on which the target is based turn out to be in error. The desired growth in the monetary aggregate is achieved via the monetary base, specifically through operating on banks' reserves. As instruments the Bank of Spain utilizes variations in the cash-reserve requirements of the banks, short-term credit to the banking system, and sales and purchases of Treasury bills and of its own certificates of deposits. 1/

In certain instances the Bank of Spain has also set short-term credit targets for the banks. However, such targets are viewed only as

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1/ A more formal analysis of how the Bank of Spain operates monetary policy within the framework of quantitative targets is contained in Appendix V.

guidelines and are derived mechanically from bank reserve targets. Given the money supply target, forecast changes in foreign reserves, public sector financing requirements and changes in other items in the balance sheets of the banks, the growth of bank credit is calculated as a residual. Such credit targets are not regarded by the authorities as independent objectives, particularly in situations of balance of payments surpluses.

The authorities have had considerable success in achieving the monetary targets on an annual basis, which is their basic objective, although in recent years the month-to-month growth of M3 has frequently been outside the band (Chart 4). The overall success could be a reflection of the fact that the targets chosen have been fairly high and have a wide band, and there has been no attempt to radically reduce the permissible growth of the money supply. In general the authorities appear to have viewed the monetary target as setting a ceiling on the rate of inflation, rather than as a way of rapidly reducing that rate. This gradualist approach in revising the monetary targets downward has been pursued on the grounds that the impact of any sharp reduction in the growth of M3, whether announced or not, would in the short-run fall primarily on output and employment and have no appreciable immediate effect on the prevailing rate of inflation.

The principal factors affecting monetary growth, and therefore the operation of monetary policy, in recent years have been the balance of payments situation and the public sector's financing needs. The influence of the balance of payments essentially has reflected the reluctance of the authorities to accept large discrete changes in the exchange rate. They have viewed rapid depreciation of the exchange rate as having possible deleterious effects on domestic inflation, and a sizable appreciation of the rate could have equally harmful consequences on the attempt to foster export growth, the current account, and possibly also economic activity. When faced with pressures in the exchange markets, the authorities have had to choose whether priority should be given to the monetary objective or to maintaining a stable exchange rate. Since the latter, for the reasons mentioned above, is often regarded as a competing intermediate objective, temporary departures from domestic monetary targets have been tolerated. More specifically, following the sharp devaluation of the peseta in July 1977, the Spanish authorities have indicated a clear preference for gradual and smooth changes in the exchange rate. Foreign disturbances have, therefore, been absorbed in variations of foreign reserves or by resorting to external borrowing, with concomitant effects on the monetary base. This relationship between monetary and exchange rate policy highlights the basic dilemma faced by the authorities when, for example, a more rapid reduction in the monetary growth targets is desired. If the exchange rate is not allowed to move sufficiently to compensate for the tightening of policy, capital inflows could be generated that would work against the initial policy. Capital controls were imposed in Spain in 1979 precisely for the purpose of preventing an undesirably large volume of capital inflows, and the steady elimination of such controls in the last two years has left the domestic financial system more vulnerable to developments abroad.

In addition, the growing need for the Government to finance its fiscal deficits has, in the absence of a sufficiently developed market for public debt, frequently put the domestic financial system under considerable strain. Accommodating the Government's demand for bank credit has meant that credit to the private sector often had to be restricted so as to stay within the aggregate monetary ceilings. Meeting the monetary targets has thus involved in certain periods a form of financial "crowding-out" of the private sector. The desire to prevent such an occurrence has also occasionally led the authorities to tolerate an increase in monetary growth in excess of the targets.

At the same time the authorities have been able to move a considerable way in liberalizing the hitherto highly regulated financial system. Important modifications have been made in the area of interest rates, where a large number of transactions are no longer subject to government regulation and rates on most types of loans and on longer-term deposits are allowed essentially to be determined by market forces. Compulsory ratios for the banks' investments in low yielding public and private bonds, which are a form of selective credit control, are being steadily reduced to a predetermined minimum level, and independent quantitative credit controls have been eliminated.

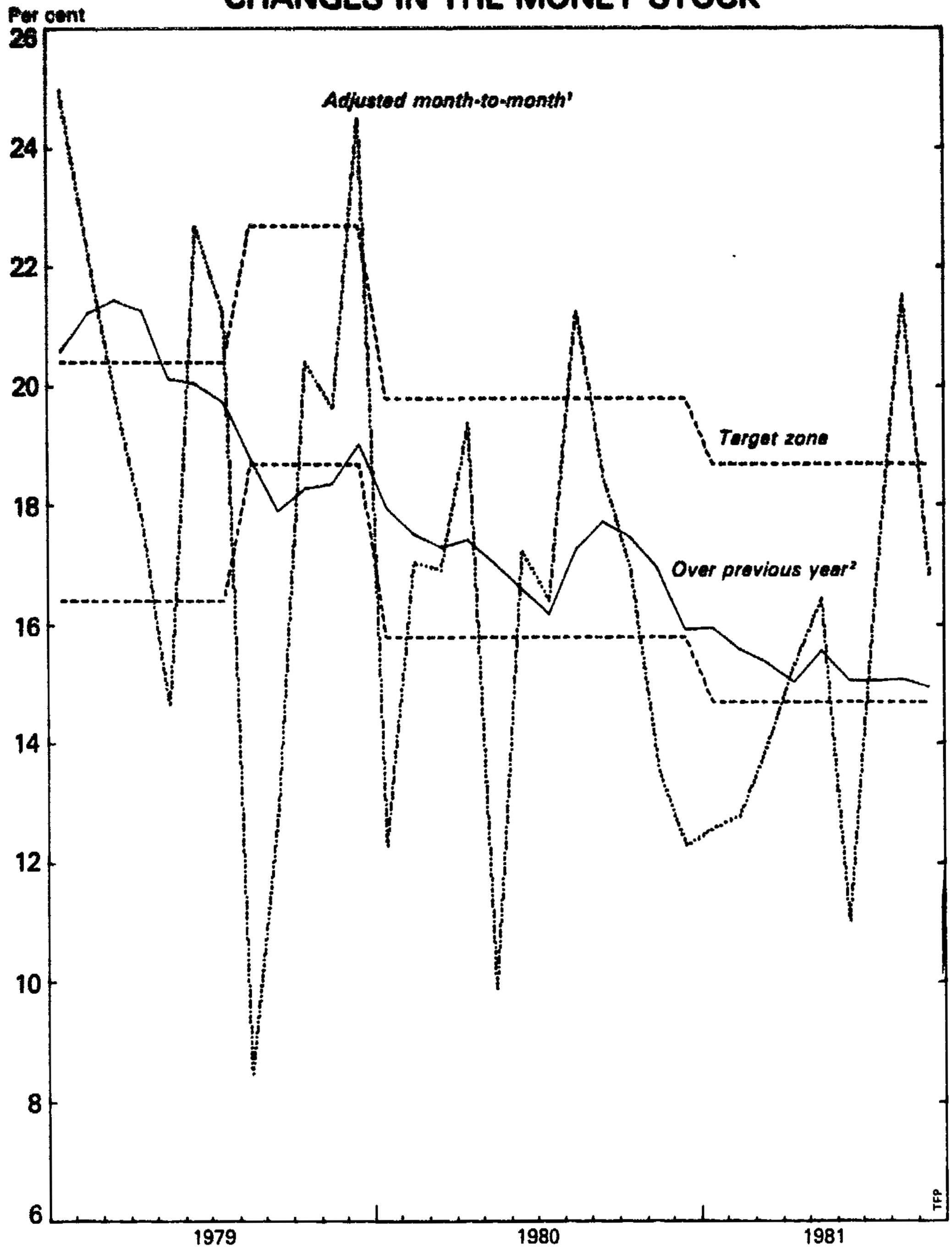
2. Interest rates

The control and regulation of interest rates is generally inconsistent with a policy of quantitative ceilings on overall monetary growth, and the authorities have moved steadily in the direction of flexible interest rate policies. An important step toward this took place in July 1977 when, as part of the tightening of monetary policy, a number of interest rates on both financial assets and liabilities were raised (Table 29). A small further adjustment was made in August 1979, when the rate on credit for priority investments of over three years' maturity was raised to 12 per cent. This was followed in early 1981 by a comprehensive modification to the system. Since January 1981 interest rates on ordinary bank loans (including overdrafts) have been deregulated, with the only exceptions being housing loans which now carry a maximum rate of 10 per cent, and loans under the mandatory investment ratios, referred to as "special credit activities," which are still subject to legally fixed interest rates. Regarding the latter, the interest rate on export credits (for circulating capital) was increased by 2 percentage points to 10 per cent, and the rate on credit for priority investments of less than three-year maturity raised to 12 per cent, equal to the level prevailing on longer-term investments. The rates of interest on the remaining special credit activities were left at the July 1977 levels.

CHART 4

SPAIN

MONETARY TARGETS AND PERCENTAGE CHANGES IN THE MONEY STOCK



Source. Bank of Spain.

[1]Percentage changes (at annual rate) calculated from a centered three-month average of seasonally adjusted monthly average of daily totals.

[2]Over corresponding month of the previous year.

On the deposit side, rates of interest on time deposits for three and six months were raised by 1 percentage point, and the rate for six-month deposits over Pta 1 million freed. Furthermore, the minimum denomination restriction (Pta 1 million) on deposits of over one year, for which the rate is free, was abolished. Interest rates on bank deposits of local authorities and some nonbank financial intermediaries (principally insurance companies) were also no longer subject to control. The rates on sight and savings deposits were kept at the same level, except that in April 1981 the deposit rate on housing was freed.

As part of this package of changes of January 1981, the Government also decreed that charges on bank services, guarantees, and on foreign-exchange loans and transactions were no longer subject to control, although the policy of fixing maximum charges on loans and discounts was continued. Banks had to announce formally their preferential rates on the main categories of loans and publish a table of service charges. From January 1981 convertible peseta accounts of nonresidents in Spanish banks have no quantitative limit or special reserve requirement, and interest rates on such accounts are free. Furthermore, for the first time banks were permitted to offer forward cover on such deposits. This replaced an existing restrictive system in operation since March 1973 in which such accounts were not permitted to pay interest and carried a 100 per cent reserve requirement.

The general trend of interest rates in recent years has been upward (Chart 5), despite the fact that inflation has been steadily brought down during the same period. This has resulted in a gradual increase in *ex post* real rates of interest in the economy. The average day-to-day interbank rate, which like other money market rates has been left to fluctuate freely since 1964, and the three-month Treasury bill rate are useful indicators of the prevailing stance of monetary policy, and these two rates have moved very closely together, reflecting the same pressures. The relatively large fluctuations in the interbank rate, ranging between 9 per cent and 21 per cent per annum over the period January 1979 through September 1981, are basically a consequence of two factors. First, the Bank of Spain has concentrated on keeping bank reserves on target and as such made little effort to minimize the variability in this rate. Second, the interbank market itself, though growing over time, is quite thin and therefore rates in it are prone to large oscillations. The Treasury bill rate has been more stable, moving only between about 13 per cent and 17 per cent per annum during the same period. Again, because attention has been focused on the monetary targets, the Bank of Spain has tolerated these fluctuations, and moved only very infrequently to dampen them. The official discount rate of the Bank of Spain, which has remained unchanged at 8 per cent over the past three years, has provided an effective floor for these short-term rates.

As the maturity of the financial assets lengthens, the variability in the corresponding interest rates is considerably reduced. The rate on commercial bills (bankers' acceptances) of one year, which for many purposes is regarded as the most representative interest rate, has only varied between 14.5 per cent and 15.5 per cent since January 1980. The commercial bills market, which is a fairly recent development, grew out of an attempt by banks to avoid the reserve requirements on time deposits, and its growth has been further encouraged by the regulations imposed by the authorities on certificates of deposits. The rate on these commercial bills rose steadily through the first few months of 1980, but since then, with the exception of a minor episode at the end of that year when monetary policy was significantly tightened, has been declining. By September 1981 this rate had reached 14.5 per cent which was about 2 percentage points below the Treasury bill rate. This pattern is also evident for the rate on long-term private bonds, with the yield fluctuating by only 1 percentage point (14.5-15.5 per cent) during the last 21 months. More importantly perhaps, the decline in the long-term rate can be taken to imply that inflationary expectations are being steadily revised downward.

Commercial bank rates on ordinary loans and time deposits with a maturity of one year and more have been free since July 1977, and these have also been rising gradually since 1979 (Chart 6). 1/ The spread between the lending and deposit rates has been fairly constant, although it is interesting to note that this spread showed a slight increase in the first part of 1981. This could be related to the elimination of the minimum denomination regulation on one-year time deposits, which led to an increased demand for such deposits.

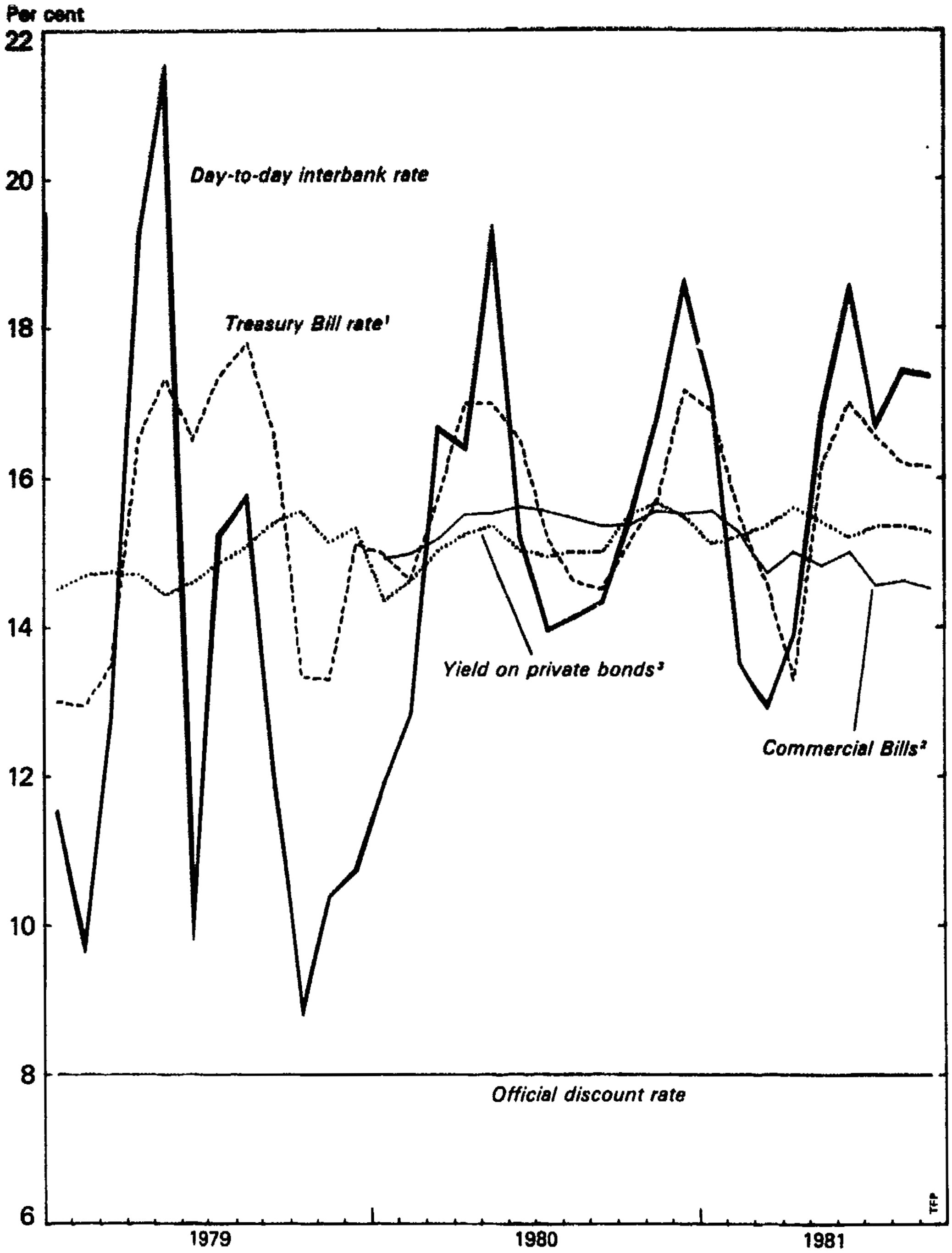
Apart from domestic monetary policy actions, money market rates in particular have been influenced by developments in the international financial markets. Until mid-1980 the relationship between the three-month interbank rate and the corresponding three-month Eurodollar rate was apparently weak, with movements of the two rates often in opposite directions (Chart 7). Since then, and particularly after the relaxation of controls on capital transactions in the beginning of 1981, the movements in the domestic and foreign interest rates have been closer. Sizeable differentials occurred in both 1979 and 1980, and more importantly, these differentials persisted for several months at a time. This suggests that the domestic capital market was shielded from foreign influences in a way that prevented interest arbitrage from taking place. In 1981, however, the pattern changed and the differentials declined substantially, and in fact moved strongly against Spain. Clearly, as the domestic capital market becomes more integrated with the international financial markets, interest rate arbitrage will ensure that domestic interest rates will progressively become more linked to foreign interest rates.

