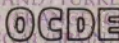


1991/1992

OECD
ECONOMIC
SURVEYS

PORTUGAL



OCDE
OECD

OECD
ECONOMIC SURVEYS

PORTUGAL

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to Article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973). The Commission of the European Communities takes part in the work of the OECD (Article 13 of the OECD Convention). Yugoslavia has a special status at OECD (agreement of 28th October 1961).

Publié également en français.

© OECD 1992

Applications for permission to reproduce or translate
all or part of this publication should be made to:

Head of Publications Service, OECD

2, rue André-Pascal, 75775 PARIS CEDEX 16, France

Table of Contents

Introduction	9
I. Portugal's integration into the EC: a progress report	11
Terms of entry, EC assistance and accompanying structural policy changes	13
Impact on external trade, product markets and factor markets	20
Progress towards real economic convergence	34
Nominal convergence	41
II. Recent economic policies	49
Budgetary policy	49
The weight of the public sector	54
Monetary and exchange-rate policy	56
Other structural reforms	64
III. Recent trends and short-term outlook: an overheated economy	68
Recent economic performance	68
The outlook to end-1993	82
IV. Conclusions	86
Notes and references	93
<i>Annexes</i>	
I. Determinants of Portuguese Private-Sector Wages	100
II. References	102

III. Chronology of economic Events	105
IV. Supplementary Tables	111

Statistical Annex	115
--------------------------	------------

Tables

Text

1. Selected infrastructural indicators: an international comparison	15
2. Financial flows with the EC	16
3. Role of EC financing in Portuguese development, 1989-93	17
4. Private-sector wages and compensation in the EC	25
5. Balance of payments over the 1980s	26
6. Composition of output and employment in EC countries	28
7. Rate of convergence of relative prices in OECD countries, 1980-85	30
8. Inward direct investment shares in OECD countries	32
9. Foreign direct investment by sector and origin	34
10. Relative labour productivity performance	37
11. Educational attainment: Portugal versus EC, 1987	38
12. General-government account	52
13. The weight of the general government	55
14. Recent credit growth	60
15. Environmental indicators: a Portugal-OECD comparison	66
16. Demand and output	70
17. Household appropriation account	70
18. Labour-market indicators	74
19. Cost and price deflators	76
20. Balance of payments	79
21. Foreign trade	80
22. The short-term outlook	84

Annex

A1. Concentration of foreign trade in smaller OECD countries	112
A2. Export shares by product, 1985 and 1990	113

A3. Share of intra-industry trade in intra-EC trade	114
A4. Rate of return on capital of US firms abroad	114

Statistical Annex

Selected background statistics	116
A. Expenditure on gross domestic product	117
B. Household appropriation account	118
C. General government account	119
D. Prices and wages	120
E. Civilian employment by sector	121
F. Money supply and its counterparts	122
G. Breakdown by nationality of foreign visitors	123
H. Foreign trade by main commodity groups	124
I. Geographical breakdown of foreign trade	125
J. Balance of payments	126
K. Labour-market indicators	127
L. Public sector	128
M. Production and employment structures	129

Diagrams

1. Evolution of economic performance	12
2. Importance of foreign trade	21
3. Import and export shares by main partners	23
4. Evolution of Portugal's revealed comparative advantage	24
5. Real convergence	35
6. Importance and efficiency of fixed capital formation	39
7. Inflation differentials	41
8. Evolution of the exchange rate	43
9. Real effective exchange rate: an international comparison	45
10. The stance of fiscal policy	50

11. Money and credit	59
12. Interest rates	61
13. Exchange rate of the escudo vis-à-vis selected currencies	63
14. Macroeconomic performance	69
15. Contributions to real GDP growth	72
16. Consumer prices	77
17. Indicators of competitiveness and foreign trade	81

BASIC STATISTICS OF PORTUGAL

THE LAND

Area (thousands sq. km)	92.0	Major cities, resident population in thousands (1981):	
		Lisbon	808
		Porto	327

THE PEOPLE

Population (1990, thousands)	10 390	Civilian employment (1989, thousands)	4 395
Number of inhabitants per sq. km	113	As a percentage of total:	
Civilian labour force (1989, thousands)	4 676	Agriculture	18.9
		Industry	35.2
		Services	45.9

PRODUCTION

Gross domestic product in 1990 (million of US dollars)	59 748	Gross domestic product at factor cost by origin (1989, % of total):	
Gross domestic product per head in 1990 (US dollars)	5 751	Agriculture	6.2
Gross fixed asset formation in 1990: % of GDP	26.9	Industry	38.1
Per head (US dollars)	1 549	Services	55.7

THE GOVERNMENT

Public consumption (1990, % of GDP)	19.6	Composition of Parliament (number of seats):	
Public investment (1990, % of GDP)	3.7	Social Democrats (PSD)	135
(% of total investment)	13.8	Socialists (PS)	72
General Government current revenue (1990, % of GDP)	40.5	Unified Democratic Coalition (CDU)	17
		Center Social Democrats (CDS)	5
		National Solidarity (PSN)	1

FOREIGN TRADE

Exports of goods and services (1990, % of GDP)	37.2	Imports of goods and services (1990, % of GDP)	47.2
Main exports as a % of commodities exports, 1990		Main imports as a % of commodities imports, 1990	
SITC:		SITC:	
Food, beverages and tobacco (0,1)	6.6	Food, beverages and tobacco (0,1)	9.7
Basic and semi-finished materials (2,3,4)	12.8	Basic and semi-finished materials (2,3,4)	16.9
Manufactured goods (5,6,7,8)	80.3	Manufactured goods (5,6,7,8)	73.3
of which: Chemicals (5)	5.2	of which: Chemicals (5)	9.1
Machinery and transport equipment (7)	19.6	Machinery and transport equipment (7)	36.9

THE CURRENCY

Monetary unit: Escudo		Currency units per US \$, average of daily figures:	
		Year 1990	142.31
		November 1991	141.22

Note: An international comparison of certain basic statistics is given in an annex table.

This Survey is based on the Secretariat's study prepared for the annual review of Portugal by the Economic and Development Review Committee on 18th November 1991.

•

After revisions in the light of discussions during the review, final approval of the Survey for publication was given by the Committee on 16th January 1992.

•

The previous Survey of Portugal was issued in January 1991.

Introduction

When the Economic and Development Review Committee last reviewed the economic situation in Portugal in November 1990, it expressed concern about excess demand pressures in both labour and product markets. Budgetary policy had been inappropriately expansionary in 1990 but looked set to tighten somewhat in 1991. Due to capital inflows the monetary authorities had been unsuccessful in their attempts to tighten monetary conditions sufficiently to bring about disinflation. The Committee recommended more restrictive stabilisation policies in order to restore macroeconomic balance and improve inflation outcomes, termed the major disappointment in economic performance in recent years. With such a policy stance domestic-demand growth was expected to ease substantially, but output expansion was projected to be better maintained, given a smaller deterioration in the real foreign balance. Consumer-price inflation in 1991 was expected to recede to the 12 per cent range, after the over 13 per cent outcome recorded in 1990, as the unemployment rate reversed its trend decline in line with waning job creation.

In the intervening year the economy has remained overheated. The government deficit has widened further in 1991, as current spending increases have surpassed 20 per cent. Although interest rates have risen in both nominal and real terms, once again, despite the efforts of the central bank, liquidity increases have been excessive as capital inflows have defied both the range of official controls imposed in order to hinder them and sterilisation efforts to offset their effects. Output growth has indeed slowed, perhaps even more than had been foreseen, but domestic demand has continued to expand at unsustainable rates, led by a boom in private consumption, while merchandise-export growth has vanished. Far from abating, demand for labour has picked up, and employment growth has surged, leaving the unemployment rate below 4 per cent, one of the lowest in the OECD and substantially below its sustainable level. As a result, real wage gains have

soared, reaching over 5 per cent per year, and, despite an unforeseen effective appreciation as well as the reversal of the 1990 oil-price shock, inflation outcomes have been above the Budget forecast with limited underlying disinflation. Beginning in the imminent 1992 Budget, the authorities intend to reverse these trends in the framework of a convergence programme with the European Community covering the period up to 1995. If measures consistent with this programme are not implemented, such trends are likely to continue: domestic-demand pressures would intensify, the real foreign balance would continue to deteriorate, and inflation would moderate only slightly.

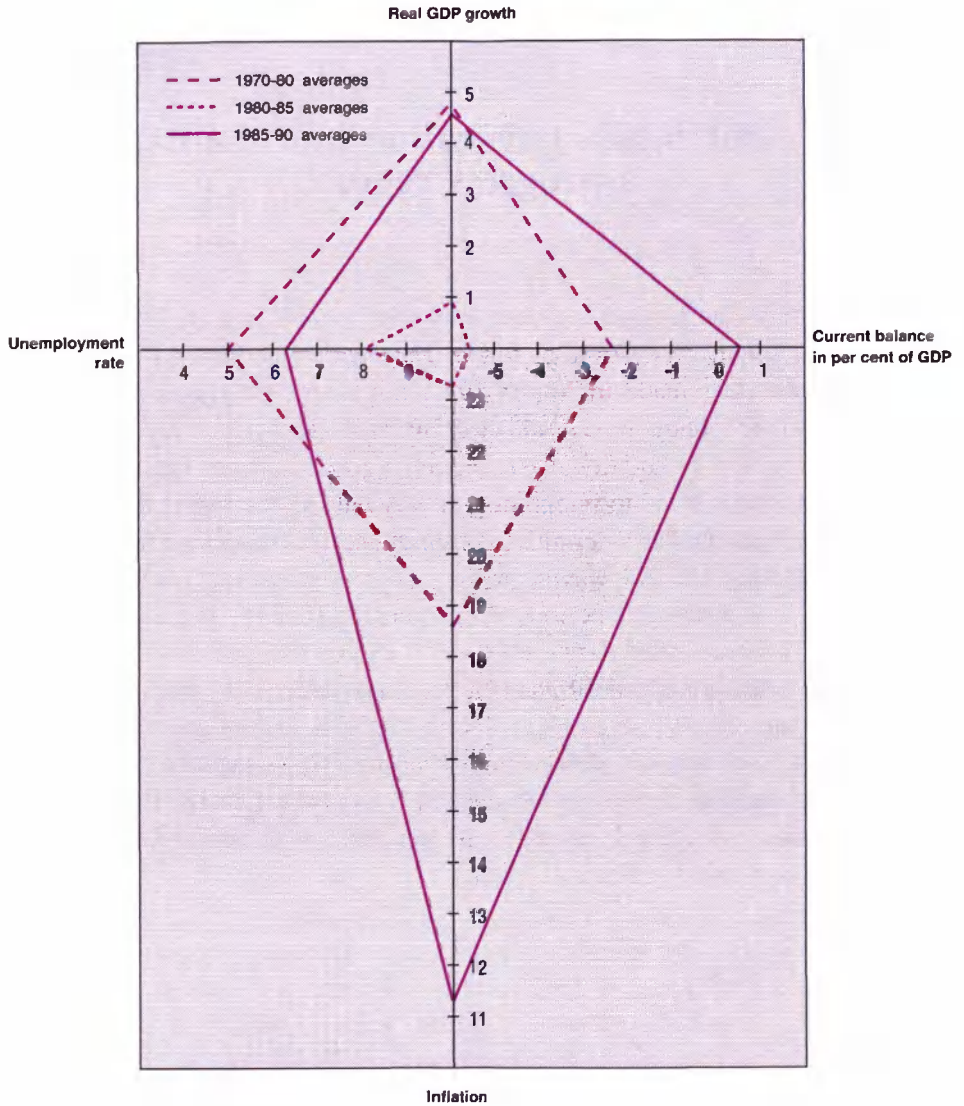
The present Survey begins by reviewing the impact EC membership has had on the economy since accession in 1986. The effects on the structure of output and trade and on the catch-up of real levels to those elsewhere in the Community are highlighted. Special attention is focused on the inability to achieve a meaningful reduction in inflation differentials, the reasons for this failure and the implications for Portugal's ongoing integration objectives. A detailed look at macro and structural policies in 1990-91 is given in Part II. Part III surveys recent domestic and external developments and presents the prospects in these dimensions for the next two years. Finally, conclusions are drawn in Part IV.

I. Portugal's integration into the EC: a progress report

Accession to the European Community (EC) on 1st January, 1986 marked the end of a lengthy transition period in Portugal's international integration. Application was first made in March 1977, but in the aftermath of the 1974 Revolution public policy was dominated by goals (politicisation of resource allocation, provision of additional public-sector goods and services) potentially inconsistent with the trend to integration. It was only in the 1980s that Portugal was truly prepared to make a definitive commitment to a future as an integral part of the EC. Joining the EC was seen by many as providing much improved prospects after a prolonged period of economic difficulty. Indeed, economic performance has been exemplary compared to its previous record, although part of the improvement may be attributable to an improved world context, as well as a natural recovery from a severe recession in 1983-84. Output growth picked up markedly to 4½ per cent on average from 1986 to 1990, as against 3 per cent in the preceding decade, the unemployment rate was cut in half by 1990, and the rate of inflation, which had exceeded 20 per cent, was brought down to an average of less than 12 per cent (Diagram 1).

Integration into the EC clearly represented a unique opportunity for the country to shake off some of its structural problems and thereby improve its long-run macroeconomic performance. In this respect, substantial progress has been accomplished in adjusting the structure of production and in improving the functioning of markets. However the positive impact such structural reform has had on the growth rate of potential output is likely to have been mitigated by persistently high inflation and its adverse effect on resource allocation. Indeed, it is probable that the continuation of the catch-up process would be impeded if inflation is not brought under control.