1/ The Bank of Spain has stopped reporting these series since May 1981 because it is believed that these rates may underestimate the actual rates by about 1 percentage point. As such, the information contained in Chart 6 can only be viewed as indicative of the true behavior of loan and deposit interest rates.

CHART 5

SPAIN

INTEREST RATES



Source. Bank of Spain.

[1] Three-months.

[2] Rate on one-year commercial bills.

[3] Weighted average of yields on private bonds of 7 or more years to maturity.

CHART 6

SPAIN

BANK LENDING AND DEPOSIT INTEREST RATES

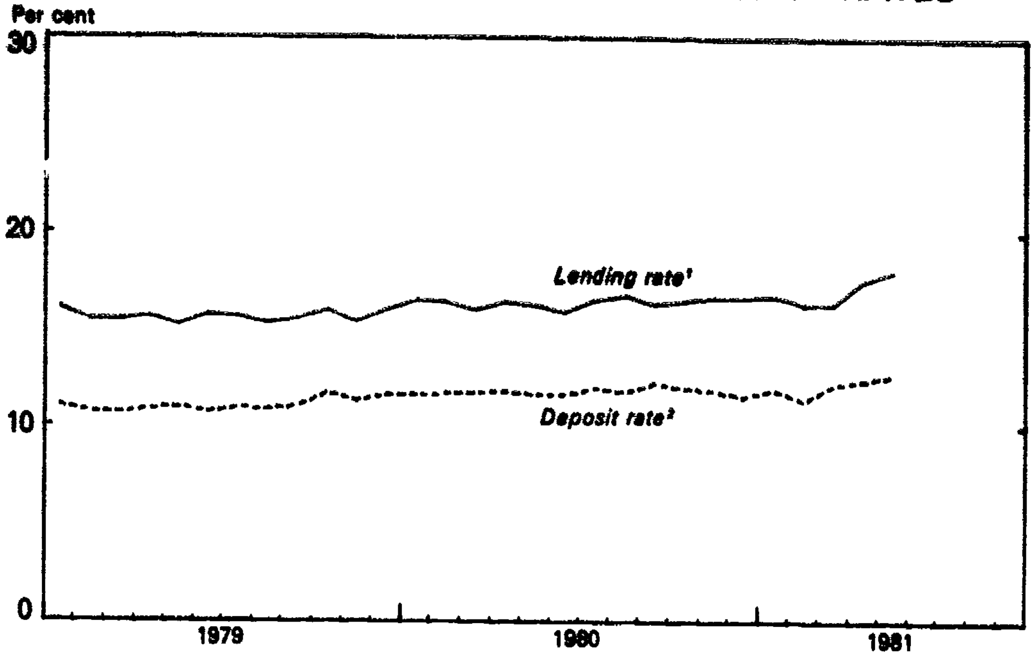
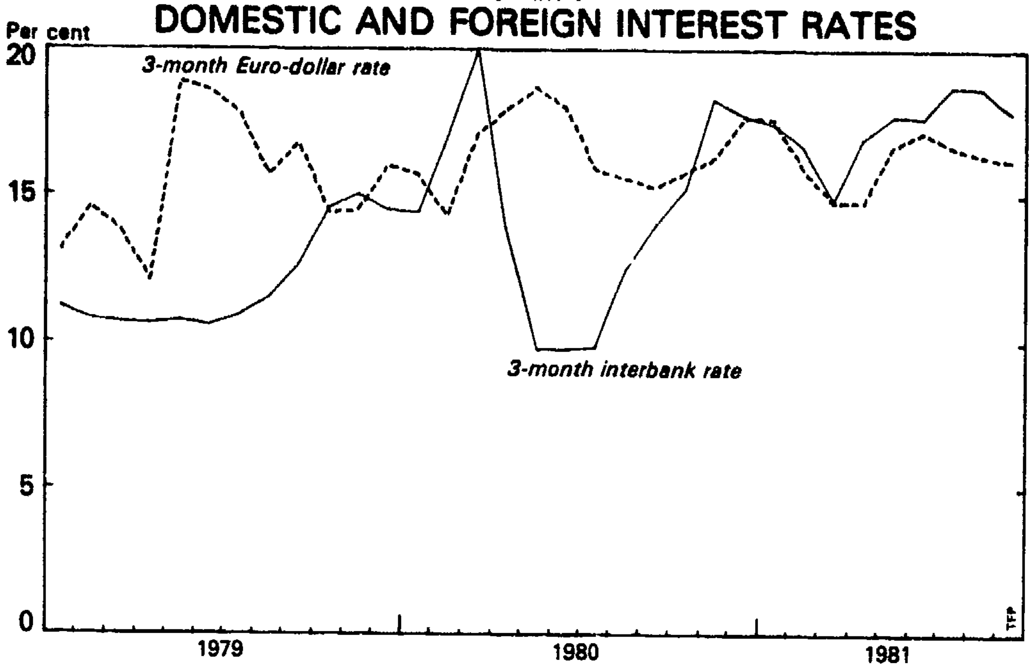


CHART 7

DOMESTIC AND FOREIGN INTEREST RATES



Source: Bank of Spain.

[1]Private banks' lending rate (1-2 years).

[2]Private banks rate on term deposits (1 year).

3. Monetary Developments in 1980

Monetary policy in 1979 operated under continual pressure of foreign developments. For the first half of the year the improving balance of payments forced the Bank of Spain to institute a series of restrictive measures to keep monetary growth from exceeding the target. This stance had to be reversed in the latter part of the year as foreign interest rates started to climb upward, causing an outflow of capital and loss of international reserves. For the year as a whole, however, the average growth of M3 was very close to the central value that had been set in December 1978.

The increase in the price of oil at the end of 1979 changed the economic picture for 1980 quite dramatically, and monetary policy during the year was conducted in an environment of a weakening current account, accelerating inflation, and a low growth rate. The problems for the authorities were further compounded by the increase in interest rates in foreign financial markets that resulted in large capital outflows and a steady loss of foreign reserves. All these factors combined to greatly constrain the ability of the authorities in their operation of monetary policy during the course of the year.

The target chosen for monetary growth allowed for a partial accommodation of the effect of the increase in oil prices. Based on the assumption of a growth of real GDP of 1.5-2.5 per cent, and a rise in the GDP deflator of 14.5-15.5 per cent (equivalent to a 14-15 per cent increase in consumer prices), the M3 target growth rate was set at 17.8 per cent for the year, with the customary range of 2 percentage points above and below this value. Income velocity was, therefore, expected to remain approximately constant. Under the assumption that there would be no loss of foreign reserves, and allowing for a modest depreciation of the peseta, the M3 growth target implied a growth of domestic credit of 18 per cent. If the current account turned out to be more favorable, or prices rose at a rate faster than anticipated, M3 growth would be allowed to go above the upper bound, and vice versa. From the very beginning the authorities were prepared to follow a flexible policy during the year.

In the first few months of 1980 a worsening of the balance of payments and a rising inflation rate coincided with a strong increase in demand for domestic credit, particularly by the public sector (Table 30 and Charts 10 and 11). For the first quarter, domestic credit rose by 25 per cent on an annual basis, with credit to the public sector growing by nearly 66 per cent. As a consequence the growth of M3 was above the upper limit of the target zone. Adding to the worsening current account picture, foreign interest rates rose very sharply. This resulted in a widening of the interest rate differential against Spain, and consequently large capital outflows. In these circumstances it was natural that expectations of a depreciation of the exchange rate would emerge.

The Bank of Spain moved in March to change policy, principally by now allowing for a rate of domestic credit expansion that would be consistent with a loss of US$1.0 billion in international reserves. Interest rates on central bank operations were raised and an exchange rate policy that would allow a smooth depreciation of the peseta was adopted. However, despite these actions, a continued fall in international reserves, accompanied by a much more moderate increase in domestic credit, led to a growth in M3 of only 14.3 per cent on an annualized basis in the second quarter. This was about 1.5 percentage points below the lower limit of the targeted value.

A deceleration in the rate of inflation in the third quarter helped in the recuperation of domestic demand, and credit to the private sector rose by 20 per cent at an annual rate during this quarter. Further increases in foreign interest rates in the last quarter created pressures on the balance of payments and the exchange rate, so that despite strong growth in domestic credit, the growth of M3 fell quite sharply relative to the previous quarter. This was a consequence mainly of the very significant decline in international reserves, amounting to over US$1.3 billion in this quarter.

The fall toward the end of the year made the growth of M3 for the year as a whole amount to only 16.8 per cent, which was a full percentage point below the targeted value. Inflation, however, was lower than had been projected, as was the growth of real GDP, so that this slower growth in M3 was still consistent with the growth of nominal GDP and a constant income velocity. For the most part of the year the Bank of Spain was in the position of reacting to unforeseen events, particularly those emanating from the foreign sector, and despite a depreciation in the real effective exchange rate of 7.9 per cent during the year, foreign reserves declined by over US$1.0 billion. The monetary base rose by 13.9 per cent in 1980, and the money multiplier increased by approximately 3 per cent.

The expansion of time deposits relative to other deposits kept the narrower monetary aggregates growing at the same moderate pace they had exhibited in the past (Chart 8), although there was a sharp rise in both M1 and M2 toward the end of the year. During 1980 M1 grew by 13.7 per cent, and savings deposits by only 10.1 per cent. Time deposits rose by 24.2 per cent and the structure of deposits continued to change in their favor. By the end of 1980 the share of time deposits in total deposits had increased to 45.2 per cent.

4. Monetary developments in 1981

The Bank of Spain maintained its strategy of gradually reducing the target growth of money into 1981. The program for the year called for an increase of 16.7 per cent in the growth of M3 with the same 2 percentage point range. The authorities projected a growth of real GDP of between 1-2 per cent, and an inflation rate of 13.5-15 per cent. Since international reserves were expected to continue falling, the limit on growth of

CHART 8

SPAIN

MONETARY AGGREGATES[1]

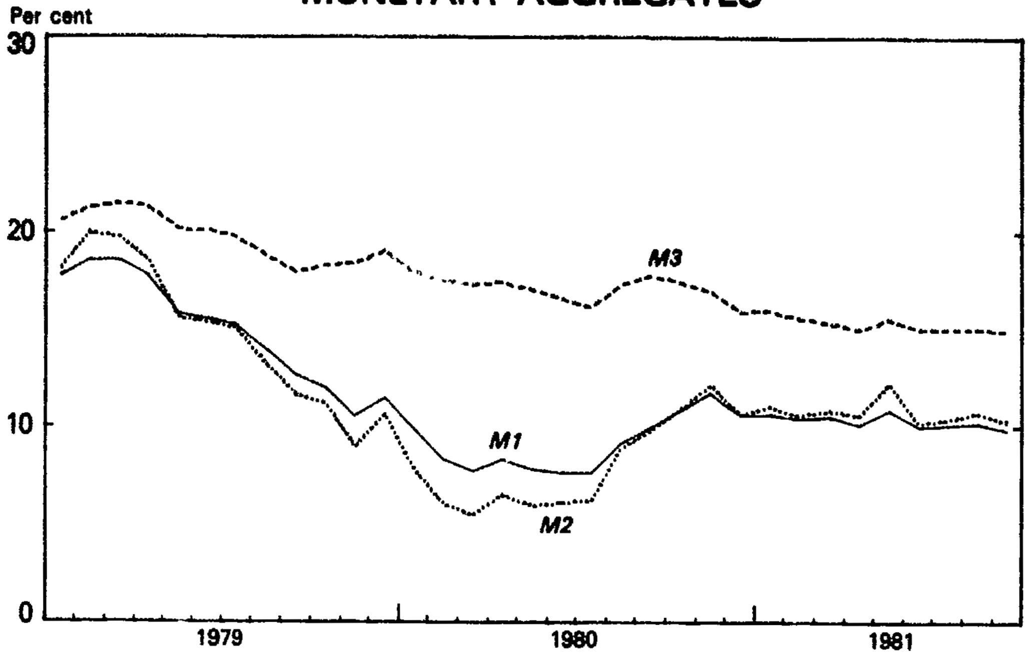
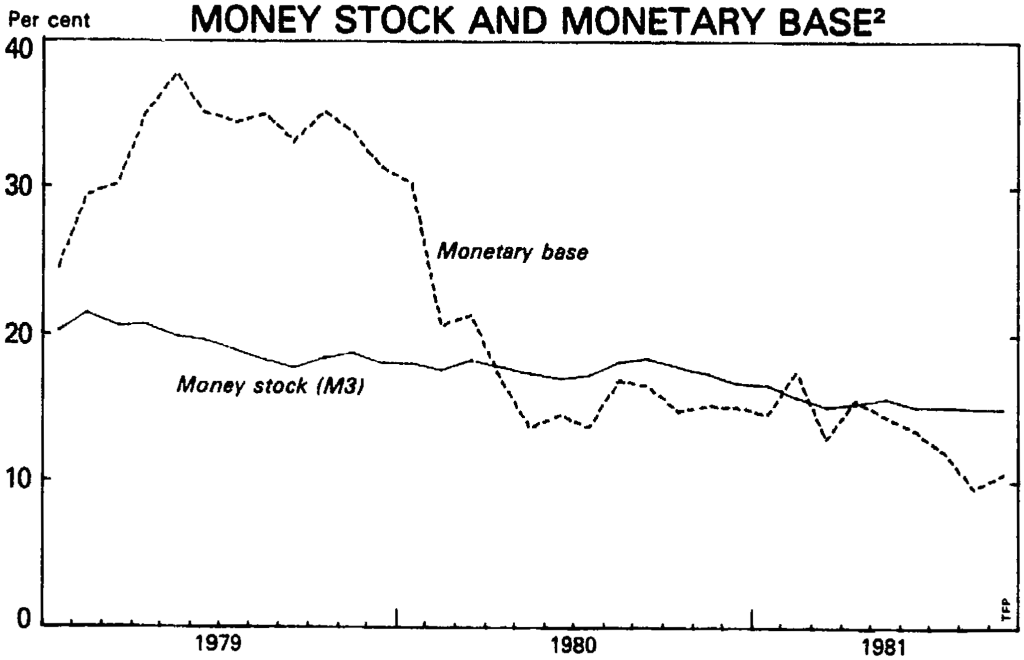


CHART 9

MONEY STOCK AND MONETARY BASE[2]



Source. Bank of Spain.

[1]Percentage changes over previous 12 months using centered three-month average of seasonally adjusted data.

[2]Percentage changes over previous 12 months using end-of-month seasonally adjusted data.

CHART 10

SPAIN

DOMESTIC CREDIT AND MONETARY EXPANSION

(End-of-month data)

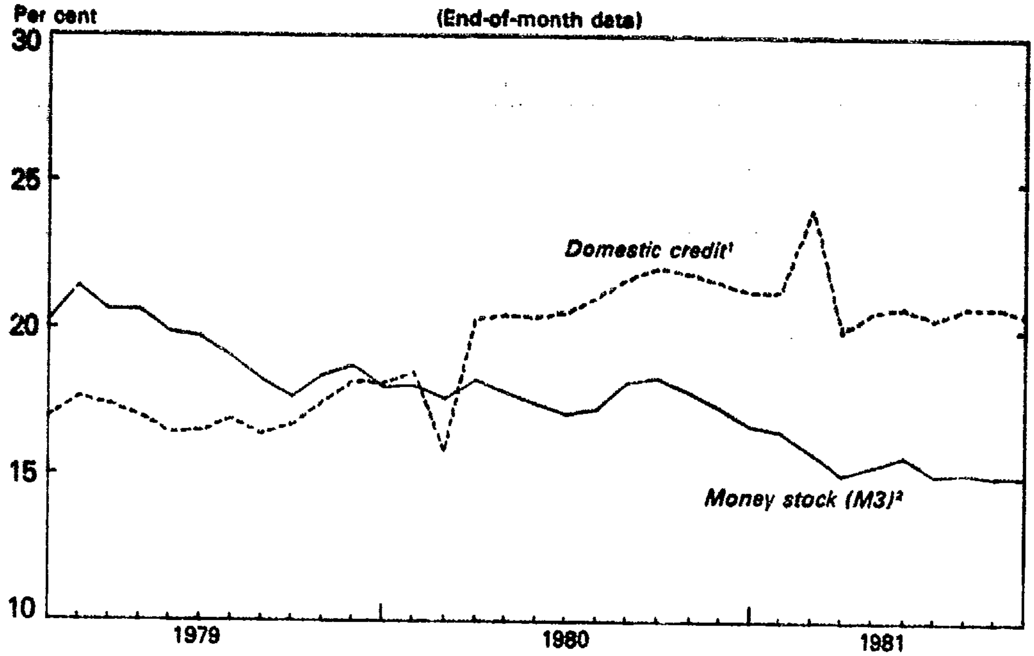
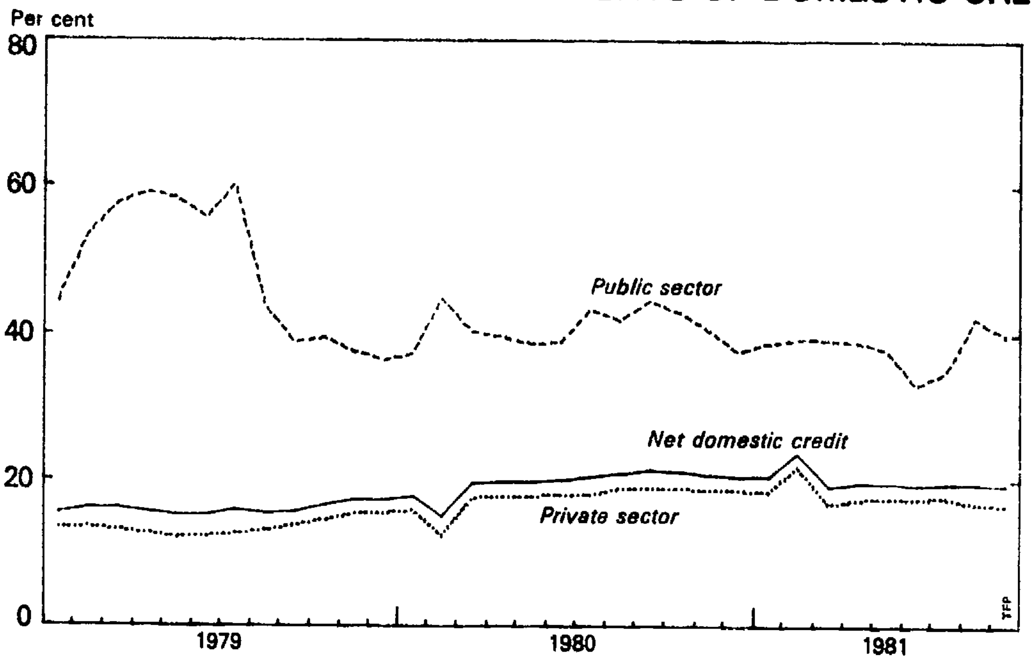


CHART 11

PERCENTAGE CHANGE IN COMPONENTS OF DOMESTIC CREDIT[2]



Source: Bank of Spain.

[1] Domestic credit expansion over previous 12 months as percentage of money stock at beginning of period.

[2] Percentage change over previous 12 months.

domestic credit was set at 18.4 per cent. Credit to the public sector was to be allowed to expand by 28.2 per cent, and credit to the private sector by 17.2 per cent.

The problems eated at the end of 1980 by rising foreign interest rates persisted through the early part of 1981. Because of capital outflows resulting from this, and a weak current account position, monetary policy during the year was geared essentially to preventing excessive loss of foreign reserves. A continuing concern with inflation precluded letting the exchange rate move more freely, so that the domestic financial markets were under continual stress.

In response to the rise in U.S. interest rates in January, the Bank of Spain raised domestic interest rates to prevent further capital outflows, particularly during the second half of the month. The peseta was also allowed to depreciate by 4.2 per cent with respect to the U.S. dollar. Despite the strong increase in demand for credit, especially by the public sector, the growth in M3 started to decline. These developments were partly responsible for the authorities' decision to take steps toward further liberalization of the financial system referred to above. Interest rates were allowed to respond to market forces, and restrictions on capital inflows were removed. In addition, to increase the liquidity of banks, the planned rate of reduction in the investment ratios was accelerated. 1/ At the same time, however, an effort was made to lengthen the maturity of loans by imposing an additional mandatory investment ratio. Under this requirement banks have to devote a certain percentage of deposits and bonds issued to loans or private bonds with an average maturity of three years or more. 2/ Interest rates on such investments were left free.

These various measures proved insufficient to prevent a substantial fall in foreign reserves in the first quarter of the year. A continuing need to finance the public sector pushed the growth of M3 to near the rate achieved in the last quarter of 1980. Credit to the private sector, however, grew very slowly during the first quarter. Although within the band, the rate of growth of M3 was well below the central target value. The decline in foreign reserves continued into the second quarter and at the same time there was reduced demand for credit by the public sector. The Bank of Spain raised the interest rates on Treasury bills and certificates of deposit, especially on those of three- to six-month maturity, in a further attempt to check the deterioration of the balance of payments. A recovery of private demand for credit in May and June helped

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1/ Commercial and savings banks are required to devote a certain percentage of their deposits to grant loans to specific sectors of the economy (at legally maximum rates), or to buy public and authorized private bonds. These investment ratios are being reduced over time according to a predetermined schedule.

2/ For commercial banks these ratios were 7 per cent (deposits) and 10 per cent (bonds), and for savings banks a standard 10 per cent ratio was imposed.

to raise monetary growth, but during the first half of the year M3 grew only at a rate close to the lower end of the target zone, and it appeared that the authorities would have little trouble in achieving the yearly target. However, a very sharp increase in demand for credit by the public sector during the third quarter started to create problems for the Bank of Spain, and M3 grew by 18.5 per cent at an annual rate during this quarter, which was well above the upper limit of the target band. For the year end-September, the monetary base had risen by 12 per cent and M3 by 15.1 per cent.

Despite the further liberalization of interest rates in the early part of the year, time deposits have behaved according to their past trend. Their share in total deposits increased to 48.5 per cent by September 1981, mainly at the expense of demand deposits. The growth of M1 and M2 remained moderate through September (Chart 8).

For the year as a whole the Bank of Spain has estimated that M3 will grow by 15.5 per cent, a value close to the lower end of the target zone. Credit to the public sector is expected to expand by 41.4 per cent, which is substantially higher than the 28.2 per cent originally envisaged. This can be traced back to an underestimation of budget overruns, which resulted in a larger bank financing of the fiscal deficit. Overall credit is projected to rise by 20 per cent and this will be somewhat higher than the 16.4 per cent increase expected at the beginning of 1981. Private sector credit expansion is estimated to be exactly equal to the 17.2 per cent increase projected in December 1980. While domestic credit expansion has been somewhat higher than foreseen, foreign reserves are estimated to fall by Pta 32 billion by the end of year, a considerably smaller decline than had been forecast, but monetary growth has been kept moderate. This has meant also that conditions in the market during the second half of the year have been fairly tight and have resulted in some domestic interest rates, particularly money market rates, tending to rise rather than follow foreign interest rates downward.

5. Operations of banks

Apart from the Bank of Spain, the banking system consists of three main groups of banks--private banks (commercial and industrial), savings banks, and official credit institutions. The private banks, numbering 129 in September 1981 (101 Spanish and 28 foreign), represent the largest group, accounting for about 63 per cent of total assets of the banking system in September 1981, followed by 82 savings banks with a 27 per cent share. There are eight official credit institutions which have 10 per cent of total assets. In terms of deposits, the commercial and industrial banks have 64 per cent of total deposits, and the remainder are held in savings banks. 1/

1/ For a more complete description of the Spanish banking system, see Spain: Recent Economic Development, Appendix V.

a. Commercial and industrial banks

Buoyed by the growth in domestic deposits, total liabilities of the private banks rose by 20.6 per cent in 1979 and then by 18.6 per cent in 1980 (Table 33). This pattern was reversed somewhat in 1981 when deposits rose by 15.7 per cent for the year end-September, while total liabilities over the same period rose by 18.7 per cent. This was partly due to a rise in foreign liabilities, and partly a result of a large increase in capital and other liabilities of the banks.

The increase in time deposits has been by far the most expansionary element in the banks' supply of resources in recent years. The share of time deposits in total deposits increased from 40.6 per cent at end-1978 to 53.8 per cent at end-September 1981. This development reflects the deregulation of interest rates on one-year deposits, and since January 1981, the removal of the ceiling on interest rates for six-month deposits. Time deposits of one-year maturity increased their share of total time deposits from 48 per cent at the end of 1978 to 70 per cent by September 1981. As a proportion of total deposits, these one-year deposits rose exactly twofold, from 19 per cent in 1978 to 38 per cent in September 1981. This rapid increase has become primarily at the expense of other shorter-term deposits which have had interest rate ceilings, but there has also been a flow from other financial assets toward such deposits.

On the asset side, the distribution of credit between the public and private sectors has been relatively stable in recent years, with the private sector accounting for about 90 per cent of total credit. The growth of bank claims on the public sector fell from 15.2 per cent in 1979 to 13.4 per cent in 1980. This was followed by a further decline in 1981, with an increase of only 11.1 per cent registered for the year end-September. During the same period claims on the private sector accelerated from 16.5 per cent in 1979 to 20.0 per cent in 1980. A slowdown occurred in 1981, but the rate for the year end-September (17.9 per cent) was well above the growth in claims on the public sector. The share of private sector claims in total assets has, however, declined from 79.3 per cent at end-1978 to 76.3 per cent at end-September 1981, mainly due to the relative increase in the bank's liquid assets (reserves at the Bank of Spain and holdings of Treasury bills).

b. Savings banks

After growing at a faster pace than private banks for several years, savings banks have grown relatively slowly since 1980 (Table 34). Total liabilities increased by 22.4 per cent in 1979, and then by only 13.7 per cent in 1980. For the year end-September 1981, although the rate of growth picked up somewhat (17.1 per cent), it was still below the expansion of the private banks. This change in pattern from previous years essentially reflected the increased attractiveness of time deposits at private banks since rates of interest on savings deposits continued to be fixed. The composition of deposits also underwent a change, with the share of savings deposits declining from 51.7 per cent i- 1978 to

45.8 per cent at end-September 1981, and time deposits increasing their share from 35.3 per cent to 39.1 per cent over the same period. On the assets side, the share of the savings banks' claims on the private sector in total assets has also declined from 74.3 per cent at end-1978 to 63.5 per cent at end-September 1981. The growth of claims on the private sector has been fairly modest, with increases of 11.1 per cent in 1979, 13.0 per cent in 1980, and 11.0 per cent for the year to end-September 1981. The share of public sector claims in total assets has remained relatively unchanged at around 10 per cent. At the same time there has been a sharp increase in holdings of Treasury bills by the savings banks.

c. Official credit institutions

Total credit extended by the official credit institutions increased by 18.6 per cent in 1980 compared with a higher growth of 25.3 per cent registered in 1979 (Table 35). Over the year to end-September 1981 the growth rate picked up to 20.1 per cent. The sectoral distribution of credit has remained reasonably stable, with the shares of agriculture and industry declining and the shares of credit for shipbuilding, housing, exports and local authorities showing small increases over the period end-1978 to end-September 1981. Treasury allocations to finance credit activities, as a proportion of total liabilities, have gradually fallen from 81.1 per cent in 1978 to 75.3 per cent in September 1981.

6. Capital markets

The capital markets remain relatively thin, reflecting the preference of private investors for bank financing as opposed to equity or debt financing, and these markets tend to be dominated by public sector transactions. There is only a limited secondary market in securities. Gross issues of central government investment bonds and long-term securities rose by 46.3 per cent in 1979, but then fell in the following year by 15.8 per cent (Table 36). Though the issue of securities for direct sale to the nonbanking sector almost doubled between 1978 and 1980 (to Pta 79.8 billion) the amount remains small in relation to the overall public sector deficit. The issues of bonds and subscribed shares of nonfinancial institutions declined by 21.8 per cent in 1979, and then rose again in 1980 by 23.3 per cent. Almost all of this increase was accounted for by the 29.3 per cent rise in the gross issues of bonds. Gross issues of bonds and subscribed shares of financial institutions have fluctuated considerably, but these represent only a relatively small share of the market.

Table 29. Spain: Some Regulated Interest Rates

	Current Rate (In per cent)	In Effect Since	Previous Rate (In per cent)
Bank of Spain			
Ordinary rediscounts	8.00	July 1977	7.00
Collateral advances	10.00	July 1977	8.50
Banking system			
Ordinary loans and discounts			
Commercial papers 1/	Free	January 1981	9.00
Short-term loans 1/	Free	January 1981	9.50
Overdrafts	Free	January 1981	10.50
Housing loans	10.0	January 1981	9.00
Loans of 1 to 2 years 2/	Free	July 1977	9.00
Special credit activities			
Export credits			
Equipment	7.50	July 1977	6.90
Circulating capital	10.00	January 1981	8.00
[illegible]nacing	8.00	July 1977	6.90
Other	7.50	July 1977	6.90
Other special credits 3/			
Up to 1 year	12.00	January 1981	9.00
1 to 3 years	12.00	January 1981	11.00
More than 3 years	12.00	August 1979	11.00
Deposit rates			
Sight	1.00	August 1974	1.00
Savings - Ordinary	3.75	July 1977	2.75
Housing	Free	April 1981	9.00
Emigrants	10.00	July 1977	7.00
Time - 3 months	6.50	January 1981	5.50
6 months 4/	7.50	January 1981	6.50
12 months	Free	July 1977	6.00

Source: Bank of Spain, Statistical Bulletin.

1/ Up to one year.
2/ Loans of more than two years have been free since 1969.
3/ Applies primarily to priority investments.
4/ Rates on deposits greater than Ptas 1 million are free.

Table 30. Spain: Monetary Indicators, 1979-81

(Percentage change from previous quarter at annual rates, seasonally adjusted)

	1979				1980				1981		
	I	II	III	IV	I	II	III	IV	I	II	III
Broad money supply, M3	18.5	19.3	13.6	20.8	19.3	14.7	18.6	14.1	12.9	14.6	18.5
Narrow money supply, M1	15.1	9.8	3.2	8.0	13.7	10.7	19.8	11.3	3.7	10.5	16.0
Currency in circulation	18.7	3.4	8.0	11.9	11.0	25.7	14.7	11.7	6.3	13.5	11.3
Sight deposits	13.8	13.9	0.6	6.3	14.9	5.3	21.4	11.4	1.2	10.8	18.2
Savings deposits	17.7	13.4	9.1	11.4	8.1	9.1	12.9	10.3	7.4	8.3	10.9
Time deposits	27.9	32.0	26.0	43.5	31.1	22.8	23.8	19.9	21.1	23.4	23.5
Net Domestic Credit	14.6	17.0	16.4	21.3	23.7	18.4	21.8	17.9	18.0	19.4	21.8
Public sector	30.1	43.8	22.4	50.6	45.8	37.9	44.1	23.2	53.0	15.1	76.1
Private sector	13.3	14.6	15.8	18.5	21.5	16.3	19.3	17.3	14.0	20.0	15.6

Source: Bank of Spain, Statistical Bulletin.

Table 31. Spain: Monetary Survey, 1978-81

(In billions of pesetas; end of period)

	1978	1979	1980				1981		
			I	II	III	IV	I	II	III
Net foreign assets	137.7	185.5	43.1	-12.6	-14.0	-135.8	-249.9	-328.5	-244.2
Bank of Spain	722.8	914.3	826.0	853.7	896.5	873.8	821.0	847.0	946.1
Other banks	-585.1	-728.8	-782.9	-866.3	-910.5	-1,009.6	-1,070.9	-1,175.5	-1,190.3
Net domestic credit	9,164.7	10,740.8	11,228.2	11,740.7	12,219.5	12,917.7	13,335.1	13,972.9	14,583.8
Public sector	751.2	1,015.8	1,192.9	1,291.2	1,382.1	1,404.2	1,666.4	1,715.0	1,929.9
Private sector 1/	8,413.5	9,725.0	10,035.3	10,449.5	10,837.4	11,513.5	11,668.7	12,257.9	12,653.9
Money and quasi-money	8,889.6	10,488.5	10,652.1	11,082.3	11,516.7	12,243.4	12,253.1	12,744.5	13,238.1
Money supply	3,314.9	3,611.2	3,456.9	3,664.9	3,742.8	4,102.3	3,825.4	4,052.0	4,143.7
Currency in circulation	(946.7)	(1,039.8)	(997.8)	(1,081.9)	(1,110.6)	(1,185.8)	(1,132.0)	(1,200.1)	(1,224.1)
Sight deposits	(2,368.2)	(2,571.4)	(2,459.1)	(2,583.0)	(2,632.2)	(2,916.5)	(2,692.4)	(2,851.9)	(2,919.6)
Savings deposits	2,528.4	2,852.3	2,794.4	2,837.6	2,996.9	3,141.0	3,071.3	3,112.3	3,272.2
Time deposits	3,046.3	4,025.0	4,400.8	4,579.8	4,777.0	5,000.1	5,356.4	5,580.2	5,822.2
Net liabilities	412.8	437.8	619.2	645.8	688.8	538.5	832.1	899.9	1,101.5
Other assets	-690.6	-916.3	-786.5	-816.3	-839.3	-1,034.9	-829.4	-938.3	-842.2
Bonds	238.8	248.9	254.3	256.6	259.3	309.1	330.4	339.9	373.3
Capital account	864.6	1,105.2	1,151.4	1,205.5	1,268.8	1,264.3	1,331.1	1,498.3	1,570.4
Memorandum items:									
Domestic credit expansion during previous 12-month period in per cent of initial money stock	16.5	17.7	20.3	20.6	22.1	21.3	19.9	20.4	20.5
Percentage change in money stock over previous 12 months	19.9	18.0	18.2	17.1	18.4	16.7	15.1	15.0	15.0
Percentage change in income velocity 2/	3.3	-1.7	...	...	...	-1.4	...	...	...
Percentage change in money multiplier over previous 12 months	-3.1	-10.7	-2.6	2.2	1.6	1.4	1.9	1.4	4.0

Source: Bank of Spain, Annual Report, and Statistical Bulletin.