Diagram 1. **EVOLUTION OF ECONOMIC PERFORMANCE**



Note: The diagram plots major macro-economic performance indicators along the four rays from the origin. Measuring scales are chosen such that performance improves with distance from the origin except in the case of the current balance where data are presented solely for information.

Source: OECD estimates.

This chapter will commence by describing the terms of entry, the various programmes of EC assistance made available and some of the more important accompanying structural reforms. In the following section the impact EC membership has had on the Portuguese economy thus far will be evaluated. The chapter will then go on to discuss the most important problem – namely inflation – which must be overcome in order for Portugal to participate fully in the EC integration process.

Terms of entry, EC assistance and accompanying structural policy changes

The terms of entry

The treaty of accession was signed in June 1985. It provided for the removal of all internal trade barriers and most capital barriers by 1993¹, complete integration into the Common Agricultural Policy (CAP) by 1996 and the coal and steel arrangements (ECSC) within five to seven years and the immediate adoption of the EC's third-party commitments (GSP, Lomé Convention, etc.). Internal tariff barriers were to be dismantled and the EC's common external tariff adopted over a seven-year period beginning in March 1986. However, the lifting of tariff barriers was not the most important aspect of integration, as even before accession Portugal had a very open economy, with exports already representing 37 per cent of GDP in 1985, and trade was largely focused on the EC (see below). In fact, the EC had removed most restrictions against imports from the EFTA (and therefore Portugal) by mid-1977 and, in general, Portuguese tariffs were not substantially higher than the common external tariff². EC quotas on Portuguese textiles and clothing exports were gradually removed, as were Portugal's limits on imports of cars and of oil products from Spain. But Portugal has maintained quantitative restrictions on some food items, as well as a number of manufactured products from non-EC sources, besides occasionally resorting to EC safeguard clauses. In September 1989 the escudo became part of the European Currency Unit with a weight of 0.8 per cent.

With respect to Portugal's integration into the Common Agricultural Policy, a special ECU 700 million fund was set up to assist the adjustment of the agricultural sector³. A ten-year transition period for the sector would gradually

bring farm prices into line with CAP prices; in general, these were already below Portuguese prices at the time, and further cuts have of course been effected in the interim. Nothing in the way of farm price adjustment was required to be accomplished before 1991. Furthermore, it was later decided that Portugal would be exempt from production restraints and from the majority of its theoretical share of the cost of clearing surpluses. A similar ten-year transition period was granted for the fishing industry. Parallel to the gradual adjustment allowed in agriculture and fishing, restrictions on the rights of Portuguese citizens to work elsewhere in the EC were set to be phased out over seven years (ten for Luxembourg).

EC structural funds

EC membership has also brought with it access to Community structural funds, for which the entire country is eligible. These funds are designed to pave the way for real economic convergence⁴ through a number of channels. First, infrastructural investment is to be promoted in order to overcome Portugal's long-standing problems in transportation, communications, technology and health care (Table 1)⁵. Second, human capital formation is to be stimulated through improved education and increased occupational training. The manpower training incentive covers 55 per cent of eligible expenditures which, in 1989, amounted to \$3 000 per trainee. Third, as mentioned above, special assistance is provided to the agricultural sector, for irrigation, for example. Fourth, private physical capital formation is to be boosted through various EC incentive programmes which cover 20-40 per cent of the costs of eligible innovation and modernisation expenditures and 50-70 per cent of R&D; the overall average subsidy element through the end of 1990 was 24 per cent in the manufacturing sector. Given that nearly half all manufacturing investment was assisted, the incentive represented some 10 per cent of fixed capital formation in manufacturing. Finally, business can get assistance in terms of management consulting, especially with a view to the upgrading of product quality.

In 1986-87 financial inflows from structural funds already represented over 1 per cent of GDP (Table 2). In 1988, the Community agreed to double the amount of structural funds available for the period 1989-93, to create a special ECU 1 billion programme to assist Portuguese industry (PEDIP)⁶ and to raise the ceiling on grants from structural funds to 75 per cent of the cost of approved projects (50 per cent for private-sector investment). The entire package is called

Table 1. Selected infrastructural indicators: an international comparison

	Portugal		Spain	Germany	France	Italy	United Kingdom
	circa 1985	latest					
Length of road networks, 1987 (000 km.)	51.9	51.9	150.8	493.6	804.9	304.6	352.3 ¹
Road km. per thousand vehicles, 1987	23.5	22.7	13.7	16.9	30.9	12.3	17.3
Length of motorways, 1989 (000 km.)	0.2	0.3	2.1	8.7	7.0	6.1	3.0
Motorway density, 1989 (km per 000 sq.km. of land)	2.1	2.8	4.3	35.7	12.8	20.7	12.4
Passenger train travel, 1987 (000 km. per capita)	0.6	0.6	0.4	0.7	1.1	0.7	0.6
Passenger air travel, 1987 (000 km. per capita)	0.4	0.5	0.5	0.5	0.8	0.3	1.4
Telephone sets per hundred capita, 1988	18.0	18.0	28.3	46.2	45.5	35.0	42.7
Infant mortality rate per 1 000 live births, 1989	17.8	12.2	7.8	7.5	7.5	8.9	8.4
Hospital beds per thousand, 1988	5.5 ²	4.7	4.4 ³	10.9	10.2	7.5	6.5
Illiteracy rate for population 15 and over, 1988	16.0	15.0	7.1 ⁴	n.a.	n.a.	3.0 ⁵	n.a.

1. Great Britain only.

2. 1980.

3. 1987.

4. 1981.

5. 1985.

Sources: UNESCO, *Statistical Yearbook 1989*; INS, *Anuário estatístico de Portugal*, various Eurostat, *Basic statistics of the Community*, 1990; UN, *Statistical Yearbook 1987*; OECD, *Environmental Indicators*, 1991 and OECD *Environmental Data, Compendium 1989, 1989 and Health OECD: Facts and Trends*, 1991.

the Community Support Framework (Quadro Comunitário de Apoio). Under its terms, Portugal is entitled to transfers amounting to over 3 per cent of projected annual GDP, and total spending is budgeted to rise at an annual rate of 12½ per cent in constant ECU terms over the period to 1993⁷. Overall commitments represent a total of ECU 7.4 billion in constant 1989 prices over the five-year period in addition to a further ECU 2.8 billion in loans (Table 3)⁸. By way of comparison, Spain's allotment is ECU 9.4 billion plus ECU 2.2 billion in loans. In 1989, net receipts of funds from the EC, at 1.8 per cent of GDP, were between Spain's 0.4 per cent and Greece's 4.0 per cent; structural funds alone amounted to 2.0 per cent of GDP, as in Greece, but well above Spain's 0.5 per cent.

The efficiency with which EC transfers to member countries are spent is open to question. In theory, support is governed by two principles. Complemen-

Table 2. **Financial flows with the EC**

	1986	1987	1988	1989	1990
	Billions of escudos				
A. Summary (cash basis)					
1. Payments	41.1	56.2	69.2	82.8	94.8
Financial contribution	30.8	43.2	36.0	52.9	63.3
Customs duties and agricultural levelling dues	10.3	22.0	23.6	26.2	27.7
Other	–	–	9.6	3.7	3.8
2. Receipts	66.1	106.0	166.7	198.7	215.5
Financial contribution reimbursement	–	20.0	18.2	29.8	15.1
Other reimbursements	22.7	3.5	2.2	0.5	0.0
Agricultural guidance fund (EAGGF)					
– guarantee	4.7	23.6	26.5	30.0	38.3
– guidance	–	3.8	15.1	25.6	40.6
Regional fund (ERDF)	23.2	24.9	58.7	63.0	74.1
Social fund (ESF)	15.5	27.8	34.0	35.4	29.7
Specific development programme for industry (PEDIP)	–	–	7.8	10.1	17.6
Other	–	2.4	4.2	4.3	0.1
3. Net flow (2-1) (per cent of GDP)	25.0 (0.6)	49.8 (1.0)	97.5 (1.6)	115.9 (1.6)	120.7 (1.4)
	Percent of GDP				
Net inflows (payments-orders basis)	0.9	1.0	1.7	1.8	1.6
Gross inflows (payments-orders basis)	1.1	1.8	2.4	2.4	2.4
<i>of which:</i>					
Structural funds	1.0	1.4	1.9	2.0	2.0
	Share of total investment				
B. Cofinanced investment					
Total cofinanced investment	4.7	5.5	7.8	8.8	9.3
Central government	23.6	13.5	18.4	17.0	n.a.
Local government	20.0	39.8	46.3	46.1	n.a.
Public enterprises	13.2	12.6	5.8	4.6	n.a.
	In percentage points of GDP				
C. Macroeconomic impact of EC support measures (QCA) on:					
GDP				0.5	1.5
Private consumption				0.3	1.1
Imports				1.0	2.3

Sources: Direcção-Geral do Tesouro; Departamento Central de Planeamento, "Quadro Comunitário de Apoio a Portugal: Relatório Anual de Execução; Primeira Avaliação do Impacte Macroeconómico", Abril 1991.

Table 3. **Role of EC financing in Portuguese development, 1989-93**

In billions of constant 1989 ECU's

	Total Cost (1 = 2 + 5)	Public Spending			Private spending (5)	EC Loans (6)
		Total (2 = 3 + 4)	EC ¹ (3)	Portuguese ² (4)		
A. Goals						
Infrastructure	3.4	3.4	1.1	2.2	0.1	1.2
Productive investment	5.0	1.9	1.2	0.7	3.1	1.0
Human capital	4.4	3.9	2.2	1.7	0.4	0.0
Agriculture and rural development	2.5	1.7	1.2	0.5	0.8	0.1
Industrial restructuring	0.5	0.5	0.3	0.2	0.0	0.2
Regional and local development	2.2	2.2	1.2	1.0	0.0	0.3
Miscellaneous	0.5	0.5	0.2	0.3	0.0	0.0
Total	18.5	14.0	7.4	6.7	4.4	2.8
B. Annual breakdown						
1989	2.9	2.2	1.1	1.0	0.7	0.4
1990	3.4	2.6	1.4	1.2	0.8	0.5
1991	3.7	2.8	1.5	1.3	0.9	0.6
1992	4.0	3.1	1.6	1.4	1.0	0.6
1993	4.5	3.4	1.7	1.7	1.1	0.7
Total	18.5	14.0	7.4	6.7	4.4	2.8

1. Spending under the following programmes: ERDF (51 per cent), ESF (28 per cent), EAGGF (16 per cent), PEDIP (6 per cent).

2. Spending by central government (58 per cent), regional and local authorities (19 per cent) and public enterprises (24 per cent).

Source: OECD calculations based on Commission des Communautés Européennes, "Cadre Communautaire d'Appui 1989-1993: Portugal", Tables 2 and 5.

tarity implies that the national government must contribute amounts proportional to EC contributions (such as one-third of the total in the case of PEDIP), while additionality holds that assisted projects must be incremental. To what extent the additionality principle is adhered to is unclear, however, given the fungibility of such expenditure (Gordon, 1991). It is verified by the Commission, but such monitoring would appear to be superficial. There is an obvious risk of inadequate oversight⁹ due to the lack of functional separation in financing, monitoring and assessment. Furthermore, the allocation of structural funds has been said to be distressingly similar to many countries' regional policy programmes without learning from that experience (Bliss, 1990), in particular with respect to inefficient capital deepening. Also, with such a large subsidy element, there are some who fear the occurrence of substantial waste, especially in the training schemes.

Accompanying structural reforms

The Portuguese authorities have used the period since EC entry to pursue a number of structural reforms which, by improving the functioning of markets, should ease the adjustment process and allow a smoother integration into the Community. These changes have been described in detail in the two previous *Surveys* of Portugal and are only briefly reviewed here. Taxation was substantially reformed in several stages. The former system of sales taxes was replaced at the outset by a VAT system which succeeded in generating some two percentage points of GDP in additional tax revenues. However, few moves toward harmonisation of indirect taxation along the lines of EC proposals have as yet been undertaken. In 1989, an important reform of direct taxation was undertaken with a view to broadening the base, lowering effective marginal rates and curtailing opportunities for avoidance and evasion. Also, the previous system of non-selective tax incentives to investment was replaced in stages with one based primarily on regional incentives.

Some progress has also been made in introducing a greater reliance on market mechanisms by reducing the role of the State in the productive sector and consolidating the finances of public corporations which, at the time of accession, accounted for a very large share of output. Thus, in 1988 eight of the top ten industrial firms ranked by sales were wholly State-owned, while a ninth was majority-owned by the State. The non-bank public sector is estimated to have accounted for 15 per cent of GDP (Commission of the European Communities, 1991), a level substantially greater than in other OECD countries (Oxley *et al.*, 1990, Chart J). Most public firms were relatively unproductive, excessively capital intensive and often a sink for government subsidies (Larre and Torres, 1991). In order to reduce the burden of State intervention in the economy and thereby improve efficiency, to stimulate the development of the capital market by broadening household equity ownership¹⁰ and to cut public indebtedness, a series of legal and constitutional changes were enacted beginning in 1988 to engage in the process of selling public firms. It was only in April 1990 that full privatisation of enterprises nationalised in the aftermath of the 1974 revolution was authorised by Parliament.

The authorities began the privatisation process in 1989 with a series of profitable enterprises – a brewery, a bank and two insurance companies – and raised 71 billion escudos. In 1990, there followed further sales of shares in these

same firms as well as another brewery and part of another bank. By 1990, non-bank ownership had fallen to 11.3 per cent of GDP. Over the past year further sales of banks and insurance companies have been made¹¹, and total proceeds have now reached nearly \$2½ billion, two-thirds of which has been used to retire some 3 per cent of total government debt (representing 2 per cent of GDP). Proceeds in 1991 (possibly 150 billion escudos) have been of the same order as in 1990 (139 billion escudos) but have fallen well short of budgeted levels (250 billion escudos). A more rapid disposal of public companies should be possible, especially if greater resort were made to stock-market flotations. Nevertheless, already there is evidence that the expected favourable effects are being realised. Early indications are that some banks have improved their performance since privatisation even faster than had been foreseen. However, the State plans to retain a golden share in a certain number of privatised firms and has limited on a case-by-case basis foreign investors' ownership, possibly depriving such companies of potential managerial improvements.

At the same time the financial situation of public enterprises was greatly improved through the settlement of the State's payment arrears to some firms and the assumption of debt from others. This resulted in a fall in their borrowing requirement from 8 per cent of GDP in 1985 to about 1 per cent in 1990. While the sample has changed somewhat and a significant share of the turnaround is no doubt due to cyclical factors, this is nevertheless an impressive result. Also noteworthy was the 1988 land reform law which allowed the privatisation of collective farms.

Labour-market reform has been relatively limited. Yet revised labour legislation, approved in 1989, was designed to facilitate lay-offs (which, until then, had been subject to particularly restrictive conditions), improve unemployment coverage and generosity and restrict the resort to short-term contracts¹². New legislation was approved in October 1991 which embodied changes negotiated by the social partners in a 1990 accord. These included the progressive reduction in the work week from 44 to 40 hours by 1995 and the possibility of dismissal for failure to fulfill job requirements. It is difficult to judge to what extent these legislative changes will improve the operation of the labour market which had been characterised by a sizeable degree of both employment rigidity and nominal wage flexibility. Secretariat indicators point to a level of employment rigidity (as measured by the elasticity of labour productivity to output) higher than anywhere

else in the OECD except Italy and Japan (OECD, 1989, Table 23). However, further labour-market flexibility could be encouraged by removing some of the constraints on laying off those on permanent contracts. This could have the effect of freeing up additional scarce labour resources in order to bolster supply potential.

This lack of employment flexibility may not have been too costly in any case because of an unusually high degree of wage flexibility by international standards¹³ which, until recently, helped keep real-wage increases well below gains in labour productivity. According to a recent Secretariat effort to estimate a wage equation for Portugal, long-run wage rigidity has been possibly lower than anywhere else in the OECD except Japan and Sweden (see Annex I). This has usually been explained by employers' inability to adjust the size of their workforce (the aforementioned rigidity of employment). It could, in addition, be due to a reluctance to make such adjustments because of the historic meagreness of unemployment benefits – the coverage ratio, for example, was only 22 per cent in 1988. Overall, labour-market performance has been relatively good, as Portugal is one of very few OECD countries whose unemployment rate has fallen between recent cyclical peaks.

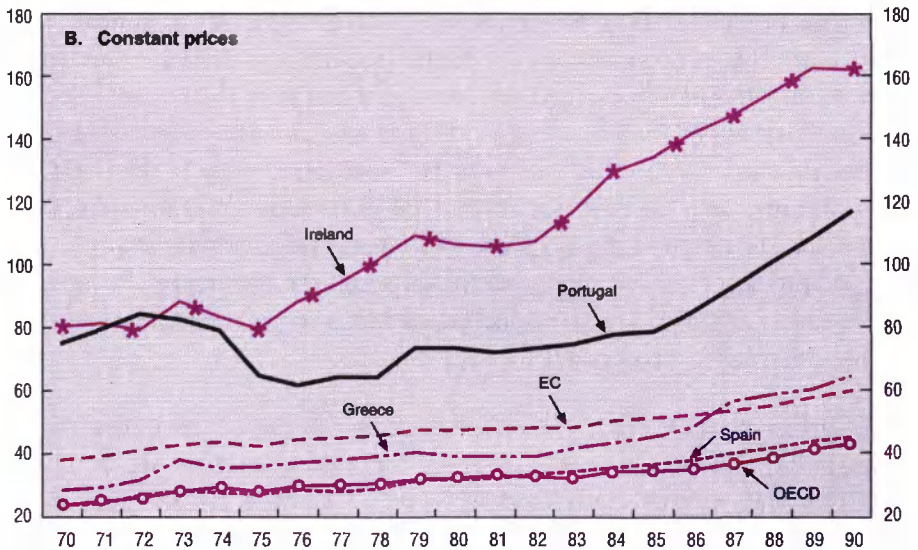
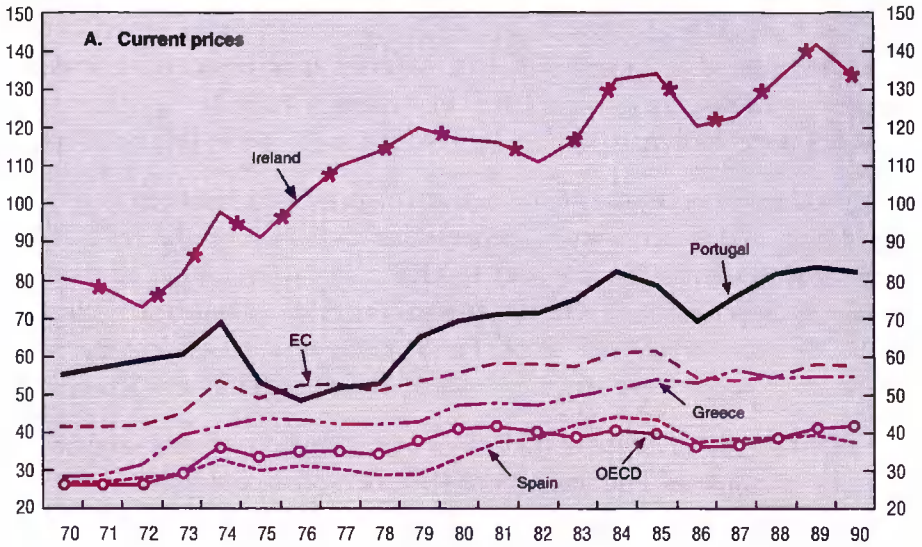
Capital markets, as well, have been the focus of important, recent regulatory changes, described in greater detail in Part II: interest rate determination was liberalised, competition between different financial intermediaries (by type and ownership) was stepped up, some controls on capital outflows were eased and monetary control was modified so as to end the recourse to credit ceilings.

Impact on external trade, product markets and factor markets

Effects on merchandise trade and the balance of payments

Most simply, EC accession can be viewed as a shock to the structure of Portugal's barriers to trade. The traditional theory of preferential regional trading arrangements based on comparative-advantage (factor-endowment) considerations predicts there will be "trade-creation" effects, as high-cost domestic supply is displaced by lower-cost production from the EC, offset by welfare-reducing "trade diversion" when lowest-cost third-country producers are squeezed out by competing EC exporters or even domestic producers facing higher domestic

Diagram 2. **IMPORTANCE OF FOREIGN TRADE¹**



1. Exports plus imports divided by GDP times 100.
Source: OECD estimates.

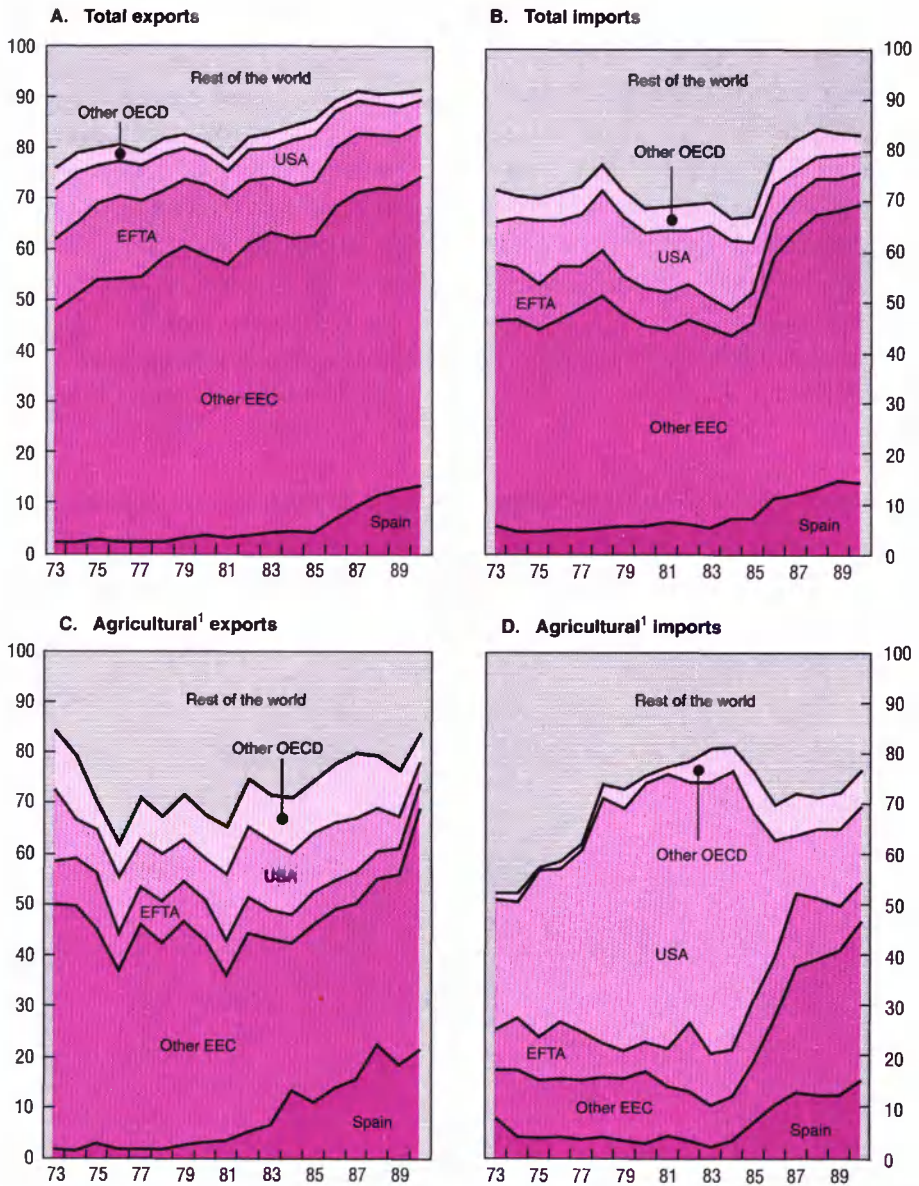
protection¹⁴. A more modern approach points to possible trade effects emanating from improved competitiveness (in Portugal or in the rest of the EC) based on superior exploitation of available scale economies consequent on market integration. In addition, there are possible trade gains resulting from increased competition due to reduced organisational slack. Overall, it is generally believed that exposure to “world” trade prices rather than the set of domestic prices distorted by national trade barriers is welfare-improving for the small, joining economy.

A good indicator of whether on balance trade creation has been important is the evolution of the economy’s openness, as measured by the ratio of total foreign trade (exports plus imports) to GDP. Visual inspection of the series (Diagram 2) indicates that there was a break in 1986, although it is clearer in constant- than in current-price terms. Furthermore, it is not evident that such a break occurred to the same extent elsewhere, most notably in the Spanish case.

A clue as to the presence of trade diversion is provided by an examination of geographic structure of Portugal’s trade (Diagram 3). Not surprisingly, a sharp increase in the share of trade with EC partners has taken place since accession, and Portugal ranked fourth among the twelve on this measure in 1989. By the first quarter of 1991, three-quarters of merchandise exports and imports were destined for or sourced from EC countries¹⁵. This is especially significant on the import side and is in no small part due to the shift in the provision of agricultural imports¹⁶. In all cases presented, the remarkable jump in the Spanish share indicates a process of Iberian integration simultaneous with its broader EC-wide counterpart. The offset to this shift is to be found principally in the non-OECD share reflecting, in large part, the reverse oil-price shock of 1986. Noteworthy has been the shrinkage in the US share of Portugal’s agricultural imports, which began prior to accession for supply reasons. Portuguese imports of US cereals are near the end of a transition phase which is significantly increasing the cost of and therefore depressing the demand for such imports.

A further possible trade impact of EC entry is the concentration of trade among fewer partners, just as was observed for both the original six members of the EC, as well as the seven members of EFTA, over the first 15 years of existence of these two regional trading arrangements (Lloyd, 1991). Indeed, both the exports and imports of all three southern European countries which joined the EC in the 1980s became less diversified after accession (Annex Table A1), while

Diagram 3. **IMPORT AND EXPORT SHARES BY MAIN PARTNERS**



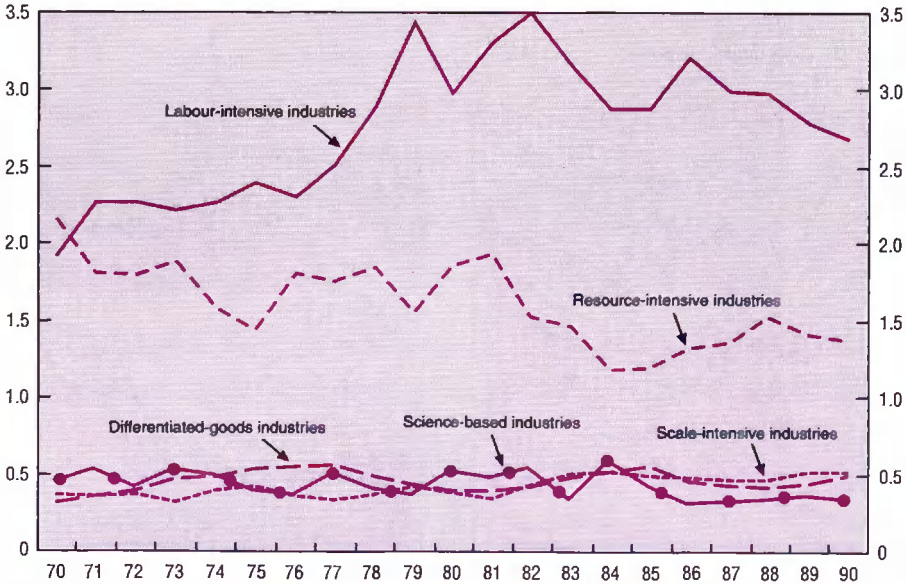
1. SITC 0 only.