1/ Including the banks' purchases of bonds and shares.
2/ Nominal GDP divided by money and quasi-money (M3).

Table 32. Spain: Changes in Monetary Base, 1979-81

(Absolute changes, in billions of pesetas)

	1979	1980	1980				1981		
			I	II	III	IV	I	II	III
External sector	191.5	-40.5	-88.3	27.7	42.8	-22.7	-52.8	26.0	99.1
Public sector	157.4	317.9	139.5	82.0	40.4	56.0	41.7	174.5	-118.1
Central Government	156.1	397.7	171.2	115.1	54.6	56.0	226.0	116.0	170.9
Other public agencies	3.7	10.1	-20.3	22.9	15.8	-8.3	18.3	12.8	7.2
Treasury bills	-62.2	-88.2	-9.7	-54.9	-28.7	5.1	-205.9	45.4	-303.0
Public funds	59.8	-1.7	-1.7	-1.1	-2.1	3.2	3.3	0.3	6.8
Banking system	84.6	-16.3	-69.6	25.4	-32.2	60.1	7.9	-37.5	79.8
Advances	89.5	-9.3	-69.1	30.2	-33.5	63.1	12.4	-35.5	80.7
Unused advances	-4.9	-7.0	-0.5	-4.8	1.3	-3.0	-4.5	-2.0	-0.9
Other factors	25.3	1.4	-3.1	-51.1	24.2	31.4	-59.0	-48.4	-38.3
Monetary base	458.8	262.5	-21.5	84.0	75.3	124.7	-62.2	114.6	22.5
Currency in circulation	93.1	146.0	-42.0	84.1	28.7	75.2	-52.9	67.2	24.0
Bank liquidity	365.6	116.6	20.5	-0.1	46.7	49.4	-9.4	47.5	-1.5
Cash and deposits	370.6	123.6	21.0	4.8	45.3	52.5	-5.0	49.5	-0.5
Unused advances	-5.0	-7.0	-0.4	-4.9	1.4	-3.1	-4.4	-2.0	-1.0

Source: Bank of Spain, Annual Report and Statistical Bulletin.

Table 33. Spain: Assets and Liabilities of Commercial and Industrial Banks

(In billions of pesetas; end of period)

	1978	1979	1980	1980 September	1981 September
Assets					
Reserves at Bank of Spain	301	537	616	581	639
Treasury bills	32	72	119	139	368
Claims on public sector	682	786	891	871	968
Public funds	675	778	884	863	961
Pledgeable	(70)	(55)	(46)	(54)	(47)
Not pledgeable	(605)	(723)	(838)	(809)	(914)
Rediscounts and other claims	7	8	7	8	8
Claims on private sector	5,632	6,563	7,878	7,350	8,664
Loans	5,298	6,228	7,531	7,006	8,280
Bonds and shares	334	335	347	344	384
Other assets	457	611	662	616	709
Assets = Liabilities	7,104	8,569	10,166	9,557	11,348
Liabilities					
Deposits	5,115	6,102	7,229	6,749	7,809
Sight	1,976	2,105	2,376	2,094	2,326
Savings	1,064	1,132	1,232	1,200	1,281
Time	2,075	2,865	3,621	3,455	4,202
Credit from Bank of Spain	293	325	339	292	396
Other financial institutions, net	405	548	618	623	647
Foreign liabilities, net	471	572	798	723	966
Other liabilities	820	1,022	1,182	1,170	1,530

Source: Bank of Spain *Statistical Bulletin*.

Table 34. Spain: Assets and Liabilities of Savings Banks

(In billions of pesetas; end of period)

	1978	1979	1980	1980 September	1981 September
Assets					
Cash and deposits at Bank of Spain	153	284	322	311	346
Deposits at other banks	168	268	281	285	280
Treasury bills	2	18	51	38	253
Claims on public sector	302	378	446	423	494
Public funds	295	352	403	393	443
Other claims	7	26	43	31	51
Claims on private sector	2,258	2,509	2,836	2,743	3,045
Loans	1,463	1,650	1,911	1,822	2,096
Bonds and shares	795	859	925	921	949
Other assets	156	264	297	284	364
Assets = Liabilities	3,039	3,721	4,233	4,084	4,782
Liabilities					
Deposits	2,896	3,441	3,958	3,751	4,352
Sight	316	375	424	403	456
Savings	1,496	1,720	1,909	1,796	1,992
Time	1,022	1,224	1,458	1,392	1,702
Other	94	122	167	160	202
Credit from Bank of Spain	22	53	38	35	36
Capital and other liabilities	121	227	237	298	394

Source: Bank of Spain, Statistical Bulletin.

Table 35. Spain: Assets and Liabilities of Official Credit Institutions

(In billions of pesetas; end of period)

	1978	1979	1980	1980 September	1981 September
Assets					
Cash and banks' deposits	32	34	43	33	28
Claims on public sector	233	304	346	332	376
Claims on private sector	768	949	1,140	1,067	1,304
Other assets	24	27	51	36	62
Assets = Liabilities	1,057	1,314	1,580	1,468	1,770
Liabilities					
Treasury allocations, net	857	1,018	1,193	1,121	1,332
Credit from banking system	32	56	53	49	64
Bonds	39	55	71	59	79
Capital and other liabilities	129	185	263	239	295
Memorandum items:					
Total credit	1,001	1,254	1,487	1,399	1,680
Agriculture	131	145	155	152	166
Industry	192	244	280	269	315
Shipbuilding	110	145	181	169	203
Housing	142	174	228	202	289
Local authorities	186	256	300	285	329
Export	112	161	211	191	238
Other	128	129	132	131	140

Source: Bank of Spain, Statistical Bulletin.

Table 36. Spain: Issues of Securities

(In billions of pesetas)

	1978	1979	1980	1981 1st 9 months
Public sector				
Central Government	247.7	265.8	252.6	130.8
Investment bonds	157.6	194.2	163.6	120.6
Other long-term securities	40.0	94.8	79.8	30.5
Treasury bills and other short-term securities	200.7	446.2	560.0	582.0
Less redemptions	-150.6	-469.2	-550.8	-602.3
Autonomous agencies	23.8	37.3	38.5	6.6
Of which:				
INI	24.9	26.5	28.1	6.8
Less redemption	-5.0	-5.9	-6.9	-8.7
Public sector, net	271.5	303.1	291.1	137.4
Private sector				
Financial institutions, net	41.0	25.5	85.1	70.5
Bonds	12.3	-4.3	37.9	43.7
Shares 1/	27.7	25.7	45.2	16.7
Unsubscribed	1.0	4.1	2.0	10.1
Nonfinancial institutions, gross	280.9	219.6	270.8	205.6
Bonds	120.1	112.6	145.6	133.1
Shares	84.7	77.1	76.6	50.1
Unsubscribed	76.1	29.9	48.6	22.3

Source: Bank of Spain, Annual Report, and Statistical Bulletin.

1/ Includes shares in investment funds.

Energy

During the period of rapid growth and low energy prices, 1965-73, the income elasticity of total energy requirements at 1.5 per cent was relatively high in Spain, as compared with an average elasticity of unity for the industrial countries. As domestic production, which includes mainly coal and hydroelectricity, traditionally accounted for less than 30 per cent of total energy requirements, the rapid growth in demand was satisfied primarily through a large increase in energy imports, especially oil imports.

The rising trend of energy consumption was not reversed after the 1973-74 oil shock, as domestic energy prices were not adjusted to international levels. The income elasticity of the demand for energy, which in the years 1973-80 averaged 1.4, did not show a significant change with respect to the previous period. In particular, oil consumption increased faster than that of other energy sources and its share in the total rose from 67.1 per cent in 1973 to 68.1 per cent in 1980 (Table 37 and Chart 12). Accordingly, the oil balance recorded increasing deficits and in 1980 it reached over US$12 billion, which compares with a deficit of $US11.5 billion of the total trade balance (Table 38).

A National Energy Plan to modify these worrisome trends and systematically approach the Spanish energy problems was introduced in mid-1979. The underlying strategy of this Plan was based on both demand- and supply-oriented policies. The former was aimed at reducing oil consumption through a more realistic pricing policy in order to reflect trends in oil import prices more closely. As for supply policies, the Plan aimed at reducing the oil share in the total energy requirement from about 68 per cent in 1980 to less than 50 per cent in 1985 and to about 45 per cent in 1990. This was to be achieved through heavier reliance on other energy sources, such as coal, but also nuclear power and natural gas (Table 37).

Table 39 summarizes real price developments for oil and oil products. Until 1979, only diesel oil fully reflected the real cost of supply, with fuel oil and gasoline prices lagging very much behind. The adjustment to international levels began in 1979 and domestic energy prices were increased on six ocassions in the period July 1979-July 1981. The change in approach in energy pricing has already produced some results: while gasoline prices increased by 56 per cent (over 18 per cent in real terms) consumption fell by over 13 per cent in the two years ending on July 1981. As a whole, primary energy consumption showed the first noticeable decline (1.1 per cent) in 1980 and it is estimated to have decreased by 0.3 per cent in 1981.

However, a sustained decline in the income elasticity of the demand for energy can only be expected in the medium term. The latest available breakdown of consumption by final users indicates that industry used over 44 per cent of all the energy in 1979, as compared with an average 34 per cent in other OECD countries. A change in the specialization of the

Spanish industry away from energy-intensive production processes involves a substantial amount of investments and cannot be realistically implemented in a short period of time. Accordingly, the National Energy Plan has adopted a strategy aiming at diversifying the use of energy sources. The Plan lays a strong emphasis on the substitution of heavy fuel oils by coal and nuclear power for electricity generation. In the 1960s coal represented about 50 per cent of total energy requirements, but due to the relative cheapness of oil, this proportion had rapidly decreased to only 18 per cent by 1980. Coal production and the construction of coal-fired power plants have been promoted through fiscal incentives and soft loans by the Banco de Credito Industrial. 1/ These incentives have resulted in a substantive increase in tonnage produced (from 18 million tons in 1977 to 33.5 million tons in 1981). Energy-intensive sectors such as cement and brickworks have begun to diversify away from oil. Regarding nuclear energy, at present there are four plants in operation and their number will be increased substantially to comply with the Plan's target of having 15 per cent of total energy requirements satisfied by nuclear energy by 1990.

The full implementation of the Plan will require a substantial amount of investments consisting of the construction of new electric power plants and adequate infrastructure to import, store and transport natural gas and coal. Official estimates indicate that some Pta 330 billion, over 2 per cent of GDP, have been spent in both 1979 and 1980 for this purpose, creating an estimated 140,000 new jobs. In the period 1981-84 the investment plan provides for a total expenditure of Pta 2,141 billion (at constant 1981 prices) in energy-related activites (Table 41). Conservation will complement the efforts to increase energy supply: the Law on Rational Use of Energy of December 1980 provides financial incentives to encourage conservation and self-production of electricity in industry.

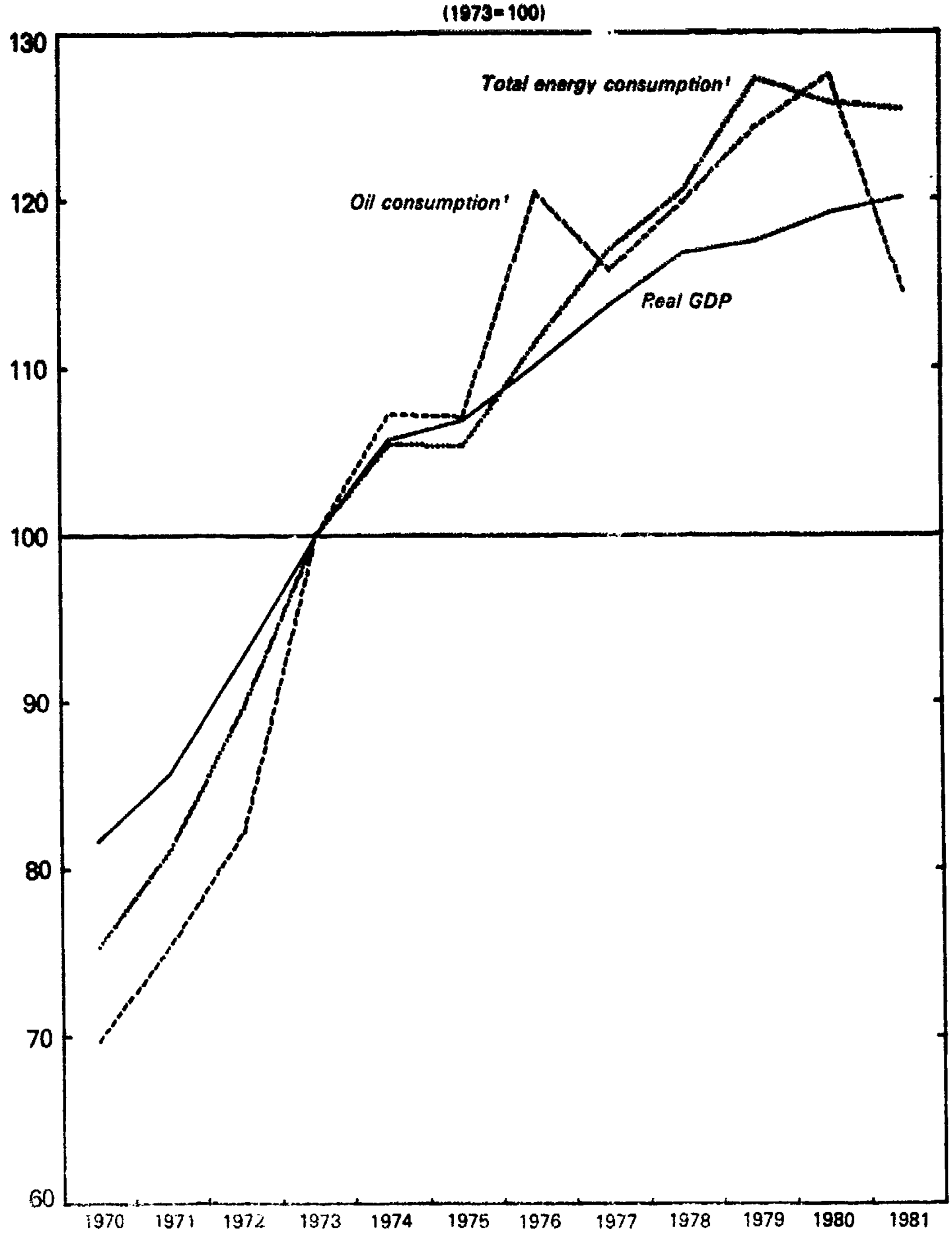
1/ The existing coal-fired power capacity, amounting to Mw 5,300 is to be almost doubled by 1984, with the introduction of 12 additional coal-fired plants.

CHART 12

SPAIN

TOTAL ENERGY AND OIL CONSUMPTION

(1973=100)



Source: Ministry of Industry and Energy, Energy Commission.

[1] In millions of tons of coal equivalents

Table 37. Spain: Primary Energy, 1973-90

	1973	1980	1981	1985 1/	1990 1/	Total 1973	Total 1980	Total 1981	Total 1985 1/	Total 1990 1/	Net Imports 1980
	In per cent					In millions of tons of coal equivalents					
Energy source											
Oil	67.1	68.1	61.4	49.3	45.2	56.3	71.8	64.5	61.3	68.8	69.5
Solid fuels	17.4	18.3	21.3	24.3	22.8	14.5	19.3	22.4	30.1	34.7	3.8
Natural gas	1.4	2.5	2.6	5.4	6.1	1.2	2.6	2.6	6.7	9.3	2.6
Nuclear energy	2.4	1.4	3.4	10.6	15.1	2.0	1.5	3.5	13.1	22.9	-0.3
Hydro and other energy	11.7	9.7	11.3	10.4	10.8	9.8	10.2	11.9	13.0	16.4	-0.6
Total	100.0	100.0	100.0	100.0	100.0	83.8	105.4	105.1	124.2	152.1	75.0

Source: Ministry of Industry and Energy.

1/ Target of the National Energy Plan.

Table 38. Spain: Energy Imports and Exports, 1978-81

	1978	1979	1980	1981 1/
	(Annual percentage changes)			
Imports				
Value 2/	6.1	26.6	83.0	38.9
Volume	-0.6	14.0	3.8	-1.5
Price 2/	6.7	11.1	76.3	41.0
Exports				
Value 2/	-12.8	4.4	123.2	...
Volume	-26.2	-11.7	60.2	...
Price 2/	18.1	18.2	39.3	...
	(In millions of U.S. dollars)			
Imports	5,301	7,672	13,152	14,640
Exports	330	394	823	...
	(As a percentage of total trade)			
Imports	28.4	30.2	38.5	...
Exports	2.5	2.2	3.9	...

Sources: Bank of Spain; and Ministry of Economics and Commerce.