Sources: OECD, *Foreign Trade Statistics, Series A and C*.

no such generalised tendency is observable either for long-standing smaller EC members nor for smaller non-members.

The overall product composition of merchandise trade has also changed substantially, especially on the import side. Purchases of foreign raw materials and semi-manufactures have languished, their share collapsing from 39 to 18 per cent over the first four years of membership, while those of manufactures have boomed (73 per cent in 1989, compared to 50 per cent in 1985). With reference to exports, those of agricultural products, energy and textiles (due to competition from developing countries) continue to wane in importance, while growth has been led by crude materials and certain categories of manufactures including clothing (Annex Table A2). Among manufactured goods, however, Portugal's "revealed comparative advantage" has remained largely unchanged since accession (Diagram 4). There has been some slight shift in favour of resource-

Diagram 4. EVOLUTION OF PORTUGAL'S REVEALED COMPARATIVE ADVANTAGE¹



1. As measured by the ratio of exports to imports in the sector divided by the overall export/import ratio for manufacturing.

Source: OECD, *Foreign Trade Statistics, Series C*.

intensive industries at the expense of labour-intensive industries, but both remain at the heart of Portuguese industrial specialisation, while its customary weak points (goods whose production is subject to substantial economies of scale or which are differentiated or require significant R&D and human-capital inputs) are unchanged (Commission of the European Communities, 1990; Neven, 1990). Portugal's wage levels remain a fraction of those in the rest of the EC, with very little in the way of equalisation in evidence since accession, at least until very recently (Table 4)¹⁷, raising the danger of an outflow of skilled labour to other EC countries (see below). However, to an important extent, Portugal's competitors are to be found outside the OECD, particularly in south-east Asia.

The tariff reductions resulting from EC accession may have reinforced another ongoing widely-seen trend: an increase in the share of trade which is "intra-industry" (two-way trade in similar products). Such trade is usually thought of as being based less on factor-endowment-based comparative advantage and more on scale economies and product differentiation and is accordingly more likely to signal trade creation. It is generally associated with inward direct investment and is often in fact intra-firm in nature. Intra-industry transactions

Table 4. **Private-sector wages and compensation in the EC¹**
Germany = 100

	Wages				Compensation			
	Actual exchange rates		PPP exchange rates		Actual exchange rates		PPP exchange rates	
	1985	1990	1985	1990	1985	1990	1985	1990
Belgium	109.4	107.3	122.7	119.6	105.8	105.6	118.6	117.6
Denmark	124.0	123.6	112.9	110.7	97.8	96.0	89.1	86.0
Germany	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Greece	36.9	31.1	55.4	52.2	46.0	37.7	69.1	63.4
Spain	63.1	66.8	94.8	87.2	68.4	71.8	102.7	93.6
France	102.0	97.6	106.1	106.6	108.2	104.1	112.5	113.7
Ireland	101.2	95.5	111.4	113.3	85.3	80.0	93.9	95.0
Italy	81.4	84.6	100.5	97.7	83.3	91.0	102.9	105.2
Netherlands	109.5	113.5	120.3	132.4	107.4	100.7	118.0	117.6
Portugal	21.4	23.3	46.3	45.3	22.1	24.4	47.7	47.3
United Kingdom	87.5	86.2	101.1	112.9	81.4	79.4	94.1	104.0

1. Wages and total compensation per dependent employee.

Source: OECD.

represented 37 per cent of Portugal's intra-EC trade in 1987, up from 32 per cent in 1980 (Annex Table A3). Nevertheless, more rapid increases were recorded by both Spain and Greece, and the share remains low: only Greece has a lower share. Overall, one would expect a further rise in the intra-industry share, as Portugal is far from having fully exploited available scale economies.

While the structure of Portugal's trade has adjusted modestly thus far to European integration, EC membership has had very favourable effects on the level of its exports as can be seen in its steady, strong market-share gains until the past year (see Diagram 17). Admittedly, imports have experienced sharp growth at the same time, and the trade deficit has jumped from 7.3 per cent of GDP in 1985 to 11.4 per cent in 1990 and more in 1991 (Table 5). Nevertheless, given the buoyant state of total demand since accession and, until recently, the rising share of capital goods in total import volumes, these outcomes would appear clearly superior to those recorded prior to accession. In the earlier period, domestic-demand growth was outpaced by that recorded by European trading partners by some 2 percentage points, while since 1986 the corresponding differential has reversed, averaging nearly 4 percentage points. The overall deficit on

Table 5. Balance of payments over the 1980s
Per cent of GDP

	1980-84 average	1985	1986	1987	1988	1989	1990
Merchandise trade	-16.7	-7.3	-5.6	-9.7	-13.2	-10.7	-11.4
Services	1.9	3.8	3.1	3.2	2.4	2.6	2.3
Investment income	-4.7	-5.6	-3.4	-2.5	-2.1	-1.6	-0.4
Unilateral transfers	11.5	10.9	9.8	10.3	10.3	10.0	9.2
Private	n.a.	10.2	8.9	9.3	8.6	8.2	7.5
Public	n.a.	0.6	0.9	1.0	1.7	1.8	1.7
Current balance	-8.1	1.9	3.9	1.2	-2.4	0.4	-0.3
Medium- and long-term capital	7.6	5.3	1.0	0.5	2.0	6.2	5.0
<i>of which:</i>							
Foreign direct investment	n.a.	1.0	0.5	0.9	1.6	3.3	3.1
Basic balance	-0.5	7.2	2.9	1.7	-0.5	6.5	4.8

Source: OECD calculations based on data in Bank of Portugal, *Report of the Board of Directors*, various years.

goods and services has widened from about 3 per cent of GDP at mid-decade to over 8 per cent in recent years. But a substantial deficit is natural and indeed desirable for a nation with Portugal's level of development and superior profitability of investment (see below). In addition, EC membership has eased the external constraint. Not only has the increase of about 1 percentage point of GDP in public unilateral transfers from EC structural funds nearly offset the trend decline in their private-sector equivalent (largely migrants' remittances), but above all, membership has helped attract foreign direct investment of over 3 per cent of GDP annually in recent years. The result is that the basic balance has shown a surplus averaging 2.7 per cent of GDP since 1985, compared with a small deficit in earlier years.

Product market adjustments

In the early 1980s Portugal's production and employment structure was characterised by a rather high share in agriculture and other primary products and low shares in energy and services compared to its European partners (Table 6, Parts A and B). Through the decade the share of the broadly-defined agricultural sector has shrunk in output terms, as elsewhere, but, even given the starting point, the contraction has been more pronounced in Portugal¹⁸. Nevertheless, some 20 per cent of the employed population generate less than 10 per cent of net output¹⁹, and little productivity catch-up has been realised: the sectoral productivity gap between agriculture and the rest of the economy, which was already particularly pronounced in 1980, widened even further during the decade (Table 6, Part C). In 1987, average labour productivity in agriculture was only 16 per cent of the EC average, compared to 56 per cent for Greece, for example, while in 1986 crop yields were only 37 to 71 per cent of European averages (Hudson, 1989). Productivity continues to suffer acutely from the poor education of the farm population²⁰, inadequate infrastructure (especially irrigation facilities) in many parts of the country, an inefficient distribution system and the sub-optimal size of most farms²¹. Capital intensity remains woefully insufficient, but agricultural investment, supported by the Community (through the PEDAP programme), has been raised to 17.4 per cent of value added in 1989, compared to 12.5 per cent in 1980. Nevertheless, this remains well below rates in the rest of the economy and in other EC countries. Since downward price adjustment toward EC levels for cereals and milk has only recently begun and still has a long way to

Table 6. Composition of output and employment in EC countries¹

	Portugal		Spain		Greece		Ireland		EC 12	
	1980	1988	1980	1988	1980	1988	1980	1988	1980	1988
A. Output										
Agriculture, forestry and fishery products	10.0	6.2	6.9	5.1	17.7	15.7	11.3	9.7	3.9	2.9
Fuel and power products	2.3	4.4	4.4	7.2	2.6	4.2	3.6	31.4	5.9	5.4
Manufactured products	28.6	27.4	25.3	21.7	20.0	17.9	24.4		26.3	25.8
Building and construction	6.9	6.3	8.3	8.6	8.5	6.2	9.4	5.3	7.1	5.6
Market services	40.0	42.7	45.0	46.9	37.8	39.5	33.9	35.9	42.5	46.0
Non-market services	12.2	13.0	10.1	10.6	13.3	16.5	17.4	17.6	14.6	14.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
B. Employment										
Agriculture, forestry and fishery products	27.2	23.1	17.9	14.3	28.7	25.7	18.2	18.1	9.4	8.6
Fuel and power products	0.9	0.8	1.3	1.2	} 28.7	26.6	32.0	27.6	36.4	32.2
Manufactured products	23.6	22.0	24.0	21.3						
Building and construction	10.1	9.6	8.8	7.7	} 42.6	47.7	49.8	54.4	54.2	59.1
Market services	23.8	27.1	37.5	41.9						
Non-market services	14.4	17.5	10.6	13.5						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
C. Relative labour productivity (A/B)										
Agriculture, forestry and fishery products	36.8	26.8	38.5	35.7	61.7	61.0	62.1	53.6	41.5	33.7
Fuel and power products	255.6	555.0	338.5	600.0	} 108.4	106.4	116.9	133.0	108.0	114.3
Manufactured products	121.2	124.5	105.4	101.9						
Building and construction	68.3	65.6	94.3	111.7	} 120.0	117.4	103.0	98.3	105.4	102.0
Market services	168.1	157.6	120.0	111.9						
Non-market services	84.7	74.3	95.3	78.5						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. Shares in total gross value-added at market prices in per cent, except for Denmark and Greece which are at factor cost.

Source: OECD calculations based on Eurostat (1991).

go, the impending labour shake-out is liable to be drastic; however, the process will be eased by the imminent retirement of many farmers, 40 per cent of whom are over 55. On the other hand, the resulting increase in the supply of labour to other sectors is a welcome development, given the probable continuation of tight labour-market conditions.

While the industrial sector is relatively large and, thanks to the recent investment boom, has a more modernised stock of capital, it too manifests a number of imbalances. A deliberate policy of national presence through import substitution, as well as a history of administered interest rates and preferential credit treatment by the banking sector since the Revolution has resulted in a dualistic industrial structure with large, capital-intensive businesses, side by side with small-scale, labour-intensive production. In fact, resource allocation may have been quite distorted: there is even sporadic evidence of revealed comparative advantage in capital-intensive industries (Neven, 1990).

A further weakness is technological dependence. While the overall ratio of R&D expenditure to GDP has risen from 0.34 per cent in 1980 to 0.53 per cent in 1989 – and a further doubling is programmed by 1993 – only about a quarter is financed and performed by the business sector²²; indeed, that share has been on a steady decline. In recent years much of the overall increase is ascribable to the heavily subsidised ECU 300 million CIENCIA programme. The long-standing characteristic of insufficient demand for R&D by firms appears to persist, as they are content to rely on technological improvements embodied in imports of machinery and technology licensing from foreign sources, resulting in substantial foreign payments on balance-of-payments account; these apparently actually exceed domestic firms' own R&D spending. While it is entirely rational for a small, relatively less advanced country like Portugal to devote only a limited amount of resources to R&D given free-riding potential, it is the small share spent by its enterprises which is of concern.

The most fragile industrial sub-sector is textiles. Not only is it exposed to increasing competition from developing countries with or without a continuation of the Multi-Fibre Arrangement, but a historic lack of investment and weak marketing channels combined with a fragmented market structure will put a substantial number of firms and jobs at risk. However, there is evidence that producers have begun to respond by upgrading product quality, embarking on product differentiation (image building), increasing investment for modernisation

ends and subcontracting in order to reap scale economies. The fishing industry is also in need of rationalisation; substantial EC investment subsidies are aimed at enlarging average boat size.

Portuguese industry is having to adjust not only to EC entry, but also to the imminent Single Market. As a result and because of the aforementioned underexploitation of scale economies, its management intends to undertake more domestic rationalisation investment than its EC rivals; this is hardly a surprising outcome, since sectors thought to be sensitive to the completion of the Internal Market account for a larger share of output and employment in Portugal than anywhere else in the EC (60 and 68 per cent respectively, compared to simple averages of 48 per cent for each measure for the EC). Restructuring costs may be significant. However, adjustment costs to what has been termed the "EC cum 1992" shock are likely to be eased by Portugal's demonstrated high degree of relative price flexibility: over the first half of the 1980s, its price structure converged rapidly toward the OECD average (Table 7).

Table 7. Rate of convergence of relative prices in OECD countries, 1980-85

United States	0.88	(10.40)
Austria	0.87	(11.55)
Canada	0.86	(10.29)
Germany	0.83	(10.34)
Portugal	0.76	(12.20)
Norway	0.74	(10.87)
Ireland	0.74	(14.71)
Spain	0.64	(2.30)
Italy	0.62	(5.23)
Denmark	0.61	(6.78)
Luxembourg	0.56	(3.12)
Belgium	0.54	(3.90)
Netherlands	0.50	(7.37)
United Kingdom	0.50	(5.54)
France	0.47	(5.07)
Japan	0.43	(7.82)
Greece	0.25	(2.56)

The estimated model is:

$$RP_{i, 1985} - RP_{i, 1980} = a + b^* (100 - RP_{i, 1980})$$

where $RP_{i, t}$ is the relative price index of product groups i in year t . Thus, the higher the relative price in 1980, the larger its subsequent decline and the lower the relative price in 1980, the greater its subsequent rise. The figures given are regression estimates for b with corresponding t -statistics in parentheses.

Source: OECD estimates.

There are both advantages and disadvantages to Portugal's existing inter-industry specialisation. It allows the nation to profit from its labour-cost advantage in order to sell goods and services in world markets. However, it generates few positive spillovers on the remainder of the economy compared with a more skill-intensive production structure and implies the possibility of increased competition from eastern European and developing countries and greater protectionism in non-EC markets. An alternative much discussed in recent European Commission documents, would be to attempt, like Spain, to exploit the remaining substantial scope for scale economies. Industries such as motor vehicles, glass and electrical products, characterised by intra-industry specialisation and the importance of direct investment, could come to the fore. To the extent that firms attempt to change strategy, they have to overcome the advantages of incumbency retained by competitors in wealthier EC countries. Yet it is unlikely that policies directed at the orchestration of such a shift would be desirable. Appropriate macro- and micro-economic policy settings should generate the optimal sectoral mix without the need for an explicit strategy.

Factor market adjustments

Portugal has long been a country well endowed with labour relative to capital. Traditionally, international adjustment occurred through the export of labour rather than the import of capital. Migratory outflows were especially strong in the period 1965-73, with a peak of 149 000 in 1970 (1.65 per cent of the population). By 1974, one in five Portuguese lived abroad. At that point emigration dried up due both to the tightening of destination-country regulations, as well as the end of the colonial wars. Indeed, since 1981 Portugal appears to have been a recipient of net migratory inflows averaging 19 000 (0.2 per cent of the population) per year. Nevertheless, 4.3 million Portuguese citizens are believed to live abroad of which some 1 million are legally resident in other EC countries. Since 1986, gross emigration to the rest of the EC has picked up, but it remains the destination for only about half of all emigrants. Given the maintenance of restrictions on migratory flows during the transition period, it is difficult to evaluate the possible impact of EC integration on the pattern of such migration. However, with Portugal's labour market at full employment and in view of the social, cultural and linguistic barriers, aggregate flows are likely to be rather unimportant (Straubhaar, 1988; Eichengreen, 1990). Nevertheless, mindful of the

continuing substantial wage and salary gap between Portugal and other EC nations, the possibility of a costly emigration of its most qualified residents, which would accentuate domestic skills shortages, cannot be excluded.

On the other hand, as mentioned above, EC entry did bring about a profound change in capital flows. Until the recent introduction of controls on inflows, capital markets were becoming much less segregated from those abroad, and capital mobility was higher than for other southern EC countries: witness over the three years to mid-1989 the virtual elimination of the covered interest differential against both the dollar and the Deutschmark (Torres, 1990). As in Spain, in recent years there has been an enormous increase in autonomous capital inflows of both shorter- as well as of a longer-term nature. In 1989 and 1990,

Table 8. **Inward direct investment shares in OECD countries¹**

Per cent

	1975-85		1986-89		1989	
	Share in GDP	Share in OECD total	Share in GDP	Share in OECD total	Share in GDP	Share in OECD total
Australia	1.2	5.9	2.2	4.8	2.6	4.6
Austria	0.3	0.6	0.3	0.4	0.4	0.4
BLEU	1.2	4.3	2.2	2.9	3.7	4.3
Canada	-0.1	-0.3	0.6	2.5	0.6	2.2
Denmark	0.2	0.3	0.4	0.4	0.9	0.7
Finland	0.2	0.3	0.4	0.4	0.4	0.3
France	0.4	7.8	0.6	5.2	0.9	6.0
Germany	0.2	4.3	0.2	2.2	0.5	4.2
Greece	1.3	1.5	1.4	0.7	1.4	0.5
Ireland	1.6	0.9	0.2	0.0	0.3	0.1
Italy	0.2	2.9	0.4	2.8	0.3	1.6
Japan	0.0	0.8	0.0	0.1	0.0	-0.7
Netherlands	0.7	3.3	1.6	3.2	2.7	4.2
Norway	0.7	1.3	0.9	0.8	1.6	1.0
Portugal	0.7	0.5	2.0	0.7	3.7	1.1
Spain	0.9	4.7	1.7	5.3	2.1	5.3
Sweden	0.1	0.4	0.5	0.8	0.5	0.6
Switzerland	..	..	0.9	1.6	1.2	1.4
United Kingdom	1.2	17.9	2.2	14.4	3.4	17.7
United States	0.4	42.0	1.2	51.1	1.4	44.5

1. OECD less Iceland, New Zealand, and Turkey.

Source: OECD.

these reached some 9 per cent of GDP and represented an addition of over 30 per cent to national saving as a source of financing for domestic investment²³.

Foreign direct investment (FDI) inflows are a vital channel to achieve real economic convergence as well as to effect industrial restructuring²⁴. Portugal has long been host to a substantial amount of inward direct investment. In recent years such flows have exceeded \$2 billion per annum (3½ per cent of GDP and 13 per cent of gross fixed investment), and Portugal's share of total OECD FDI has even exceeded 1 per cent (compared to its 0.3 per cent share in GDP) (Table 8). In 1989, inward FDI was greater in relation to GDP than anywhere in the OECD except Belgium-Luxembourg. Furthermore, there is a strong possibility of additional increases in the future, thanks in large part to the availability of EC investment incentives (Ford-Volkswagen joint venture, natural gas pipeline, thermal power plant, etc.). Given the liberal regulatory regime for such investment as of 1977, the end to the screening requirement in 1986 and favourable tax treatment²⁵, foreign investors are also anxious to avail themselves of Portugal's continuing labour-cost advantage in order to set up a local export platform or to share in the extremely high returns still available on the domestic market – especially in the non-tradeables sector, due in part to the dearth of local competition. Indeed, American multinational firms, for example, have found their Portuguese investments to be consistently among the most profitable over the period since accession (Annex Table A4), although it must be admitted that their investments in Portugal are rather narrowly based.

While the growth in inward FDI has been rapid for many sectors, it has been particularly strong in finance, real estate and business services (Table 9) which remain underdeveloped, yet highly profitable. Within manufacturing, the most significant growth has been in the traditional exporting sectors (textiles, clothing) and in resource-based industries. Among source nations seven-eighths of total FDI is from EC origins, compared to only one-half for Spain. A growing proportion has been emanating from Spain and France within the EC, as well as Japan and non-OECD countries further afield. While Portugal has managed to provide an environment more conducive to foreign investment since EC accession²⁶, its infrastructure will have to continue to improve²⁷, given the disadvantages of its peripheral location in Europe as well as the limited size of its domestic market.

Table 9. **Foreign direct investment by sector and origin**

\$ million

	1986	1987	1988	1989	1990
Total	166	367	692	1 577	2 171
<i>of which:</i>					
Agriculture, forestry, hunting, fishing	3	14	24	22	24
Mining	7	12	20	25	12
Manufacturing	76	108	226	344	456
Utilities	0	0	0	1	0
Construction, public works	2	4	30	113	197
Trade, restaurants, hotels	48	69	122	279	214
Transport, storage, communications	0	13	6	17	8
Finance, real estate, business services	29	144	248	741	1 209
Community, personal, social services	1	3	16	35	27
Not specified	0	0	0	0	24
<i>of which from:</i>					
OECD	160	340	642	1 387	1 900
EC	127	241	478	1 149	1 579
Germany	18	26	51	115	141
Spain	14	57	63	184	238
France	17	36	74	270	395
United Kingdom	64	80	174	364	491
Others	14	42	116	216	314
Other Europe	17	38	77	154	196
USA	15	52	81	71	81
Japan	1	8	6	12	43
Rest of the world	6	27	50	190	271

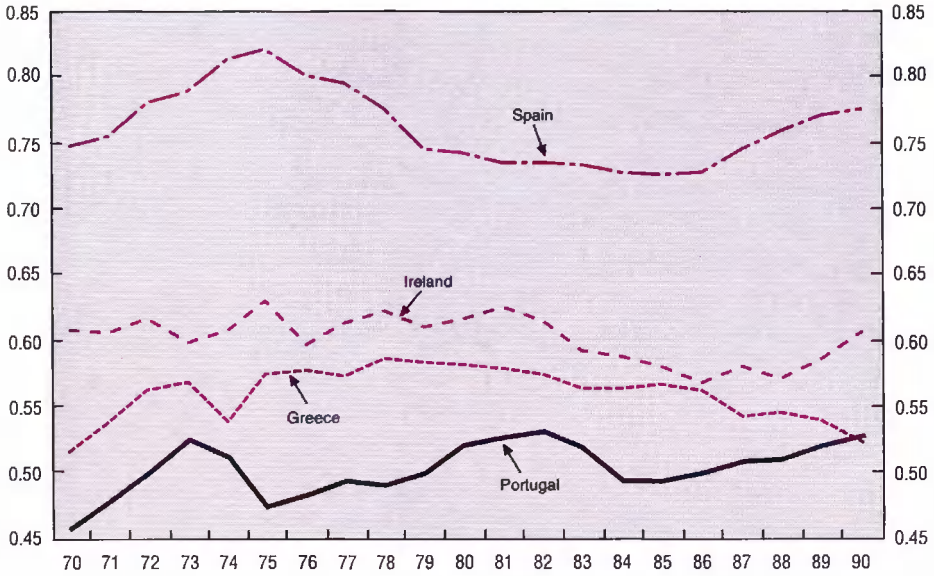
Source: Bank of Portugal.

Progress towards real economic convergence

As stated at the outset, the period since accession has been marked by a notable pick-up in output growth. To some extent this may be ascribed to the buoyancy elsewhere in the OECD as well as the severity of the 1983-84 recession which followed the 1981-82 balance-of-payments crisis. Nevertheless, although it still has some of Europe's poorest regions²⁸, there is no denying that Portugal, like Spain and Ireland, has succeeded in reducing the real income differential it faces when compared with the rest of the EC (Diagram 5, Part A). By 1990, it managed to move out of last place in terms of real income rankings

Diagram 5. REAL CONVERGENCE

A. GDP per capita relative to EC average¹



B. Components of the Portugal - EC real income gap²

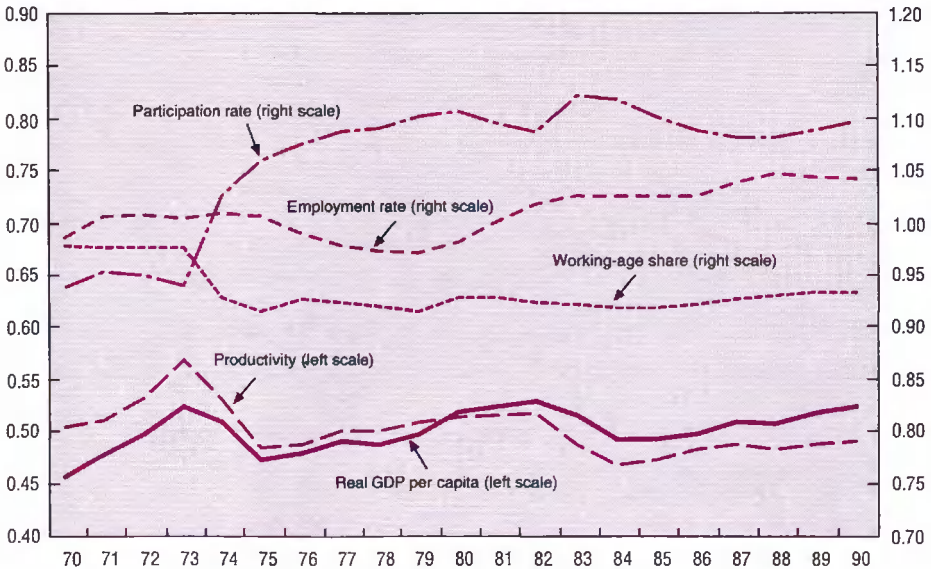
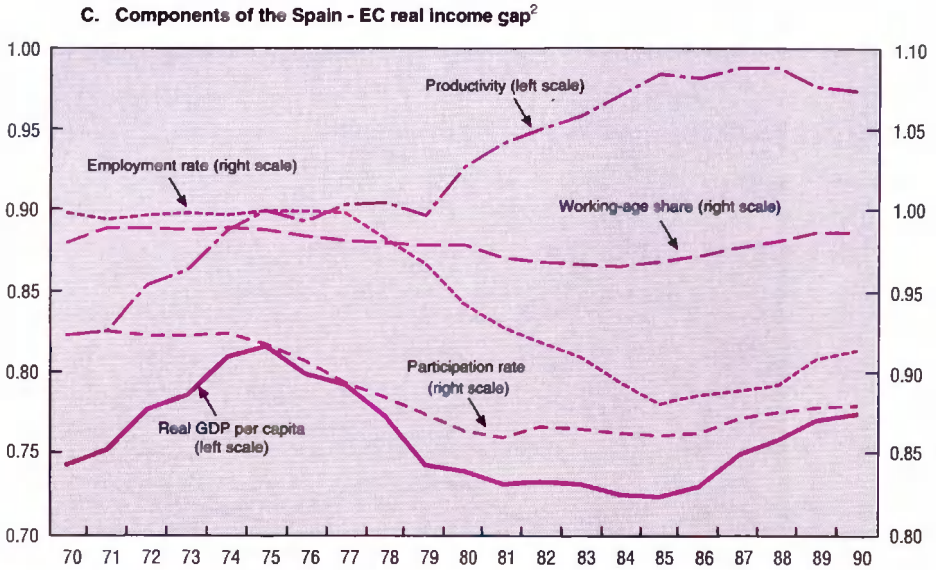


Diagram 5. **REAL CONVERGENCE** (continued)



1. GDP in current prices converted to PPP terms using current PPP.
2. In order to decompose levels of real income per capita the following algebraic manipulations were undertaken:

$$\text{GDPV/POP} = (\text{GDPV/ET}) (\text{ET/POPT}) (\text{POPT/POP})$$

$$= (\text{GDPV/ET}) ((\text{LF}-\text{UN})/\text{POPT}) (\text{POPT/POP})$$

$$= (\text{GDPV/ET}) ((\text{LF}-\text{UN})/\text{LF}) (\text{LF/POPT}) (\text{POPT/POP})$$

$$= (\text{GDPV/ET}) (1-\text{UNR}/100) (\text{LF/POPT}) (\text{POPT/POP})$$

where GDPV is constant-price gross domestic product, POP is total population, ET is total employment, POPT is working-age population, LF is the labour force, UN is total unemployment and UNR is the unemployment rate. Thus, real income per capita is the product of labour productivity, the employment rate, the participation rate and the working-age share of the population. In order to make international comparisons, GDPV was transformed into a 1985 base year and into dollars using 1985 purchasing-power-parity exchange rates for all countries concerned.