1/ Estimates.
2/ In pesetas.

Table 39. Spain: Real Price of Oil and Oil Products, 1972-81 1/

(1972 = 100)

	Energy Imports	Gasoline	Diesel Oil	Fuel Oil
1972	100.0	100.0	100.0	100.0
1973	98.4	92.9	93.7	90.7
1974	255.8	110.1	219.8	136.3
1975	239.8	109.8	236.2	195.6
1976	254.6	122.4	277.5	169.8
1977	250.5	122.2	234.4	155.8
1978	222.2	114.4	207.8	156.5
1979	213.9	111.4	229.7	153.7
1980	334.0	132.5	340.2	221.4
1981	418.1	139.5	423.0	316.8
Percentage changes between July 1979/July 1981:				
Nominal	...	55.9	116.4	172.7
Real	...	18.2	64.1	130.9

Sources: Ministry of Economics and Commerce; and staff calculations.

1/ Energy import prices have been deflated by the GDP deflator, gasoline and diesel oil by CPI, and fuel oil by the industrial value-added deflator.

Table 40. Spain: Price of Oil Products in Selected European Countries, 1980 1/

	Gasoline Pesetas/Liter (1)	Diesel Oil Pesetas/Liter (2)	Fuel Oil Pesetas/Kg. (3)
Germany	51.09	49.87	13.61
Belgium	63.56	44.92	16.36
Spain	71.00	43.00	20.95
France	62.52	44.36	16.18
Greece	79.51	37.18	13.12
Netherlands	56.26	37.82	14.02
United Kingdom	53.84	53.84	15.43
Italy	69.76	30.34	13.23
Portugal	66.29	25.78	11.05

Source: Staff calculations.

1/ Prices prevailing at end-1980 (July 24, 1981 for Spanish prices).

Table 41. Spain: Investments by Sources
According to the National Energy Plan, 1981-84 1/

(In billions of pesetas)

	1981	1982	1983	1984	1981-84
Coal	18.8	26.1	28.2	31.1	104.2
Petroleum	95.9	126.0	111.0	80.8	413.7
Natural gas	25.7	37.8	43.7	44.7	151.9
Coal-generated plants	87.4	66.0	77.1	60.1	290.6
Hydroelectricity	20.0	17.7	16.7	19.3	73.7
Nuclear plants	167.2	181.8	188.0	178.9	715.9
Other controversial plants	3.6	4.6	4.2	4.3	16.7
Transportation and distribution	61.3	64.2	67.3	70.5	263.3
Nuclear fuel	3.3	7.7	6.6	5.0	22.6
Conservation	10.7	13.6	16.3	18.1	58.7
Other	6.4	6.9	7.9	8.9	30.1
Total	500.3	552.4	567.0	521.7	2,141.4

Source: Ministry of Industry and Energy.

1/ At constant 1981 prices.

Exchange and Trade System

The Spanish authorities have undertaken a gradual liberalization of the exchange and trade system in the last two years. Some of these measures reflect a general trend aimed a phasing out controls and restrictions in view of the prospective EC membership. But others, such as the convertibility of nonresident accounts, must be considered as part of the more general trend toward liberalization of the Spanish financial system since the beginning of 1981.

A brief description of the main features of the existing exchange and trade system, highlighting the major changes introduced in the past two years, is provided below. A fuller review of the system as of the end of 1980 is contained in the Annual Report on Exchange Arrangements and Exchange Restrictions, 1981.

1. Exchange system and controls

a. Exchange rate system

The authorities of Spain do not maintain margins in respect of exchange transactions, and exchange rates are determined largely on the basis of demand and supply conditions in the exchange markets. However, the authorities intervene when necessary in order to smooth out fluctuations in exchange rates so as to maintain stability in the exchange market. Official buying and selling rates for specified currencies 1/ are fixed daily by the Bank of Spain, acting in consultation with the authorized banks. These banks are allowed to operate in foreign markets for spot and forward transactions related to commercial operations for up to 360 days; forward transactions with customers are restricted to currencies admitted to the Madrid foreign exchange market and to permitted import and export transactions with a maturity up to 360 days. The forward peseta position of an individual bank must not reflect a net buying or selling balance at the close of each day.

b. Exchange controls on current transactions

Responsibility for the administration of exchange controls is shared by the Ministry of Economy and Commerce and the Bank of Spain. The former is responsible for current transactions, trade credits and portfolio and direct investment, while the latter is charged with the control of non-trade short-term and long-term credits.

Settlements on account of merchandise transactions and invisibles may be made in any specified currency 2/ but they are usually made in

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1/ Austrian schillings, Belgian francs, Canadian dollars, Danish kroner, deutsche mark, Finnish markkaa, French francs, Irish pounds, Italian lire, Japanese yen, Netherlands guilders, Norwegian kroner, Portuguese escudos, pound sterling, Swedish kroner, Swiss francs, and U.S. dollars.

2/ See footnote 1/ above.

the currency of the country of origin or destination. All export proceeds must be sold within eight days in the exchange market or to the Bank of Spain through authorized banks. 1/

There are several types of nonresident account in Spain according to the status of the individual or corporation and the purpose for which the account is to be used: convertible peseta accounts, external accounts in internal pesetas, nonresident accounts in convertible foreign currencies, and emigrants' accounts. Convertible peseta accounts deserve special attention. In 1961, when the peseta became a convertible currency, it was established that nonresident accounts were allowed to be credited with the countervalue in pesetas of foreign transactions (Spanish imports, services payments by residents, income payments arising from direct foreign investment, etc.) as well as with the counterpart value in pesetas of transactions taking place in Spain. In addition, balances on nonresident accounts could be used for any peseta payment to residents (Spanish exports, services receipts by residents, income receipts from Spanish direct investment, etc.); furthermore, they could be freely converted into foreign currency. In 1973, the Spanish authorities decided to separate these accounts into the so called "A" accounts (foreign accounts in pesetas for payments in Spain) and "B" accounts (foreign accounts in convertible pesetas), in order to shelter the exchange rate from short-term speculation. On January 27, 1981, the "A" accounts and "B" accounts were abolished: nonresidents are now permitted to hold convertible peseta accounts, and existing peseta balances in "A" accounts and "B" accounts automatically become convertible peseta balances. The July 1978 rule, according to which banks were required to redeposit with the Bank of Spain the increases in nonresidents' peseta accounts and were forbidden to pay interest on them, was also abolished in January 1981. Furthermore, from that date banks were allowed to offer forward cover on these accounts, with the stipulation that the net forward transactions in convertible pesetas against foreign exchange must be approximately in balance.

With respect to invisibles, payments up to Pta 50,000 for any purpose may be made freely. For larger payments declarations to the Ministry of Economy and Commerce are required. The basic exchange allowance for tourism is Pta 80,000 per person per journey, with an annual maximum of Pta 320,000 (about US$3,320 at current exchange rates). For business trips the annual maximum is Pta 1.4 million. Larger amounts, however, can be authorized by the Ministry of Economy and Commerce. Holders of Spanish securities (excluding securities issued by private companies and acquired through direct subscription) may freely transfer abroad accrued interest and dividends; the securities must have been purchased with foreign currencies or convertible pesetas. Profits and dividends on direct investments are freely transferable abroad. Rents on nonresident-owned real estate are transferable, provided that the purchase price has been paid in full. All exchange proceeds from invisibles must be sold within

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1/ Authorized banks include all commercial and industrial banks, as well as branches and affiliates of foreign banks.

15 days in the exchange market or to the Bank of Spain through authorized banks. Travelers may bring in a maximum of Pta 100,000 in notes of the Bank of Spain.

c. Exchange controls on capital transactions

The overall approach to exchange controls on capital transactions has been traditionally a rather liberal one toward inflows, both long and short term, and a rather restrictive one toward outflows. However, the strength of the external position in 1978-79 prompted a significant liberalization of outward long-term capital flows as well as the imposition of temporary restrictions on inflows.

As regards capital inflows, there are no restrictions on foreign direct investment leading to the ownership of up to 50 per cent of the capital of Spanish companies. Prior administrative authorization is required for foreign investment of more than 50 per cent. Special participation ratios and regulations apply to particular activities and sectors (e.g. defense industries, news media, and public utilities). Proceeds from the liquidation of foreign direct investment are freely transferable abroad. Portfolio investment in shares are treated as direct investments and those in bonds are unrestricted, while investment in real estate by nonresidents is subject to certain limitations. Loans by nonresidents to residents require authorization by the Bank of Spain: for loans with an average term to maturity of one year or more, approval is granted automatically if the application is not questioned or rejected within 15 working days by the Bank of Spain. Suppliers' credits extended to residents by nonresidents require authorization by the Ministry of Economy and Commerce. Certificates of deposit issued by banks can only be purchased by nonresidents subject to authorization, while long-term bonds of banks (five-ten years) have been completely liberalized. Nonbank residents are not allowed to hold foreign currency deposits with resident banks, or foreign currency and peseta deposits with nonresident banks. Capital outflows through the purchase of foreign exchange against pesetas by banks is only possible on a very limited scale.

Direct investments abroad by residents are permitted freely. In addition, banks, savings institutions, and insurance companies have been allowed to deal in foreign stock markets up to 10 per cent of the increase in their funds, and Spanish residents are allowed to purchase bonds denominated in foreign currencies issued by Spanish private or public institutions and by international organizations (such as the IBRD and the IDB). There has been no experience with the issuing of bonds in the Spanish capital market by nonresidents, nor with short-term credits granted by Spanish banks to nonresidents other than certain export credits granted directly to foreign importers. Credits to nonresidents for transactions with Spain may, however, be authorized by the Ministry of Economy and Commerce.

2. Trade system and commercial policy

Most imports are admitted under the following arrangements: (i) free imports, (ii) global quotas, (iii) state trading, and (iv) individual licensing, also referred to as the "bilateral import regime." All imports require either an import license or an "import declaration" issued by the Directorate-General of Tariff Policy and Imports. Import declarations are issued freely for a large number of goods (mostly foodstuffs not under state trading, raw materials, capital goods, spare parts, and also some consumer goods) included in an import-free list. There are global quotas for specified imports from countries to which the free list applies, but licenses are usually granted for larger amounts and there are separate global quotas for imports of these same commodities from EC countries. Imports of raw cotton, certain other agricultural products, some raw materials, and tobacco are state traded; some goods formally listed as being subject to state trading, such as feedgrains, may be freely imported by private traders. Imports of certain agricultural products that are free of quantitative restriction and previously were state traded are subject to variable import levies. Import subsidies are paid on certain foodstuffs and specified other essential commodities. Exchange in the appropriate currency to pay for authorized imports is granted freely. Except for capital goods, suppliers' credit for imports is not normally permitted to exceed 90 days. Certain agricultural products may be subject to an export tax, but this practice is unusual. Since April 1980 some goods included in a list published by the Directorate-General of Exportation may be exported without a license if payment is made in convertible foreign currency and within six months of export; in this case, only a declaration before the customs is required.

Commercial policy has been inspired by the desire to gradually liberalize trade in the perspective of future full integration into the EC. In 1978 tariffs on nonagricultural goods subject to duties greater than 10 per cent were reduced by 20 per cent over a three-month period beginning in July and quotas were increased on a number of products. In May 1979 additional imports were liberalized and a temporary tariff cut, which is still in effect, was introduced.

In June 1979, after protracted negotiations, special trade agreements were signed with Portugal and with the other EFTA countries, which accounted for about 5 per cent of Spanish imports and 6 per cent of exports in 1978. The agreements envisaged cuts in tariffs on industrial products (which represent about 87 per cent of the trade between Spain and the EFTA members) that are the same as those under the Spain-EC Preferential Agreement. As of July 1, 1980, EFTA countries cut their tariffs on the majority of industrial imports from Spain by 60 per cent while Spain cut them by 25 per cent. For agricultural products, bilateral agreements were negotiated with each individual member. In addition, duty-free quotas on imports from EFTA are set at the same levels as those from the EC and future tariff cuts for imports from the latter will be extended to EFTA.

Analysis of Fiscal Impact

To evaluate the macroeconomic impact of fiscal policy, it is necessary to measure the overall balance of general government operations against a standard of neutral balance, which would obtain under conditions of relatively high employment and stable prices. Any deviations from neutrality could be interpreted as an expansionary or contractionary budgetary stance--the actual impact depending on the short-run multipliers of government expenditures and taxes. Further, the budgetary impact thus measured may be compared to exogenous shocks from the domestic private sector or from abroad. For this purpose, it is of course necessary to identify and measure those shocks. The direction and relative size of the budgetary impact and of the impact of private autonomous demand can then serve as an indicator of the cyclical appropriateness of the fiscal stance.

Following the German method of measuring the cyclical effect of the budget, 1/ we can express this effect for time period t simply as the difference between the cyclically neutral balance (expressed in reference to the base period o) and the actual overall financial balance of the General Government's budget, 2/

$$CEB_t = CNB_t - OB_t$$

where

$$CNB_t = (GGR/GDP)_o \cdot GDP_t - (GGE/\widehat{GDP})_o \cdot \widehat{GDP}_t$$

represents the cyclically neutral balance, and

$$OB_t = GGR_t - GGE_t$$

is the ordinary balance, given the following definition of variables

GGR = general government revenue

GGE = general government expenditure

GDP = gross domestic product at market prices

$\widehat{GDP}$ = potential gross domestic product grossed up by its deflator, at market prices.

1/ This approach is based on the cyclically neutral budget concept developed by the German Council of Economic Experts. For a discussion, see T.F. Dernburg, "Fiscal Analysis in the Federal Republic of Germany: The Cyclically Neutral Budget", IMF Staff Papers (November 1975), pp. 825-857. For an early application to Spain, see L. García de Blas, "Efectos económicos del presupuesto," Hacienda Pública Española (1977), pp. 31-45.

2/ Throughout this analysis the budget refers to the actual or estimated outcome of all general government operations, as against the narrower legal definition of the budget used in Chapter III.

In essence, the cyclically neutral budget balance in any given year is the balance that would prevail if (i) government expenditure was maintained at a level that bears the same relationship to potential output in that year as the relationship between government outlays and output in the base year when the economy was deemed to have been operating near capacity, while (ii) government revenue attained the same proportion to actual output as the proportion to output in the base period--assuming implicitly a unitary elasticity of revenue with respect to output or income. Thus, a positive (negative) cyclical effect (CEB), owing to an upsurge (cut) in expenditure and/or a tax reduction (increase), can be interpreted as an expansionary (contractionary) budgetary impact or stance; further, any positive (negative) year-to-year change in the effect (ΔCEB) can be regarded as an expansionary (contractionary) impulse.

The cyclical effect of private autonomous demand, comprised largely of fixed investment plus exports, is given by the difference between actual autonomous demand and the cyclically neutral demand,

$$CEA_t = AD_t - CNA_t$$

where

$$AD_t = GFI_t + XGS_t$$

denotes autonomous private sector demand,

$$CNA_t = (AD/\widehat{GDP})_o \cdot \widehat{GDP}_t$$

is the cyclically neutral demand, and

GFI = private (including nonfinancial public enterprises) gross fixed investment

XGS = exports of goods and services.

The cyclically neutral autonomous demand concept is analogous to that of the cyclically neutral budget in that in a given year it reflects the base year relationship between autonomous demand and potential output. Likewise, any positive (negative) deviation (CEA) of actual from cyclically neutral autonomous demand suggests an expansionary (contractionary) impact; and a positive (negative) change (ΔCEA) can be viewed as an expansionary (contractionary) impulse.

It should be noted that all variables, including potential output, are valued at current prices in national currency. The process of grafting the current price series on potential real output is based on the implicit assumption that the inflation rate is regarded as a datum and not as a fiscal policy target; alternatively, it would be necessary to value potential output with an assumed normative inflation rate. An additional aspect of the valuation approach used herein is that since all variables are computed at current prices, instead of constant prices, they reflect in part fluctuations in relative prices of the various components of aggregate demand. Thus, for the purpose of this exercise, the domestic macroeconomic impact of a rise in exports is postulated to be the same regardless whether it is due to an increase in the volume of exports or in the foreign prices of exports, or to a change in the exchange rate.

The analysis of the budgetary impact is applied to Spain over the 1970-81 period on the basis of national accounts data, selecting 1972 as the base year. 1/ The results, summarized in Table 42 and Chart 13, indicate that fiscal policy has become increasingly expansionary since 1974 (despite minor contractionary impulses in 1975 and 1979). This expansionary stance must be considered against the backdrop of cyclical variations in autonomous demand. Assuming that the latter is made up of investment plus exports, it appears that after the 1974 expansionary peak, the Spanish economy was heading toward a decline in activity. Therefore, broadly speaking, fiscal policy seems to have had an appropriate countercyclical effect from 1975 until the present. However, further scrutiny reveals that the fiscal expansion was countercyclical in reference to private investment yet procyclical vis-à-vis exports--which have been rising markedly over the last three years relative to "neutral" exports (neutrality being determined by their 1972 ratio to GDP). 2/ These developments are illustrated in Chart 14, where autonomous demand is defined to consist solely of private investment, and in Chart 15 where it is defined in terms of exports alone.