Sources: OECD, *National Accounts*, *Labour Force Statistics* and Secretariat estimates.

within the EC. On OECD estimates, Portugal's GDP per capita in purchasing-power-parity terms rose from 49.3 per cent of the EC average in 1985 to 52.5 per cent in 1990²⁹. Thus, the gap has been narrowed at a rate of nearly 1 percentage point per year. While impressive, this is less than the rate of convergence during the period 1960-73. Real convergence can be disaggregated into four components. For Portugal, it is relative labour productivity levels which, at only half EC average levels, dominate in determining the size of the remaining gap as well as

the speed of catch-up (Diagram 5, Part B). Since accession there has been a noticeable pick-up in productivity outcomes, in marked contrast to achievements in the rest of the Community (Table 10). However, catch-up has been assisted by declining unemployment and rising participation as well. It should be noted that Spain has had quite different results (Diagram 5, Part C). While real convergence since EC accession has been as fast as in Portugal, albeit from a considerably higher starting level, the major contributing factor has been declining joblessness. Favourable demographics and rising participation have also played a secondary role in the Spanish case, but productivity has shown no further tendency to converge, having virtually caught up to the EC average prior to accession.

While improved productivity levels have been the key to Portuguese convergence thus far, there remains an extraordinarily large gap to be overcome before it can be completed. Following particularly poor performance in the decade to 1984, the gap is even larger than the real-income gap. According to the data presented in Table 6 the problem would appear to be greatest in agriculture, building and construction and non-market services. Low productivity levels can be attributed to the low level of human and physical capital intensity and, possibly, the sectoral composition of output. Illiteracy is still prevalent, especially among the elderly, and educational attainment is much more limited than elsewhere in the EC (Table 11). However, there are signs of improvement in terms of rising shares of successive cohorts having completed compulsory education. Human capital has been enhanced by increasing the school-leaving age by three years in 1986 and by rapid increases in training expenditures under the Community Support Framework (near \$1 billion per year). In the four years to 1992 volume increases in educational spending and training are scheduled at

Table 10. **Relative labour productivity performance¹**

Average annual percentage change

	1970-75	1975-80	1980-85	1985-90
Portugal	1.9	4.0	0.1	2.6
Spain	4.6	3.4	3.1	1.6
EC	2.7	2.8	1.8	1.8

1. Real GDP per employee.

Source: OECD.

Table 11. Educational attainment: Portugal versus EC, 1987

	Males			Females		
	Portugal	Other EC ¹	Difference	Portugal	Other EC ¹	Difference
Share having completed less than upper secondary education						
Total	87.4	54.0	33.4	89.0	67.1	21.9
20-24 year olds	82.2	40.0	42.2	74.7	40.1	34.6
25-34 year olds	80.6	41.9	38.7	78.8	49.3	29.5
35-44 year olds	84.7	49.4	35.3	87.4	61.8	25.6
45-54 year olds	88.9	59.4	29.5	92.1	74.5	17.6
55 and over	92.8	67.7	25.1	96.4	84.2	12.2

1. Simple average of shares of Belgium, Germany, Italy, Spain and the United Kingdom.

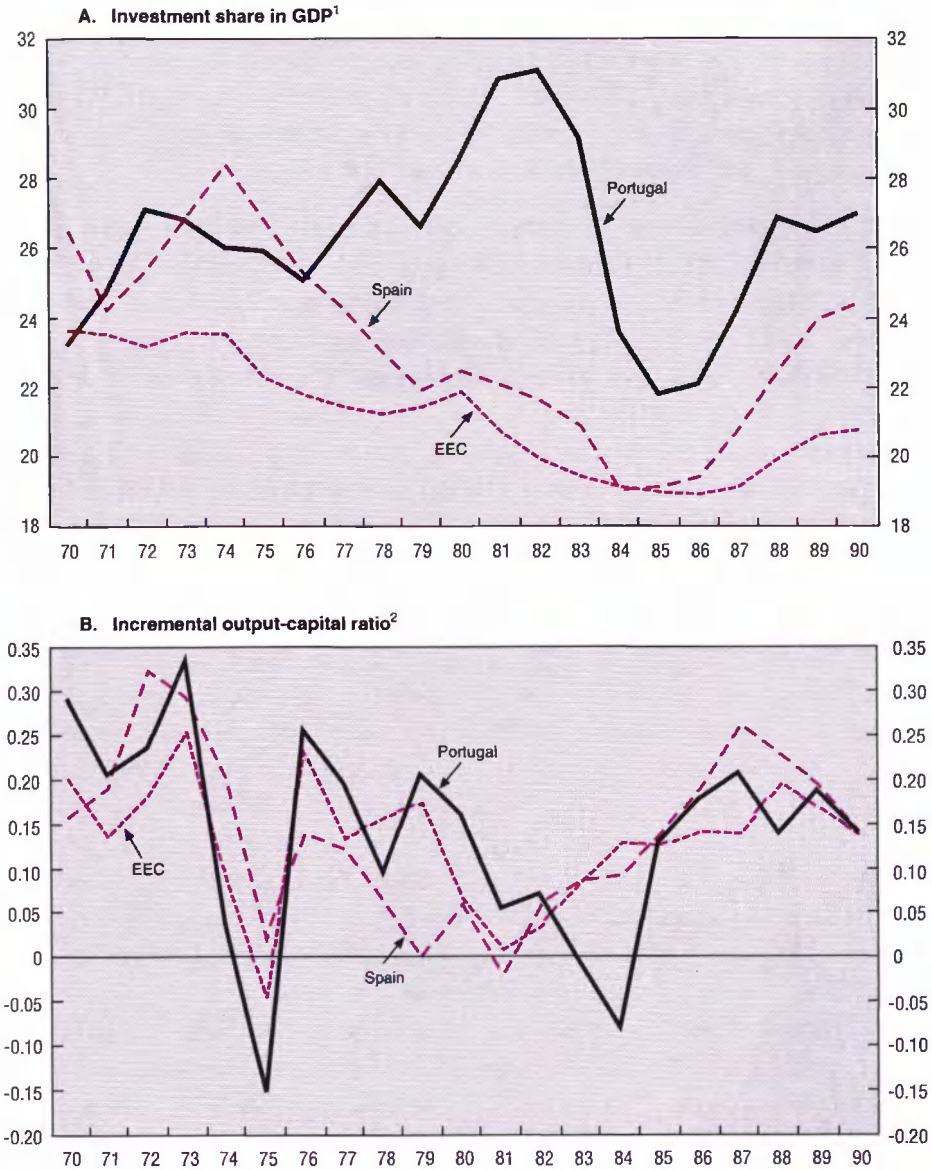
Source: OECD calculations based on OECD, *Employment Outlook*, July 1989, Table 2.1.

7½ per cent and 10 per cent, respectively. In 1988, 1.8 per cent of the labour force – 81 400 people – participated in public training and related programmes and a further 240 000 in private schemes. This compares to some 2¼ per cent of the labour force in Spain who were involved in public schemes (in 1987) and 1.1 per cent in Greece. In Portugal, the accent is on youth training, however, and training expenditures for employed adults have been falling in relation to GDP since 1986. A national apprenticeship programme was also established in 1984-85 and now handles some ten to twelve thousand youths per year; this represents 6-7 per cent of a typical age cohort of the Portuguese population.

Physical capital intensity is being upgraded by capital inflows, especially in the form of direct investment. Overall fixed investment continues to account for a larger share of GDP than elsewhere in the EC, including Spain, although the output-enhancing efficiency of such capital expenditures, as proxied by the incremental output-capital ratio, is no better than that observed elsewhere (Diagram 6). Nevertheless, it is also clear that this ratio has, on average, been greater in the years since accession – possibly resulting from the capital market liberalisation undertaken – than it had been in the earlier years of the decade, although some of the increase is no doubt attributable to normal cyclical developments.

Besides capital inflows, EC structural funds are another important channel for augmenting the capital intensity of production. Recent Planning Ministry estimates based on an input-output approach (thereby neglecting the productivity

Diagram 6. **IMPORTANCE AND EFFICIENCY OF FIXED CAPITAL FORMATION**



1. In nominal terms.

2. Real GDP growth rate over the investment share in GDP in real terms.

Source: OECD estimates.

impact of infrastructural improvements) value the incremental impact of the Community Support Framework on the volume of GDP as 0.5 percentage points in 1989 and 1.5 points in 1990 (Table 2, Panel C). This is less than the total value of the transfers due to import leakage and the omission of any supply response. Simulation results using a dynamic general equilibrium model of the Portuguese economy show an ongoing increase in real growth rates of some $\frac{1}{2}$ percentage point per year into the medium term (Gaspar and Pereira, 1991)³⁰.

The time period required for the completion of the real convergence process in PPP terms is a simple function of the growth rate differential with the rest of the EC. This has averaged 1.5 percentage points over the period 1986-1990, compared to 1.4 points for Spain. Extrapolating this trend shows that at this rate it would still take well over 20 years for Portugal to reach 80 per cent of the EC average and some four decades to eliminate the real-income gap entirely³¹. Furthermore, an uncertain share of the catch-up has been cyclical. It is therefore important to evaluate how Portugal's supply potential has evolved relative to that of the EC in order to judge the feasible horizon over which real convergence may be envisaged.

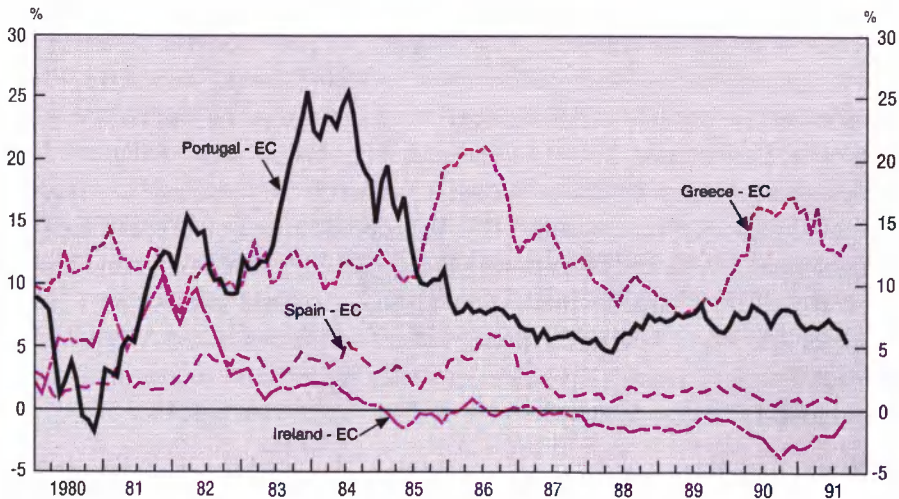
OECD estimates for EC potential output growth in the first half of the 1990s are $2\frac{1}{2}$ - $2\frac{3}{4}$ per cent per year, perhaps slightly higher than in the latter part of the 1980s. Unfortunately, data limitations severely constrain the analysis that is possible for Portugal in this regard. A simple production-function approach generates numbers in the range of $3\frac{1}{2}$ to 4 per cent in the late 1980s, assuming constant real oil prices, compared to realised growth rates which averaged only 3.1 per cent in the decade prior to accession. In view of the observed historical stability of Portugal's participation rate, labour-force growth may slow down over the next few years to at least the 1 per cent per year average historical rate, given working-age-population growth which is only $\frac{3}{4}$ per cent per year and falling. Since annual labour-productivity growth has averaged $2\frac{1}{2}$ per cent in the period of uninterrupted expansion since accession, it would appear imprudent to project annual potential growth beyond $3\frac{1}{2}$ to 4 per cent, despite the benefits of industrial restructuring, foreign capital and EC transfers. The authorities are inclined to be more optimistic³². While the question remains open, a diagnostic of a real growth differential with the rest of the EC of 1 to $1\frac{1}{4}$ percentage points is corroborated by observing that the nearly $4\frac{1}{2}$ per cent volume GDP growth seen since accession was achieved only by drawing on unemployed resources, particu-

larly labour. Such additional manpower is no longer available, despite potential outflows from the agricultural sector; indeed, it will be argued below that the unemployment rate is presently at an unsustainably low level. It should be noted that the pick-up in supply growth of 1.4 points per year was small relative to the corresponding increase in demand expansion of 4.7 points.

Nominal convergence

Reduction in inflation to the rate prevailing elsewhere in the EC – so-called nominal convergence – had, in the 1987 PCEDED (“Programme for the structural adjustment of the external deficit and unemployment”), been projected for 1989. Instead, the inflation differential, which had been successfully brought down to below 5 percentage points in the spring of 1988 from as high as 25 points in 1983-84, rebounded to some 7 percentage points where it remained until mid-1991 (Diagram 7). Initially, the reacceleration in inflation from its

Diagram 7. **INFLATION DIFFERENTIALS**¹
Year-over-year percentage change



1. Measured by the consumer price index.
Source: OECD, *Main Economic Indicators*.

trough of some 8 per cent in May 1988 to 12½ per cent on average in 1989 was attributable to a combination of factors, including the end of the pass-through of the 1986 oil-price collapse and the impact of a poor domestic harvest on food prices, as well as excess demand in the goods market, especially in the non-tradeables sector (see Part III).