The foregoing results must be interpreted with great caution, insofar as they may mask a causal relationship between the budgetary stance and fluctuations in autonomous demand. In recent years the adherence to monetary targets, notwithstanding the Government's resort to domestic bank credit in excess of the initially programmed borrowing requirement, seems to have resulted in a corresponding reduction in bank credit made

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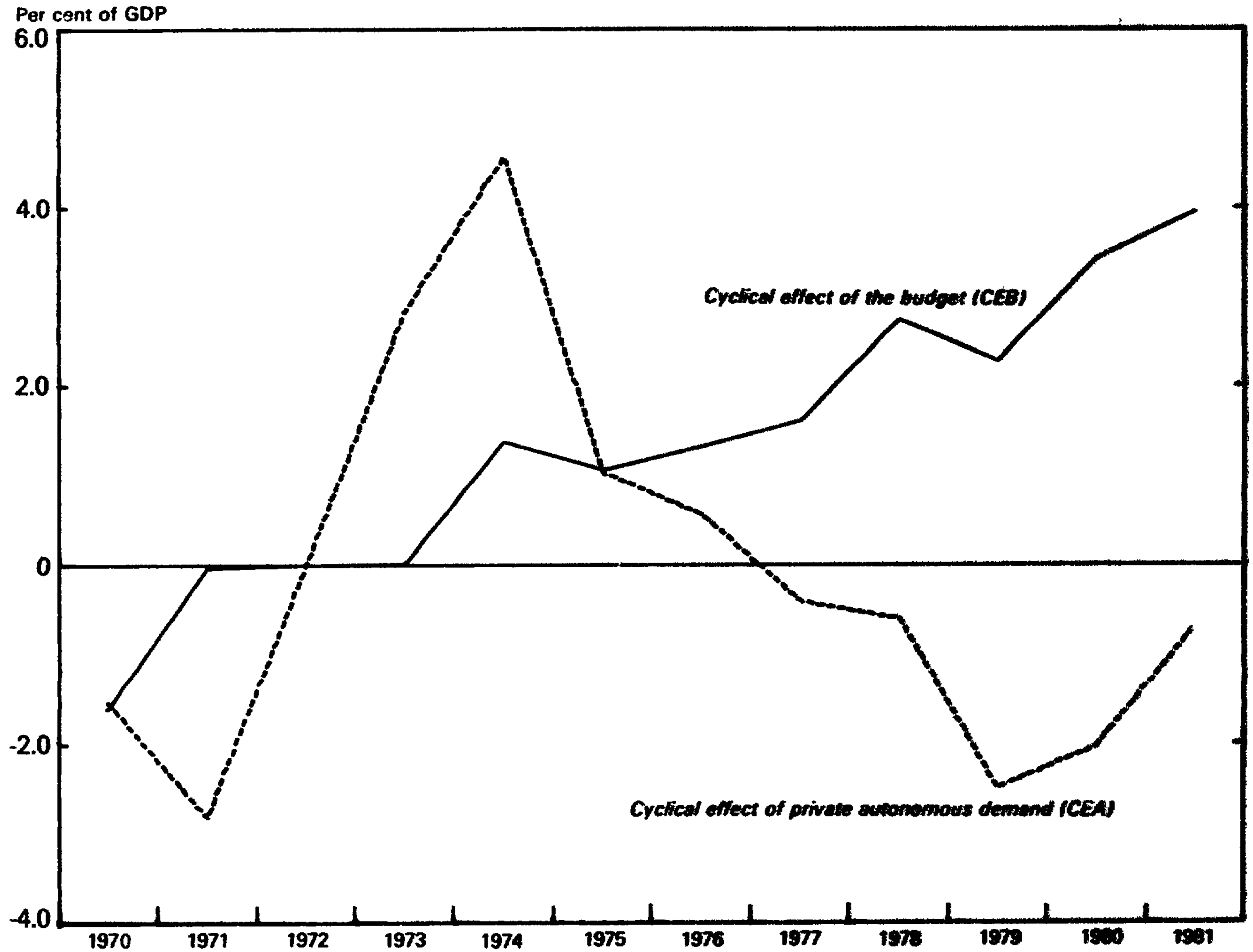
1/ Potential GDP was calculated by grossing up trend real GDP by its deflator. The trend real GDP (obtained from a linear regression of actual GDP at constant prices on time trend) implies an annual growth rate that declines from 4 per cent in 1971 to less than 3 per cent in 1981. Given declining capital formation, a fall in the growth rate of potential GDP is a realistic working assumption. Alternative calculations were also undertaken assuming a constant GDP growth rate over the entire period.

2/ Although this measure of budgetary stance may be used as a crude indicator of the cyclical adequacy of fiscal policy, no inference can be drawn as to whether the budgetary posture has been reached through discretionary action or the operation of automatic stabilizers (unemployment benefit transfers and revenue from income or ad valorem taxes). This qualification is particulary relevant for the recent Spanish experience as major reform of the tax and transfer systems precludes a satisfactory quantification of the cyclically-induced variations in government expenditure and revenue, as opposed to variations attributable to discretionary measures.

CHART 13

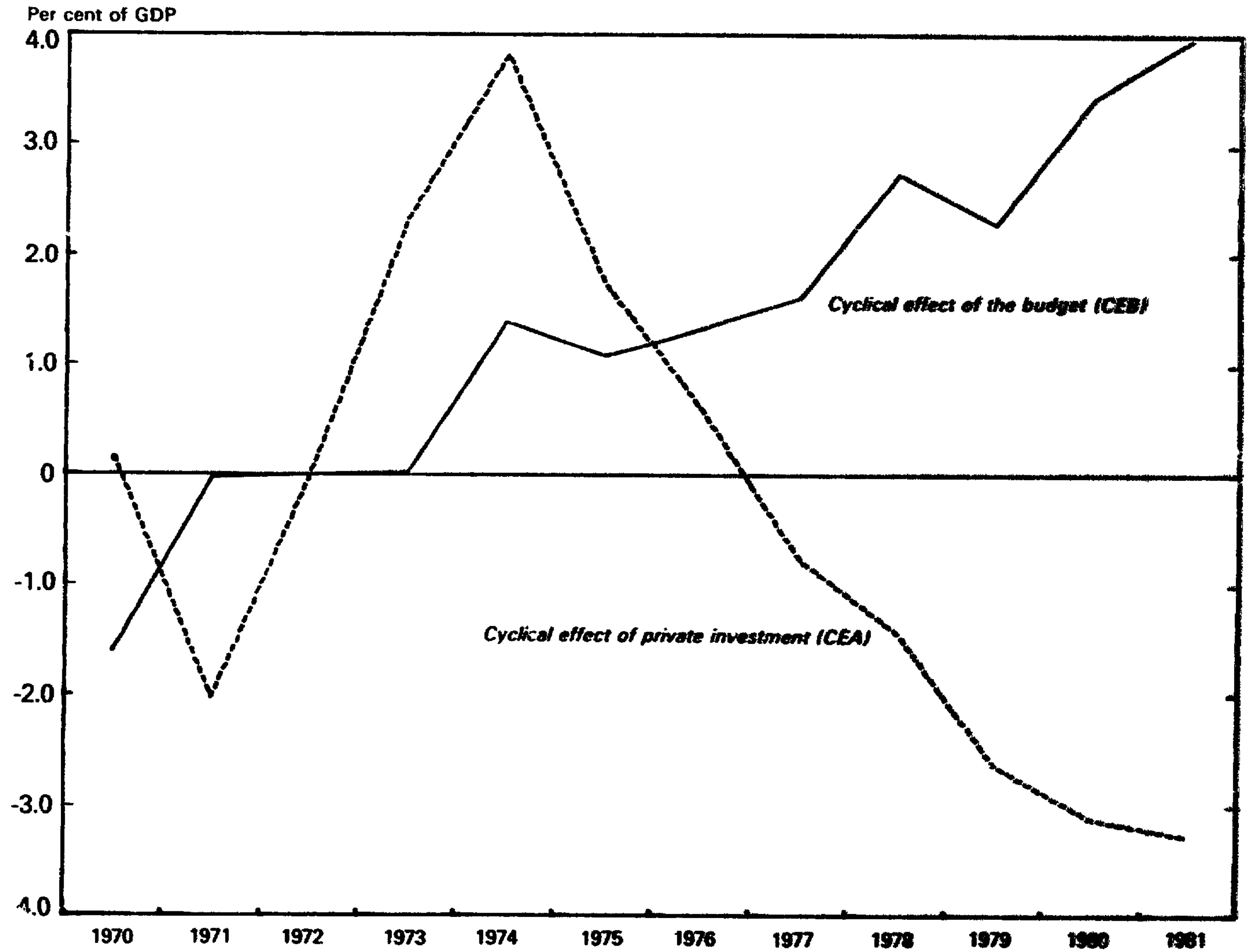
SPAIN

CYCLICAL EFFECT OF THE BUDGET AND OF AUTONOMOUS DEMAND



Source. IMF, staff calculations

CHART 14
SPAIN
CYCLICAL EFFECT OF THE BUDGET AND OF INVESTMENT

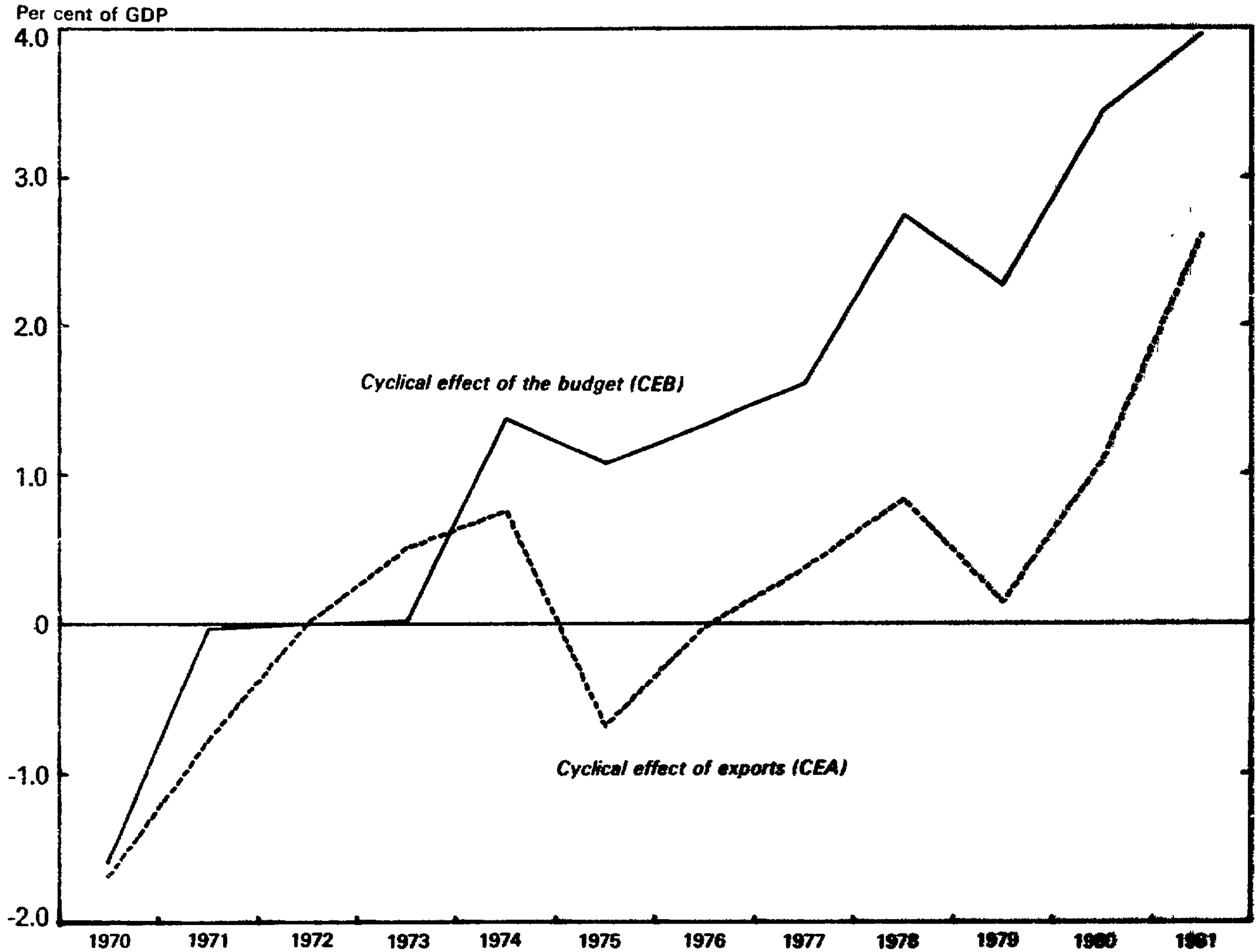


Source: IMF, staff calculations

CHART 15

SPAIN

CYCLICAL EFFECT OF THE BUDGET AND OF EXPORTS



Source IMF, staff calculations.

available to the private sector. This raises the question as to what extent (if any) such financial crowding out has led to a real crowding out through displaced private investment. In the absence of a full-scale short-run macroeconomic model, it is necessary to rely on circumstantial evidence for a possible answer.

On the basis of Chart 14, it may be argued that private investment has been consistently sluggish since 1975, even in the face of varying fiscal impulses (although the budget always exhibited a positive effect in relation to the neutrality standard), with the implication that investment was unaffected by the budgetary stance. Perhaps equally convincing is the opposite hypothesis that the more sharply expansionary budget of the last couple of years has inhibited some private investment, as enterprises were unable to compensate the domestic credit squeeze with increased self-financing and access to capital markets at home or abroad. 1/ Of course, even if the extreme view of one-to-one real crowding out (resulting in a zero net impact on demand in the short run) is accepted, the substitution of public and private expenditures must be recognized as having longer-run effects on resource allocation and growth that depend on the composition of the increment in government outlays.

1/ Following yet another line of reasoning, it can be hypothesized that since public consumption is one of the most dynamic components of public expenditures, real crowding out in part takes the form of direct displacement of private consumption expenditures by households who value such government outlays as part of their own consumption. Yet such crowding out seems rather unlikely to have been of any significant magnitude in view of the decline in the household savings ratio experienced in recent years.

Table 42. Spain: Cyclical Effect of the General Government Budget, 1970-81 1/

(In per cent of GDP)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 Estimate
Budget balance:												
Cyclically-neutral balance (CNB)	-0.8	-0.6	0.3	1.2	1.6	1.1	1.0	1.0	0.9	0.4	--	-0.3
Ordinary overall balance (OB)	0.8	-0.5	0.3	1.2	0.3	--	-0.3	-0.6	-1.8	-1.9	-3.4	-4.3
Cyclical effect (CEB)	-1.6	--	--	--	1.4	1.1	1.3	1.6	2.7	2.3	3.4	4.0
Change in cyclical effect (ΔCEB)	--	1.6	--	--	1.4	-0.3	0.2	0.3	1.1	-0.4	1.1	0.6
Autonomous demand: 2/												
Cyclical effect (CEA)	-1.5	-2.8	--	2.8	4.6	1.0	0.6	-0.4	-0.6	-2.5	-2.0	-0.7
Change in cyclical effect (ΔCEA)		-1.3	2.8	2.8	1.8	-3.6	-0.4	-1.0	-0.2	-1.9	0.5	1.3

1/ All data are expressed on the basis of national income accounts. Private investment has been reduced by the amount of government capital transfers, included in government expenditures. The cyclically-neutral budget balance and autonomous demand have been calculated in reference to the base year 1972. For any given year, components may not add up to total because of rounding.

2/ Private fixed capital formation plus exports of goods and services.

Public Sector Investment

1. Past trends

In the face of stagnating private investment activity, capital spending by the nonfinancial public sector has become increasingly important in Spain both as an instrument of growth, and more recently, as a demand management tool. For purposes of this Appendix (and consistent with the section on Public Finance), the public sector investment is defined to include fixed capital formation of the General Government and nonfinancial public enterprises. 1/ The reason for this broad coverage is, of course, that all such investment is the result of public policy decisions, either directly (insofar as it comprises budgeted capital outlays and budgetary transfers) or indirectly (by virtue of government ownership and control).

In quantitative terms (Table 44), the share of the public sector in domestic fixed investment rose since the mid-1970s from 22 per cent to 26 per cent by 1980. Almost one half of the increase can be attributed to the capital expansion of the INI group which totalled about 6 1/2 per cent of global investment in 1980. The most important contribution to this investment effort was made in the energy, food processing and construction sectors; in contrast, in metals and chemicals, there was a declining share of public investment. Within the Central Government there has been a shift in infrastructure investment from water resources and transport (both rail and road) undertaken by the state, to school construction and community development by the administrative agencies. On balance, the proportion of the Central Government in total investment increased by more than one half of a percentage point.

2. The planning process

The main instrument of public investment planning is the three-year rolling Public Investment Program (PIP), which covers roughly one half of total public sector investment, namely, the proportion included in the annual state budget. Although in the formulation of the program account is taken of the full amount of each investment project (if it involves state participation), the proportion of financing from other sources (internal funds, and domestic and external credit) is not formally included in the PIP.