When cost pressures began to emerge is more difficult to estimate with precision. According to recent research (Modesto *et al.*, 1990), excess demand in the labour market may have begun as early as 1987. Ministry of Finance unpublished estimates put the rate of unemployment consistent with stable rates of inflation (the so-called "NAIRU") at some 5 per cent, a rate reached in mid-1989³³. In any case, once labour's income share began to increase sharply in 1990, with the prime-age male unemployment rate at only slightly above 2 per cent, there was no further doubt that the labour market was unsustainably tight, despite substantial underemployment in agriculture and the public sector. Most recently, labour-market pressures have continued to intensify (see Part III).

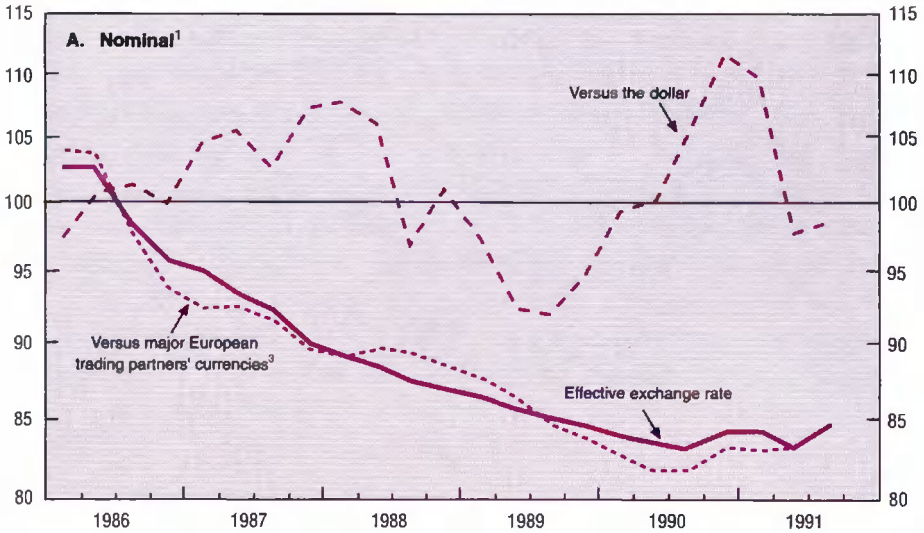
The overall overheated state of the economy is in the first instance the result of the massive inflows of private capital and EC transfers, both directly related to accession. Their inflationary impact could have been offset by demand-reducing stabilisation policies, but such contractionary efforts as were made were largely unsuccessful. Also, for several years the authorities have been over-optimistic with respect to the likely path of inflation³⁴, in part because of an apparent implicit overestimation of the economy's available supply capacity. Over the years 1987-91 inflation was on average 3½ percentage points higher than official targets and projections. This has harmed attempts to fight inflation through incomes policy: since inflation began to re-accelerate, wages have increased much more rapidly than laid down in either decentralised or overarching collective agreements. With inflationary pressures masked by the favourable effects of the reverse oil-price shock, which were particularly large in Portugal's case, the authorities adopted a budgetary policy stance in the years 1987-89 which was only slightly restrictive. The problem of strong inflationary momentum was then compounded by expansionary budgets in 1990 and 1991 (see Part II).

While the monetary authorities recognised the need to engage in restrictive monetary policy as early as 1989, they have been worried about its exchange-rate impact. The concern is that real appreciation is harmful to the extent that competitiveness would suffer, and exporters, especially of textiles and clothing, concen-

Diagram 8. EVOLUTION OF THE EXCHANGE RATE

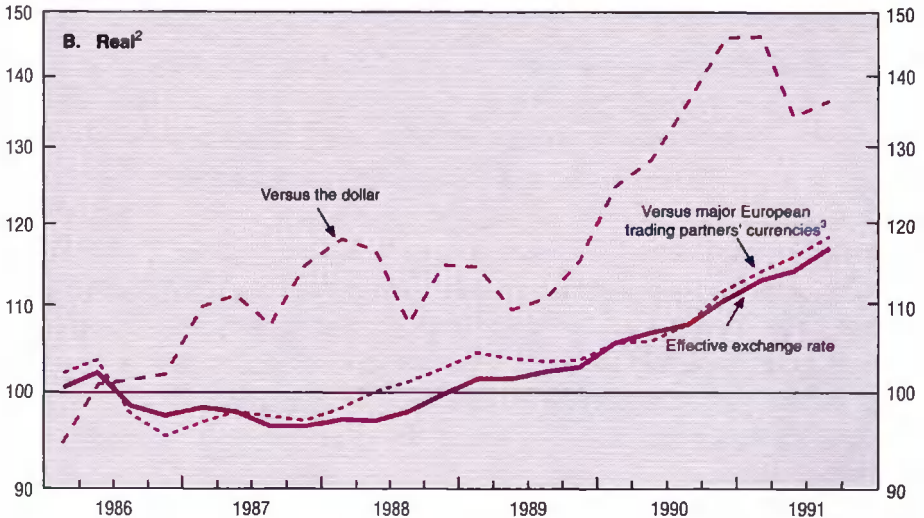
1986 = 100, semi-log scale

1986 = 100, semi-log scale



1986 = 100, semi-log scale

1986 = 100, semi-log scale



1. Units of currency per escudo.

2. Deflated by the consumer price index.

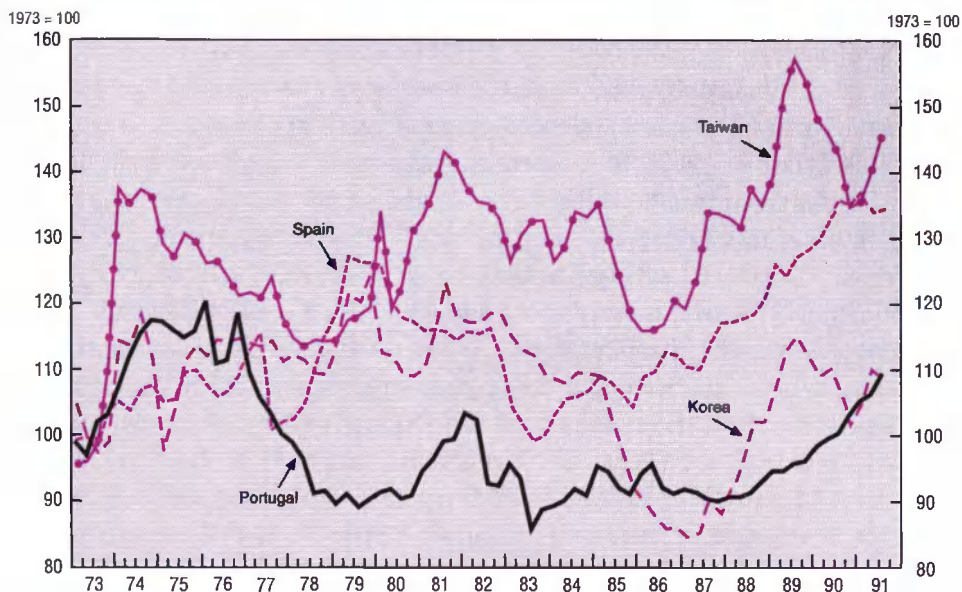
3. Deutschemark, French franc, Peseta, Pound sterling, Guilder and Italian lira weighted by Portuguese trade with these countries.

Source: OECD estimates.

trated in the north of the country, would be unable to survive. The memories of the balance-of-payments crisis of the early 1980s are still fresh. Exchange-rate overshooting would also be unhelpful in terms of price expectations, as perceptions that the rate was unsustainable would engender expectations of depreciation³⁵. However, the crawling-peg exchange-rate regime, which was originally intended to reduce exchange-rate volatility, allowing a more rapid expansion of trade, as well as to conserve competitiveness by limiting real appreciation, became increasingly difficult to maintain in the face of the rising tide of autonomous capital inflows. By 1990, the upward pressure on the real exchange rate could no longer be contained, and in September the system was abandoned. The escudo had already begun to appreciate in real terms in mid-1988 (Diagram 8), and the rate of appreciation has gained pace since then. Nevertheless, the real appreciation has not, thus far, been large in comparison with the recent experience of several other countries, notably Spain: the cumulative real appreciation of the peseta since 1983 has been half again as great as that of the escudo (Diagram 9).

There was, and remains, a need for further real exchange-rate appreciation for a number of reasons. First, in the context of the excess demand manifest for the past several years, appreciation serves to cool the economy by switching expenditure from domestic to foreign goods in order that demand for domestic goods match available supply more closely. It is also likely to restrain employers' willingness to grant excessive wage claims. Second, maintaining too low a value for the exchange rate or, equivalently, an excessively modest current-account deficit implies that domestic investment is too low for any given level of domestic saving, constraining potential growth and slowing real convergence in the long run. The increase in desired investment resulting from EC integration prospects as embodied in the capital inflows must cause a deterioration in the current account (via the identity of saving and investment), and it is a real appreciation which is the means by which this deterioration is effected³⁶. Moreover, there is no doubt as to Portugal's ability to finance a sizeable deficit in the context of high national saving rates and even higher investment needs, given its stage of development and favourable prospects. The balance-of-payments "fundamentals" are clearly superior to those of the early 1980s: not only are EC transfers substantial, but capital inflows are by no means entirely speculative, and the efficiency of investment is higher (see Diagram 6) due to capital-market

Diagram 9. REAL EFFECTIVE EXCHANGE RATE:
AN INTERNATIONAL COMPARISON



Source : OECD estimates.

liberalisation. It should also be noted that exporters' margins are hurt no more by nominal appreciation as by the inflationary cost increases associated with real appreciation with nominal currency stability. Judging by relative export market performance which has proved robust until very recently at least (see Part III), competitiveness has not been greatly impaired by the real appreciation to date.

The extent of the upward pressure on the real exchange rate and its vital importance as a mechanism for achieving internal as well as external equilibrium were probably not fully recognised, and rather than allow it to result in a steady nominal appreciation, the authorities have attempted to rein in capital inflows through administrative controls (see Part II). The Bank of Portugal accumulated foreign-exchange reserves totalling \$10.7 billion in the four years to 1990, an average of nearly 6 per cent of GDP per year³⁷. With a cap on the nominal exchange rate, the impact of the inflow on the money supply needs to be offset by

sterilisation if the real appreciation is not to come about anyway – through higher inflation.

Nevertheless, as recognised by the authorities, the need for further real appreciation induced by the capital inflows and the resulting autonomous increase in investment can be reduced by an increase in domestic saving (Krugman, 1990; Gaspar, 1990). Since there is evidence of pent-up consumer demand due to liquidity constraints which will have to disappear in the near future (Luz, 1990) and business saving has risen by nearly 3 percentage points of GDP in recent years, increased saving can be brought about most effectively by fiscal consolidation. This would bring about a lower level of domestic demand and of interest rates, thereby damping capital inflows and easing public-debt charges. However, it need not slow activity excessively, as the earlier experience of Denmark and Ireland shows (Giavazzi and Pagano, 1990). Concretely, the most obvious candidate for budget cuts is public consumption: its share in GDP has risen from 15.2 per cent in 1987 to 16.2 per cent in 1990. In addition, there is room for an increase in taxation. Finally, whether or not it will ultimately prove necessary for EC monetary and economic union, deficit reduction would at least be supportive of the integration process.

Other weapons in the anti-inflation arsenal may also be envisaged. For example, some have advocated immediate entry into the EMS exchange-rate mechanism (ERM). The advisability of early entry is, however, controversial. Supporters point to a number of probable advantages. For example, immediate closer currency ties for a country like Portugal with its EC neighbours might prove beneficial because of the enhanced credibility of anti-inflationary policy³⁸, the interest-rate benefits of diminished currency risks and the reduction in the cost of administering EC programmes. Such strengthened credibility might lower the costs of disinflation (that is, improve the “sacrifice ratio”). Membership in the ERM might also reduce Portugal’s cost of adjusting to the real shock of integrating into the Single Market (Torres, 1990). Often posited but rarely proven is the claim that the resulting reduction in exchange-rate volatility would stimulate foreign trade. Clearly, early membership in the ERM would require the imposition of the tough fiscal and wage-bargaining discipline necessary to set the inflation rate on a firm downward path. However, conversely, joining the ERM without undertaking fiscal contraction would lack credibility and might fail to reverse inflation expectations (de Macedo, 1990). The official view is that joining

prior to achievement of a substantial measure of disinflation would be judged not credible by investors and wage- and price-setters alike.

The authorities have professed the strong desire to put inflation on a downward path for the well-known reasons that it prevents the proper functioning of financial and other markets, effects arbitrary redistributions and is likely to stymie the process of real convergence over the longer run. Perhaps most importantly, the persistence of the remaining inflation differential is seen as a barrier to entering the exchange-rate mechanism of the EMS, the first step along the road to eventual monetary union. The basic policy question then has been how to achieve the necessary disinflation. The authorities' medium-term strategy for participation in first the ERM and then EMU is the QUANTUM ("National Adjustment Programme for the Transition to an Economic and Monetary Union"), first announced in June 1990. It embodies fiscal consolidation through expenditure restraint and an increase in indirect taxation in line with EC tax harmonisation proposals. However, thus far there has been no fiscal tightening, and despite the recent unforeseen fall in the buoyancy of foreign demand, the inflation problem is proving more difficult to tame than foreseen. Whatever policies are chosen, it is clear that inflation cannot be expected to fall without a reduction in the rate of domestic demand growth from the close to 5 per cent level still seen in 1991.