The preparation of the PIP starts within each ministry where a proposal is drawn up for each individual project. The proposal is required to contain information regarding the objectives of the project, realized and proposed expenditures (over a three-year time period), total duration of project, employment, import costs, associated private investment, breakdown of costs, sources of financing, regional distribution of costs and employment, as well as a description of the method used in elaborating these estimates. Also, formal evaluation is conducted on certain projects, calculating discounted flows of costs and benefits on the basis

1/ In the national income accounts, the public sector is defined to include only components of the General Government.

of appropriate shadow prices; in the absence of such an evaluation, it is necessary to provide estimates of the future stream of benefits and expenditures--including maintenance costs beyond the investment period.

The proposals are submitted to the General Directorate of Public Investment, which is in charge of reviewing them and formulating recommendations for action to the Public Investment Committee (CIP). The latter, created in August 1979, is comprised of representatives of ministries responsible for the bulk of investment expenditures (Agriculture, Industry, Transport, Education, Defense and Public Works), the Director General of the Budget and the Director General for Planning, under the chairmanship of the Undersecretary of Economy and Commerce. The principal function of the CIP is to select among projects (a) on the basis of the economic policy criteria laid down by the Economic Affairs Committee, and (b) subject to the overall budgetary ceiling on capital expenditures.

More specifically, all projects considered by the CIP are grouped into 21 blocks, by expenditure category and constrained by subceilings on the budgetary contribution--set according to the level of available self-financing. External financing for these projects is under the control of the External Financing Committee (CIFEX). The investment projects approved by the CIP and reclassified by spending department and by budgetary entry (within Chapters 6 and 7 of the state budget, which denote capital formation and capital transfers, respectively), are subsequently adjusted, if necessary, by the Economic Affairs Committee. Thereafter, the PIP is ready for final approval by the Council of Ministers. Once the PIP is in place, the Public Investment Review Committee (CISP) monitors the realization of the investment projects. A quarterly report is sent to Congress on the implementations of the PIP.

3. The 1982-84 Investment Program

In order of importance, the following criteria have been adopted for the formulation of the current PIP: (1) comp etion of ongoing projects, 1/ (2) employment creation, (3) encouragement of private investment, (4) technological improvement, (5) energy saving, (6) improvement of the balance of payments, and (7) minimization of future increase in current expenditures. Besides these criteria, the CIP was instructed to pay special attention to the regional impact of investment projects so as to favor the less developed regions.

The annual global ceiling for the 1982-84 PIP has been set at Pta 825 billion (in constant prices). In the 1982 state budget this amount is broken down into Pta 343 billion in capital formation (Chapter 6) and Pta 482 billion in transfers (Chapter 7). Compared to the initial 1981 budget, this year's total reflects a nominal increment of about 23 per

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1/ In this respect, it may be noted that legally departments can commit up to 70 per cent of the current year's appropriations for the next year, up to 60 per cent for the following year, and up to 50 per cent for the third and fourth years.

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cent (Table 43). Distributed by broad categories, the most significant rates of increase are programmed in the following areas: energy 119 per cent, research and development 87 per cent, industrial restructuring 47 per cent, aid to agriculture 40 percent, defense 34 per cent, and transport and communication 26 per cent.

However, it may be more meaningful to look at the relative magnitude of appropriations, rather than the percentage increment, in each area. The largest shares in the capital budget are channelled to transport, housing and defense, which together account for almost one half of the total. In the transport sector, there is a strong rise in appropriations for highway construction and maintenance, and investment in airports (which represent the local counterpart of project lending by the European Bank of Investment); also, significant contributions are envisaged for the State Railways (RENFE) three-year investment program, totalling Pta 90 billion (in current prices). The transfers for housing reflect only a portion of the financing requirements of that sector's three-year investment plan; the remaining needs will be met with the Housing Authority's (IPPV) own resources. About one fifth of the investment program is earmarked for economic services, consisting principally of funds for restructuring of sectors in crisis (various manufacturing industries and shipbuilding), and financial investment for the INI and INH groups--a contribution of Pta 67 billion toward the investment program of these holding companies, totalling Pta 400 billion this year.

The general regional guideline for project selection has been followed rather closely by CIP: 66 per cent of 1982-84 PIP is identified as having a direct regional impact. For 1982, the investment program includes specifically almost Pta 50 billion in expenditure for regional development, one half of which will contribute to both public and private investment expected to reach more than Pta 220 billion. From an institutional perspective, altogether Pta 180 billion of the state budget (Section 33 of Chapters 6 and 7) have been set aside for the Regional Compensation Fund: one half in direct state outlays and the other half in transfers to local governments. The major intermediaries in administering these appropriations are: the Ministry of Public Works, 41 per cent; Ministry of Agriculture and Fisheries, 22 per cent; Ministry of Transport, 19 per cent; and Ministry of Education and Science, 11 per cent.

Table 43. Spain: Public Investment Program, 1982 1/

	In Billions of Pesetas	Per Cent of Total	Annual Per Cent Change
General administration services 2/	43.4	5.3	8.0
Research and development	20.8	2.5	87.4
Energy	25.2	3.1	119.2
Water resources 3/	55.6	6.7	22.2
Housing	97.3	11.8	16.7
Transport and communication	112.8	13.7	25.8
Health and education	76.4	9.3	16.1
Regional development	46.9	5.7	20.3
Industrial restructuring	40.2	4.9	47.3
Agricultural support	21.2	2.6	40.3
Other sectoral support	22.9	2.8	19.9
Financial investment 4/	81.5	9.9	14.5
Operating expenditures	17.2	2.1	6.8
Miscellaneous projects	44.1	5.3	-6.8
Defense 5/	119.5	14.5	34.4
Total	825.0	100.0	22.9

Source: Spanish authorities.

1/ Consistent with state budget, different from national income accounts.
2/ Including internal security.
3/ Consists mainly of irrigation projects.
4/ Including mainly transfers to the INI and INH groups.
5/ This category has not been reviewed by the Public Investment Committee.

Table 44. Spain: Public Sector Share in Domestic Fixed Investment

(As per cent of gross domestic fixed capital formation)

	1974	1977	1980
Nonfinancial public sector investment	21.7	25.0	26.0
General Government	9.4	11.8	10.4
Central Government 1/	6.9	8.4	7.6
Local governments	2.5	3.4	2.8
Nonfinancial public enterprises	12.3	13.2	15.5
Industrial and commercial agencies 2/	2.1	3.1	2.4
State Railways (RENFE)	1.2	1.4	1.6
Private enterprises under state control	4.6	4.1	4.7
INI Group	4.2	4.6	6.4
Other enterprises 3/	0.3	0.1	0.3

Source: Spanish authorities.

1/ Including state, administrative agencies, and social security.
2/ Central government agencies engaged in industrial and commercial activities (postal service, RTVE, FEVE, ICONA, the mint, etc.)
3/ For the most part, local government related enterprises and services.

A Formal Analysis of Spanish Monetary Policy

The Bank of Spain has been operating monetary policy through the setting of quantitative annual or half-yearly targets for monetary aggregates from the early 1970s. The transition to monetary targeting occurred at a time when the overriding objectives of the authorities were the achievement of greater price stability and a reduction in external payments imbalances. Emphasis on a medium-term monetary growth target, rather than a more flexible monetary policy, was based on both institutional and empirical considerations. On the institutional front, the lack of a developed domestic financial structure precluded the use of an active interest rate policy. Moreover, there appeared to be considerable empirical support for the proposition that insofar as the ultimate aim of the authorities was to influence the price level, the relationship between nominal income and money was more stable and dependable than between nominal income and interest rates. Furthermore, because in the medium term, allowing for secular changes in the income velocity of money, the domestic rate of inflation is essentially determined by the rate of monetary expansion relative to the rate of growth of output, control of inflation is therefore best achieved by restricting the growth of money, rather than through varying interest rates. The policy of publicly announcing monetary targets, which was initiated as part of the stabilization program of July 1977, was founded on the premise that this would provide direct information to the banking system of the medium-term intentions of the Bank of Spain, and furthermore, that the announcements would have a direct effect on inflationary expectations.

Monetary targets are, by definition, only intermediate objectives and are employed to influence the ultimate objectives of the authorities--principally prices, output, and the balance of payments. A necessary condition for monetary policy to have a predictable effect on these ultimate economic goals is that there must exist a well-defined and stable demand for money. The monetary aggregate chosen as a proximate target must then be one which has the most stable relationship with the arguments that are typically included in a demand for money function. Further, it is obvious that the selection of a particular monetary aggregate is directly related to the ease with which the monetary authorities can control it using the instruments at their disposal. The operation of a target-oriented monetary policy, therefore, depends on two key relationships--the demand for money, and the relationship between the chosen monetary aggregate and the operational variables of the authorities.

The Bank of Spain has chosen a broad definition of money (M3) as the relevant aggregate to target on grounds that widespread controls over interest rates have made the narrower definitions less meaningful concepts and their behavior subject to greater uncertainty. More importantly, it has been determined that M3 bears a closer and more systematic relationship with nominal GDP, the main variable the authorities wish to influence.

Control over this aggregate is exercised via the monetary base, expressly through variations in the banking system's reserves. Monetary policy has been operated by the Bank of Spain on the assumptions that the demand function for M3 is relatively more stable, and that the relationship between this aggregate and the level of banks' reserves is presumably a predictable one.

The purpose of this Appendix is to outline how the Bank of Spain conducts monetary policy, focusing particularly on the derivation of the overall target for monetary growth and the translation of this target into the short-term operating procedure of the authorities. Since the demand for money function plays a central role in the analysis, it is considered in some detail and additional empirical evidence presented. The second part of the exercise concentrates on the procedures employed by the Bank of Spain to determine its short-term intervention strategy to attain the longer-run desired monetary growth.

1. Derivation of the monetary target

In broad terms the target value for the growth of M3 is chosen to be consistent with the expected growth in nominal income, which in turn is based on the projected increase in real output and the anticipated evolution of prices during the coming year. As the income velocity of money has varied from year to year (Chart 16) some allowance for both the secular changes in velocity, and movements due to interest rate developments, is made. Typically the use of a two percentage point band around the central value permits the authorities some degree of flexibility if the projections on which the target is based turn out to be in error.

Underlying this calculation of the monetary target is an empirical money demand function, and the Bank of Spain has been continually experimenting to obtain the appropriate function to use for this purpose. Generally the approach followed is to specify an equilibrium money demand model that relates the stock of real money balances to a scale variable, such as real income, and the opportunity costs of holding money. Since money-holders can substitute between money and goods (real assets), as well as between money and financial assets, the relevant opportunity costs are the (expected) rate of inflation and the rate of interest on financial assets, respectively. In Spain it could be argued that the relatively thin markets for alternative financial assets would tend to make the substitution between money and goods quantitatively more important than that between money and financial assets. However, even though weak, the effect of interest rates on such assets that do exist should still be taken into account, so that the functions normally specified for Spain have broadly the same features as those formulated for the industrialized countries.

Formally such money demand functions can be written in log-linear terms as:

$$(1) \quad \log m_t^d = a_0 + a_1 \log y_t - a_2 \log r_t - a_3 \Pi_t; \; a_1, a_2, a_3 > 0$$

where m^d denotes the demand for real money balances (defined as nominal demand deflated by the price level P); y is the level of real income; r is the rate of interest on other financial assets; and Π is the expected rate of inflation.

In full equilibrium, the demand for real money balances would be identical to the actual stock, and the expected rate of inflation equal to the actual rate of inflation. Equation (1) would, therefore, become:

$$(2) \quad \log m_t = a_0 + a_1 \log y_t - a_2 \log r_t - a_3 \Delta \log P_t$$

where m = M/P, and Δ is a first-difference operator so that $\Delta \log P_t$ is the actual rate of inflation. The growth of nominal money can be determined by simply transforming equation (2) into terms of rates of growth to obtain: 1/

$$(3) \quad \Delta \log M_t - \Delta \log P_t = a_1 \Delta \log y_t - a_2 \Delta \log r_t$$

or,

$$(4) \quad \Delta \log M_t = a_1 \Delta \log y_t - a_2 \Delta \log r_t + \Delta \log P_t$$

With values for a_1 and a_2, the income and interest rate elasticities of the demand for money which determine the secular and short-run behavior of velocity, respectively, and values for the growth of real income, interest rates, and prices, the nominal growth of money can be ascertained from (4). This is basically the formal representation of the approach taken by the Bank of Spain to derive the monetary growth target.

However, as pointed out, equation (1) is an equilibrium relationship, and its use to calculate annual targets presupposes that all adjustment takes place within one year. As this is not necessarily consistent with the data, some type of dynamic behavior in the form of a lagged response of real money balances to changes in the exogenous variables should be considered. One way of doing this, adopted in an earlier study of the Bank of Spain, 2/ is to introduce dynamics through the method of polynomial

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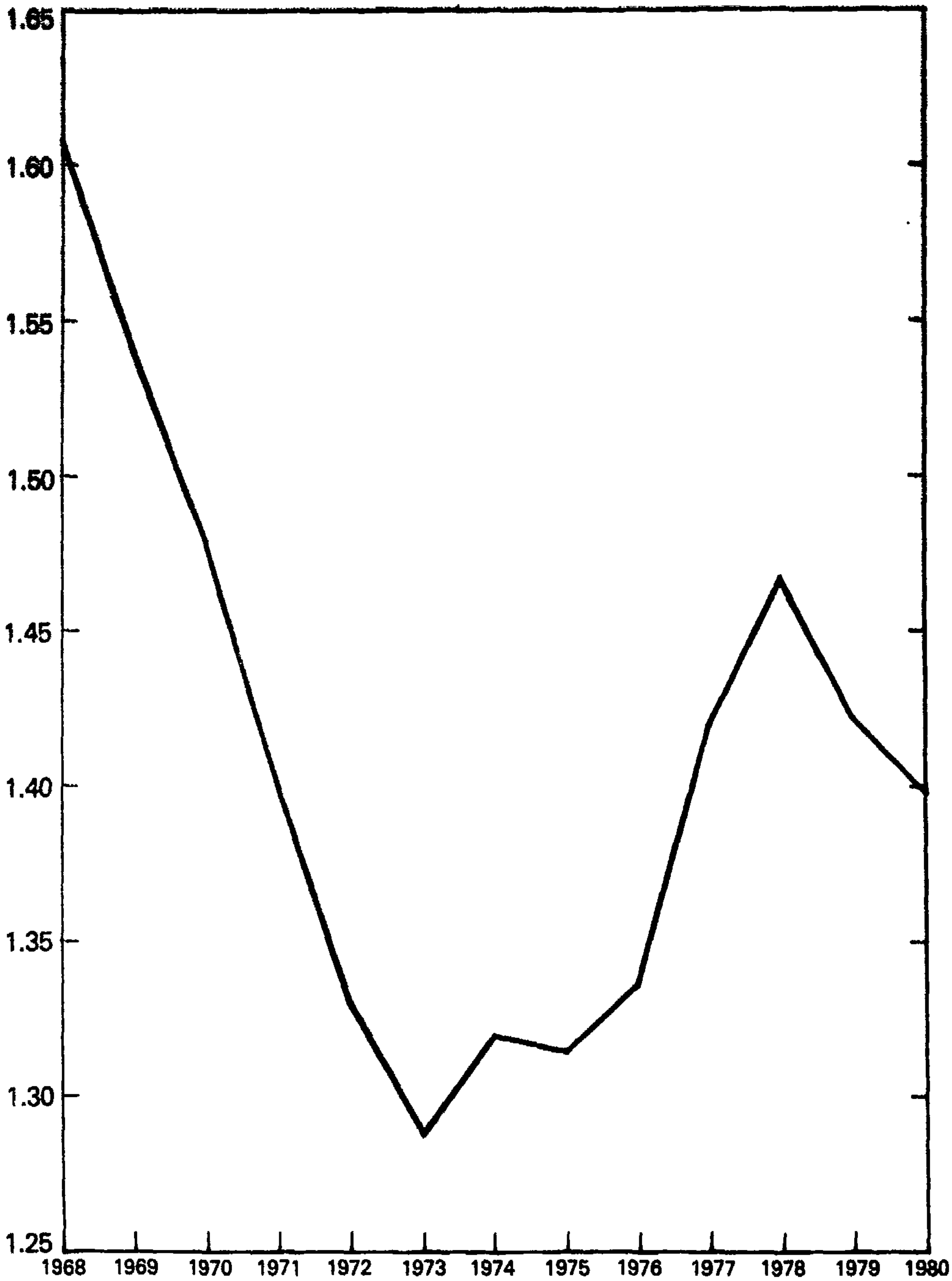
1/ In the steady-state the rate of inflation would be constant, so that the change in $\Delta \log P$ ($\Delta^2 \log P$) would be zero and drop from the specification.

2/ See L.A. Rojo and J. Perez, "Monetary Policy in Spain: Targets and Instruments," Bank of Spain Economic Studies No. 10, 1977.

CHART 16

SPAIN

INCOME VELOCITY, 1968-80[1]



[1]Nominal GDP divided by the average stock of money (M3).

lags. Current work at the Bank of Spain on this topic, however, utilizes the popular partial-adjustment model, whereby real money balances are assumed to adjust in the following manner:

$$(5) \quad \Delta\log m_t = \lambda[\log m_t^d - \log m_{t-1}]$$

where $\Delta\log m$ is the rate of growth of real money holdings, and λ is the coefficient of adjustment, $0 < \lambda < 1$. This function, which is used extensively in the literature, can be referred to as the "standard" dynamic specification. The solution of equations (1) and (5) in terms of the level of real money balances is:

$$(6) \quad \log m_t = \lambda a_0 + \lambda a_1 \log y_t - \lambda a_2 \log r_t - \lambda a_3 \Pi_t + (1-\lambda)\log m_{t-1}$$

A more general version of the partial-adjustment mechanism, which yields a more realistic path for real money balances following an unexpected change in the rate of monetary expansion, is the so-called flow-disequilibrium model defined as:

$$(7) \quad \Delta\log m_t = \lambda[\log m_t^d - \log m_{t-1}] + \gamma[\Delta\log M_t - \Delta\log M_t^e]$$

where $\Delta\log M^e$ is the anticipated growth and $[\Delta\log M - \Delta\log M^e]$ the unanticipated growth in the nominal supply of money. The second term in equation (7) represents flow-disequilibrium or a monetary shock, and the parameter γ measures its impact on the change in the stock of real money balances. This representation, which can be described as the "extended" model, is able to capture the frequently observed phenomenon that real money balances tend to initially rise when there is an acceleration in the rate of growth of money. 1/ Standard models, such as (5), are unable to account for this type of behavior. While this flow-disequilibrium specification has not been applied to money demand behavior in Spain, it has considerable theoretical appeal and deserves consideration. Substituting equation (1) into (7) yields:

$$(8) \quad \log m_t = \lambda a_0 + \lambda a_1 \log y_t - \lambda a_2 \log r_t - \lambda a_3 \Pi_t + (1-\lambda)\log m_{t-1} + \gamma[\Delta\log M_t - \Delta\log M_t^e]$$

1/ The various features of this model are discussed in Mohsin S. Khan, "Monetary Shocks and the Dynamics of Inflation," IMF Staff Papers, (June 1980).

Expectations of inflation can be derived using the conventional adaptive-expectations approach, in which expectations are revised by a constant proportion, β, of the error between the actual rate of inflation and the rate that was expected in the previous period

(9) $\Delta\Pi_t = \beta[\Delta\log P_t - \Pi_{t-1}]; \; 0 < \beta < 1.$

Expectations of the rate of monetary growth, $\Delta\log M^e$, are assumed to be equal to the expected rate of inflation, i.e., 1/

(10) $\Delta\log M_t^e = \Pi_t$

Using equation (9) to eliminate Π from equation (6), the following reduced form equation for the standard model can be derived:

$$(11) \quad (1-(1-\beta)L)\log m_t = a^*+(1-(1-\beta)L)\lambda a_1\log y_t - (1-(1-\beta)L)\lambda a_2\log r_t - \beta\lambda a_3\,\Delta\log P_t + (1-(1-\beta)L)(1-\lambda)\log m_{t-1}$$

where L is a lag operator, $L^i x_t = x_{t-i}$, and $a^* = (1-(1-\beta))a_0$. The corresponding reduced form for the extended model utilizing equations (8), (9) and (10) is:

$$(12) \quad (1-(1-\beta)L)\log m_t = a^*+(1-(1-\beta)L)\lambda a_1\log y_t - (1-(1-\beta)L)\lambda a_2\log r_t - \beta(\lambda a_3+\gamma)\Delta\log P_t + (1-(1-\beta)L)(1-\lambda)\log m_{t-1} + (1-(1-\beta)L)\gamma\Delta\log M_t$$

Equations (11) and (12) were estimated for the period 1968-1980 using quarterly observations. In the estimation two alternative interest rate series--the rate on long-term private bonds and a short-term interest rate--were employed as there is no theoretical presumption as

1/ The theoretical rationale for this is contained in Mohsin S. Khan, op. cit.

to the type of interest rate to use. 1/ Since the models are nonlinear in parameters, the method of estimation was a combination of ordinary least squares and a search procedure for the expectations parameter. In all cases an adjustment for first-order autocorrelation was made.

The results for both the standard and extended models are shown in Table 45. The standard models (I and II) seem reasonably well-specified with all the parameters having the theoretically expected signs. With the sole exception of the elasticity of money demand with respect to the long-term interest rate, all the estimated coefficients are significantly different from zero at the five per cent level. The equilibrium, or long-run, income elasticities calculated from both equations I and II in Table 45 are fairly large, i.e., around 1.5, and the expected rate of inflation plays an important role in the behavior of real money balances. The effect of expected inflation is, as had been suggested, considerably stronger than that of interest rate variations, although this could be attributed to the fact that the interest rate series utilized are not fully representative. There is clear evidence that adjustment takes longer than one year, implying therefore that it would be incorrect to attempt to impose an equilibrium model on the data; expectations of inflation are, furthermore, also revised slowly.

In the two versions of the extended model (equations III and IV in Table 45), the coefficient measuring the impact of the monetary shock turns out to be positive and significantly different from zero at the five per cent level. This result clearly indicates that such a variable properly belongs in the specification, although it is also apparent that there is a relation between the monetary shock and interest rates since the latter's effect on real money holdings is now somewhat reduced. The short-run income elasticities are lower than the corresponding elasticities obtained in the standard model case, but as the lags in adjustment are considerably longer, the equilibrium income elasticities are surprisingly large. The expected rate of inflation continues to be a dominant factor, and the revision of expectations takes about as long as was observed in the estimates of the standard model.

There are essentially two main conclusions to be drawn from the statistical tests performed here. First and foremost, in confirmation of the studies undertaken in the Bank of Spain, a well-defined money demand function can be isolated. This obviously implies that one of the important pre-conditions for the conduct of a target-oriented monetary policy is met in the case of Spain. The second conclusion is that in calculating the

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1/ The short-term interest rate is the rate on time deposits of less than one year maturity. It could be argued that since an increase in this rate would increase the demand for time deposits, aggregate money holdings could rise as well. However, at the same time holdings of currency and other deposits would be expected to fall, so that the net effect on M3 is ambiguous, and could very well be negative.

value for the monetary aggregate for a period of one year, a dynamic specification of the demand for money is called for. From the results obtained it would seem that this dynamic model should be one that incorporates both stock-disequilibrium, as is customarily done, as well as some type of flow-disequilibrium process. If the authorities are interested in the time path that real money balances are expected to follow, an extended model that includes both forms of disequilibrium yields results that are quite different from those obtained from the more standard dynamic models. Besides, in the context of the more general dynamic models it would take a much more drastic reduction initially in the rate of growth of money to lower the rate of inflation, and therefore reducing inflation may be more costly in the short-run than is generally supposed. It is perhaps in implicit recognition of this fact that the Bank of Spain has pursued a fairly gradualist monetary policy in its attempt to bring the rate of inflation down.

2. Control of monetary aggregates 1/

Having determined the target annual growth rate for M3 using the type of procedure outlined above, the Bank of Spain has to translate this into short-run operational terms. Since the initial adoption of the target-oriented approach to monetary policy, the Bank of Spain has relied on a reserves-deposit multiplier rather than the monetary base-money multiplier relationship because this permits the direct derivation of bank deposits targets, or guidelines, from the overall monetary targets. However, as the behavior of currency is relatively stable, this distinction is not of any major practical significance. It is through the short-term control of banks' reserves, defined as cash, noninterest bearing deposits with the Bank of Spain, and unused credit margins guaranteed by public debt issued before 1959, that the authorities attempt to achieve the desired medium-term growth of M3.

The overall monetary growth targets are transformed into targets for permissible changes in bank reserves in the following mechanical way. Every month the Bank of Spain Operations Committee determines the short-run growth path for (seasonally adjusted) M3 over a two- or three-month period. These values are naturally consistent with the longer-run annual targets, and dynamic behavior of the demand for money has a significant weight in the calculation of the short-run path for M3. The Operations Committee takes into account both the various lags in the behavior of money holdings as well as transitory factors affecting the money creation process. As in the case of the longer-run targets, a tolerance band is allowed around the target value.

1/ This sub-section is based to a large extent on the following papers: P. Martinez Mendez, "Monetary Control by Control of the Monetary Base: The Spanish Experience," Bank of Spain Economic Studies No. 20 (1981); and A. Espasa and J. Perez, "Within Month Predictions for Monetary Aggregates and Spanish Monetary Policy Implementation," Bank of Spain (1981).

Projections are then made for the demand for currency to deduce the desired growth path of bank deposits. The seasonally adjusted currency forecasts are made using both monthly models and ten-day average models for within-month predictions. 1/ These models are basically univariate time series models that rely only on the past values of a particular variable to predict its future values. However, the estimates are supplemented by intervention analysis to allow special factors or events to be taken into account. In general terms these models for currency take the form:

$$(13) \quad \Delta \log EF_t = \frac{\phi(L)}{\Phi(L)} u_t$$

when EF is the stock of currency in the hands of the public, the functions $\phi(L)$ and $\Phi(L)$ are the moving average (MA) and autoregressive (AR) processes in the logarithmic change in currency, respectively, and the variable u is an error term. Functions such as (13) are estimated and then employed to predict the growth of currency.

Using the short-run monetary targets (M3*) and the predictions of currency holdings obtained from equation (13), EF*, a comparable monthly average figure for bank deposits (DB*) is derived simply as:

$$(14) \quad DB^* = M3^* - EF^*$$

Seasonality is introduced, and the series DB* is used as a starting point to obtain a daily and ten-day profile for deposits. Within-month projections of bank deposits are made via simple time-series models of the type given by (13), taking into account again identifiable transitory factors. The application of the required reserves ratio (5.75 per cent) and a prediction of the excess reserves ratio, based on an estimate of average excess reserves "desired" over the next two months, to the deposits path yields daily and ten-day paths for bank reserves. This last calculation can be expressed as follows:

$$(15) \quad R^* = (0.0575 + RE^*)DB^*$$

where R* is the projected level of total reserves and RE* the projected excess reserves ratio. This daily path of R* is viewed not so much as a target, but rather as a guide for the actions of the authorities. Given

1/ The ten-day average period corresponds to the period used to calculate reserve requirements. The month is divided into three reporting periods (working days 1 to 10, 11 to 20, and 21 to the end of the month) and liabilities subject to reserve requirements calculated. Reserve holdings are averaged over similar ten-day periods.

the other sources of the monetary base that the Bank of Spain has information on, i.e., public sector and foreign operations, tax receipts, use of credit margins by banks, etc., the authorities are able to obtain the gross figure for intervention for the day to keep bank reserves close to the daily target.

Every day the Operations Department of the Bank of Spain updates the various forecasts, and although all forecasts are subject to error, these errors have in the past been remarkably small and because of their random nature tended to cancel out. Broadly speaking, the Bank of Spain has been able to keep the difference between actual average daily level of bank reserves and the target value R^* over the ten-day accounting period at less than one half of one per cent.

Because historically banks have been heavily indebted to the Bank of Spain, controlling bank reserves has mainly involved changing the volume of central bank credit to banks, and the authorities have concentrated on the development of instruments that permit them to alter their net lending to banks on a continuous and flexible basis. Apart from situations of balance of payments surpluses, as for example during the period 1977-1979, this approach has been adequate in achieving the desired goal of keeping bank reserves close to target. The principal instruments used to this end are the extension of short-term loans to the banking system and open-market operations in Treasury bills. To increase liquidity, day-to-day loans to banks are auctioned by the Bank of Spain, and the rates of interest on such loans have become closely linked to the daily interbank rate. Except in instances of substantial inflows of capital, bank liquidity can be reduced in a symmetrical fashion by letting the day-to-day lending fall the appropriate amount.

When reserves need to be reduced the Bank of Spain is also able to sell Treasury bills that are specially designed for this purpose. Although termed "Treasury bills" these securities, which have maturities ranging between seven days and three months, are effectively the Bank of Spain's own liabilities since the proceeds do not accrue to the government, but are kept in a blocked account at the Bank of Spain. These bills are marketable, but only among banks and the public cannot acquire them. While the rates on Treasury bills, as in the case of the day-to-day loans, are market-related, the Bank of Spain does not, however, place much weight on the use of cost factors as a means of control. At times when it is necessary to substantially reduce bank reserves, the Bank of Spain can increase reserve requirements, call for special interest-bearing deposits (as was the case in early 1979), or decrease rediscount quotas to raise the banking system's level of indebtedness to the Bank of Spain. However, even when such discontinuous actions are carried out, the Bank of Spain compensates for this by use of its net lending operations to smooth out the impact.

The Bank of Spain places a great deal of importance on gradualism even in its day-to-day operations, and therefore follows a flexible policy with respect to bank reserves. Because of non-lagged reserve accounting, any sudden change in the level of reserves would lead to rapid changes in the demand for excess reserves and create fluctuations in the interbank rate. This has meant on occasion the emergence of a conflict between the control of reserves and achieving stability of interest rates. While small deviations of reserves from targets have been tolerated, the Bank of Spain has tried in the main to keep the growth of reserves consistent with its longer-term monetary targets. This is verified by the empirical relationship between the monthly growth in deposits and the corresponding growth in bank reserves over the period January 1979 to September 1981: 1/

$$(16) \quad \Delta \log DB_t = \underset{(21.20)}{0.012} + \underset{(3.08)}{0.047} \Delta \log R_t$$

$$R^2 = 0.235; \; D.W. = 1.84; \; C = 0.387$$

Although the growth of bank reserves by itself does not explain a great deal of the variation in the month-to-month growth of deposits, nevertheless, there is a statistically significant relationship between the two variables. Furthermore, this relationship appears to have been stable over the past three years, which is obviously an important result from the point of view of control.

Using the various tools at its disposal, the Bank of Spain has been reasonably effective in keeping banks' reserves in line with its short-run targets. However, success should properly be judged in terms of whether the overall monetary targets have been met and whether inflation has been reduced since the general target-oriented monetary policy was adopted. On both counts the monetary authorities in Spain have to a large extent succeeded.

1/ The data are seasonally adjusted end-of-period values of total bank deposits (DB) and total bank reserves (R) and were provided by the Bank of Spain. The C statistic tests for the stability over time of the regression relationship. All other statistics are defined in the footnote to Table 45.

Table 45. Spain: Estimates of Demand for Money, 1968-1980 (Quarterly) 1/

Equation	Constant	Real Income	Interest Rate: Long-Term	Interest Rate: Short-Term	Expected Inflation	Lagged Dependent Variable	Monetary Shock	Coefficient of Expectations	ρ	R^2	H
I	-0.028	0.137	-0.028		-1.137	0.910		0.3	0.035	0.991	0.018
	(0.58)	(2.23)	(1.17)		(5.47)	(20.63)			(0.25)		
II	-0.079	0.149		-0.031	-1.015	0.911		0.4	-0.122	0.997	0.315
	(1.53)	(2.65)		(2.93)	(6.73)	(24.77)			(0.88)		
III	-0.083	0.065	-0.013		-1.342	0.978	0.743	0.4	-0.545	0.999	-0.528
	(2.76)	(2.39)	(1.14)		(12.17)	(55.24)	(7.10)		(4.56)		
IV	-0.102	0.095		-0.012	-1.329	0.957	0.681	0.4	-0.547	0.999	-0.491
	(3.06)	(2.67)		(1.69)	(12.31)	(42.28)	(6.05)		(4.60)		

1/ All data were provided by the Bank of Spain. The series utilized are centered mid-quarter and, with the exception of the interest rates, are seasonally adjusted. The dependent variable is the nominal stock of money (M3) deflated by the consumer price index; real income is GDP at factor cost (constant 1970 prices); the long-term interest rate is the yield on private bonds of greater than seven years maturity; the short-term interest rate is the rate on time deposits of less than one year; and the rate of inflation and the growth of money are derived on the basis of the consumer price index and nominal M3, respectively. In the results t-values are reported in parentheses below the coefficients. Also shown are the respective coefficients of expectation and autocorrelation (ρ), the coefficients of determination (R^2), and the Durbin-h statistics (H).

Bibliography

Fund documents

SM/80/28 (1/28/80) - Staff Report for the 1979 Article IV Consultation.
SM/80/32 (2/1/80) and Supplement 1 (2/26/80) - Recent Economic Developments.
Annual Report on Exchange Arrangements and Exchange Restrictions, 1981.
International Financial Statistics.

Spanish sources

Bank of Spain
Informe Anual (various issues).
Boletín Económico (monthly).
Boletín Estadístico (monthly).

Ministry of Economy and Commerce
Información Comercial Española (weekly).
La Economía Española en 1980 y las Perspectivas a Corto Plazo (1981).

Ministry of Finance
Presupuesto del Sector Público (1981 and 1982).

National Institute of Statistics
Boletín de Estadística (bimonthly).
Contabilidad Nacional de España: Nueva Serie (1980).