As this Survey was being finalised, the newly elected government presented its revised programme of economic convergence with its Community partners to the EC Council of Ministers. The plan, dubbed "Q2", aims at the elimination of the inflation differential while maintaining a superior output growth performance. As with its predecessor, it postulates a rigorous control of public expenditure as well as an increase in indirect taxation. However, in contrast to the original QUANTUM, the authorities now intend to set precise limits on overall primary expenditure at both central- and general-government levels: these limits are to be invariant to actual inflation outcomes. Furthermore, it calls for the avoidance of exchange-rate depreciation as well as a substantial contribution to public-debt reduction from privatisation proceeds. The projected result is a halving of the general-government deficit and a cut in the level of public debt of some 12 percentage points of GDP. With the inflation rate falling to the 4 to 6 per cent range on average in 1993-95, GDP growth is expected to return to a 4 per cent rate, led by private domestic demand.

Capital flows and interest-rate movements imply that financial integration is well advanced. Participation in the ERM, when it is achieved, will mark a further stage, and full monetary union will complete the process. What changes will this bring? According to the EC Commission, besides assisting in achieving price stability, it should reduce business-sector costs by reducing exchange-rate volatility and eliminating the currency-risk-premium component of interest rates, permit a lower level of exchange reserves and allow faster real convergence by easing the balance-of-payments constraint. Given the still substantial size of public-sector debt, any reduction in interest rates due to diminished currency risk³⁹ stands to provide a significant benefit to Portugal. Recent research simulating the impact of financial integration using a dynamic general-equilibrium model shows that real output growth could be about 0.4 percentage points per year higher in the initial years, but that these growth-rate gains then slowly taper off (Gaspar and Pereira, 1991).

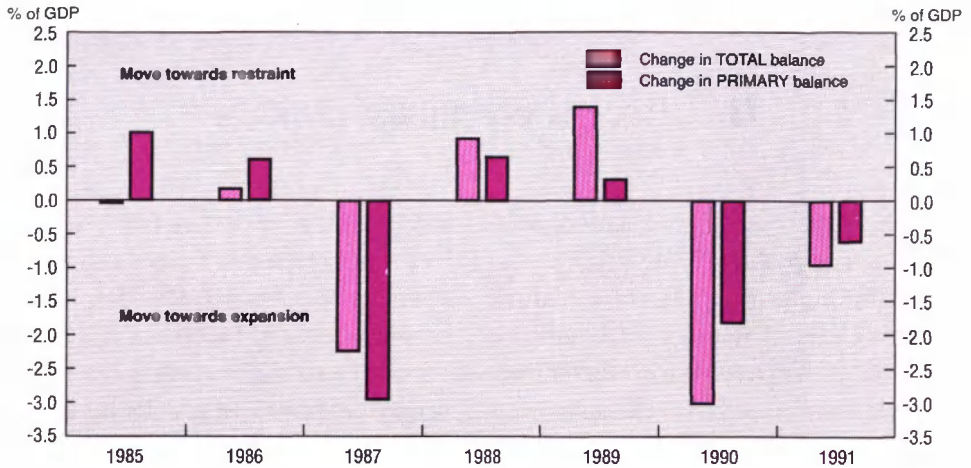
II. Recent economic policies

Over the past year macroeconomic policy setting has been faced with a fundamental problem: while it has been clear that substantial tightening was called for, budgetary policy has continued to move toward expansion, despite the obvious excess demand in both labour and product markets. Incomes policy – in the form of the October 1990 agreement between the social partners – has failed to counteract these basic imbalances, and wages continued to accelerate somewhat in the first half of 1991. Accordingly, the burden of inflation fighting has fallen to monetary policy alone, and the resulting policy mix has been unbalanced. Interest rates have had to be set at very high levels which, when superimposed on the structural need for real exchange-rate appreciation, has led to recurrent waves of capital inflows. These flows have swamped the ability of the Bank of Portugal to deal with them – especially in view of technical problems thrown up by the ongoing structural changes in the implementation of monetary policy – and have defied its wish to prevent a nominal appreciation of the escudo. This chapter reviews the recent macroeconomic policy stance, beginning on the budgetary front before moving to monetary and exchange-rate questions. There follows a brief summary of some of the more important structural policy changes.

Budgetary policy

Whereas considerable progress had been achieved on the fiscal consolidation front in 1988 and especially in 1989, with the implementation of the direct-tax reform which implied a one-time increase in tax receipts, fiscal policy switched to an expansionary stance in 1990 and in 1991 (Diagram 10). According to calculations by the OECD, the cyclically-adjusted budget deficit seems to have increased by $3\frac{1}{2}$ per cent of GDP during these two years. With the move

Diagram 10. **THE STANCE OF FISCAL POLICY**
 Change in the cyclically-adjusted budget balance
 (General-government account)



Source : OECD estimates.

towards expansion coming during a favourable phase in the business cycle, fiscal policy was clearly procyclical and contributed to intensifying domestic-demand pressures and to feeding inflation.

Due to the election-induced delay in the presentation of the 1992 Budget, only sketchy indications of future fiscal policy were available at the time of writing. According to preliminary indications and consistent with the medium-term goals set out in the 1990 QUANTUM, the general-government budget deficit should be cut to 4 per cent of GDP in 1992, based on the underlying assumption that real GDP will increase by $3\frac{1}{4}$ per cent, with consumer-price rises slowing to $8\frac{3}{4}$ per cent. The primary surplus (excluding interest charges) would rise to $2\frac{3}{4}$ per cent of GDP, and the public debt/GDP ratio would fall back to 60 per cent. However, without further changes in policy, the general-government budget deficit would be likely to increase from an estimated $6\frac{1}{2}$ per cent of GDP in 1991 to perhaps $6\frac{3}{4}$ per cent in 1992, as government expenditure should moderate only slightly, while increases in tax receipts should weaken more markedly following the slowdown in activity. The cyclically-adjusted budget

deficit would be unchanged between 1991 and 1992, thus implying a continuation of the expansionary fiscal-policy stance.

The 1990 outturn

Budgetary developments in 1990 were out of line with the government's medium-term programme of fiscal consolidation initiated in 1985. After a reduction of $4\frac{1}{4}$ percentage points to 3.1 per cent of GDP in 1989, the general-government deficit (on a national-accounts basis) widened to $5\frac{1}{2}$ per cent of GDP in 1990 (Table 12). Its total borrowing requirement, i.e. including financial transactions, reached $6\frac{1}{4}$ per cent of GDP.

Current expenditure accelerated, reflecting in part the civil-servants' salary-scale reform of October 1989, which aimed at making their wages more competitive with those in the private sector and at improving the transparency of the salary grid. This reform is estimated to have added 120 billion escudos (1.3 per cent of GDP) to the general-government wage bill in 1990. Furthermore, social-security transfers were boosted by the payment of a fourteenth month of pensions – a measure adopted in June 1990 and estimated to have amounted to about $\frac{1}{2}$ per cent of GDP. Debt-interest payments also accelerated sharply in 1990 boosted by the following factors:

- The higher effective interest rates paid on the public debt; with the drastic fall since 1984 of the share of foreign debt in total debt, new debt is increasingly financed at domestic rather than foreign rates in order to reduce upward pressure on the exchange rate;
- The timing of debt-management operations, with a large placement of public debt at the end of 1989; and,
- The growing share of public securities issued at gross interest rates in order to compensate the introduction in May 1989 of a tax on public-debt instruments.

Thus, the implicit average interest rate on government debt increased from 12.3 per cent in 1989 to 14.5 per cent in 1990, implying a slightly positive real effective rate. Strong public investment growth was supported by the projects co-financed by EC in the priority areas such as health, education and physical infrastructure.

Table 12. **General-government account**
National-accounts basis

	Billion escudos	Per cent rate of growth from previous year		
	1989	1990 Estimate	1991 Budget ¹	1991 Estimate ²
Current receipts	2 833.4	17.5	21.7	18.4
Direct taxes	665.3	17.9	25.6	23.6
Social contributions	705.5	21.3	18.9	18.9
Indirect taxes	1 105.0	16.5	13.0	15.0
Other	312.6	12.0	44.9	18.0
Current expenditure	2 735.8	24.6	18.5	21.9
Goods and services	1 109.5	23.6	19.2	22.6
Subsidies	115.3	12.8	38.2	28.0
Interest on public debt	509.5	37.1	17.0	22.6
Current transfers	1 001.5	22.5	15.5	20.1
Capital receipts	81.5	33.2	89.1	98.8
Capital expenditure	401.4	21.2	34.5	32.6
Investment	239.3	31.3	17.0	17.0
Capital transfers and other	162.1	5.9	58.7	61.1
Overall balance³	-222.3	-455.6	-626.9	-641.7
Per cent of GDP	-3.1	-5.4	-6.5	-6.4
<i>Memorandum items:</i>				
Primary balance ⁴	4.0	2.9	2.5	2.2
Total borrowing requirement ^{4, 5}	-4.5	-6.3	-7.2	-6.9
Public debt ⁴	70.9	68.2	63.8	..
Nominal GDP	19.1	19.1	15.0	17.4

1. From the outturn estimated at Budget time.

2. OECD estimates.

3. Billion escudos.

4. Per cent of GDP.

5. Including financial operations related to public enterprises.

Sources: Ministry of Finance and Bank of Portugal.

Overall tax pressure was hardly changed. Receipts from direct taxes and social-security contributions were boosted by stronger activity and higher inflation than projected in the Budget⁴⁰, while the impact of the broadening of the tax base resulting from the 1989 tax reform was underestimated. On the other hand, personal income tax revenues were affected by an *ad hoc* adjustment of the tax brackets and deductions exceeding the rate of inflation, both measures introduced in February 1990. VAT receipts rose by less than nominal consumers' expendi-

ture, reflecting a shift towards goods and services subject to lower VAT rates but also probably implying greater tax evasion. Overall, indirect taxes increased by 15½ per cent, helped by increases in the taxation of cigarettes and beer and in some stamp duties.

The 1991 Budget

The Budget for 1991, which was voted at a time of substantial uncertainty linked to the Gulf Crisis⁴¹, aimed at the return to a path of fiscal consolidation through a reduction in the share of certain components of public expenditure in terms of GDP and an increase in indirect taxation. Underlying assumptions called for real GDP to grow at a rate of 3½ per cent, while the rate of inflation, as measured by the rise in consumer prices, was to slow to 10¾ per cent. In order not to augment the direct-tax burden of households, tax brackets were adjusted by slightly more than the projected rate of inflation. The corporate income-tax rate was cut from 36.5 per cent to 36 per cent. In order to be in greater conformity with other EC countries⁴¹, a small number of tax-exempt products were subjected to VAT, with only a limited impact on VAT receipts expected. Taxes on petrol and fuel as well as excise taxes on tobacco and alcoholic beverages were also raised. The stamp-duty tax base was extended to a large number of external financing operations. The authorities believed that checking the rise in public expenditure would release enough resources to finance the civil servants' pay-scale reform and spending on priority areas, such as the development of infrastructure and the social-security system, allowing at the same time a reduction in the budget deficit.

Initial budget projections for 1991 implied a reduction of the general-government deficit to 6½ per cent of GDP from the then-expected deficit of 7½ per cent of GDP for 1990, and a further fall in the debt/GDP ratio. Present estimates for the 1991 deficit in terms of GDP are close to the voted figure. As the outcome of the budget deficit for 1990 was markedly better than foreseen (5½ per cent against 7½ per cent in terms of GDP), the general-government deficit is now estimated to have widened by about 1 percentage point of GDP in 1991. The total borrowing requirement of the general government may rise to close to 7 per cent of GDP excluding privatisation proceeds.

According to the latest estimates of the Ministry of Finance, total current revenues might have grown by some 17 per cent in 1991, about the same rate as

in 1990. Direct-tax receipts have probably picked up sharply, largely reflecting higher-than-projected inflation and the impact of the unexpectedly large widening of the corporate tax base, mainly concerning the financial sector. On the other hand, indirect taxes may have again grown by less than private consumption (see below). The sharp rise in capital receipts is linked to transfers by way of EC structural funds.

Despite the attempts to moderate non-wage and non-interest current public expenditure, current outlays of the general government seem likely to have increased by some 22 per cent in 1991, 2½ percentage points more than budgeted. The dynamics of the wage bill can be explained in part by the impact of the civil-servants' pay scale reform and in part by the persistent rises in public employment. Debt-interest payments will probably also have risen sharply, with the rise in effective interest rates, for similar reasons as in 1990⁴². Transfers to households are likely to have increased in real terms due in part to the uprating of the very low levels of the survivors' and disability pensions and of unemployment compensation. Sharp growth in public investment is likely to be supported by the rising trend of available EC structural funds.

The weight of the public sector

After five years of fiscal consolidation, the general-government deficit (excluding financial transactions) resumed a rising trend in both 1990 and, contrary to the expectations of the authorities, in 1991. The overall tax burden has remained at some 35 per cent of GDP since 1989, almost 3 percentage points above its level in the previous two years (Table 13). With the 1989 reform of direct taxes, their share in GDP rose to 9¾ per cent of GDP in 1991, from 8 per cent in 1988, fuelled also by the strength of the domestic economy. Social-security receipts also increased sharply in terms of GDP in 1989, as contribution rates were raised. With the introduction of VAT in 1986, indirect-tax receipts widened their share of GDP by 2 percentage points. Since then, however, the indirect-tax/GDP ratio has been shrinking, suggesting that, in a phase of sharply accelerating private consumption and of rising rates, the opportunities for tax evasion seem to be increasingly exploited.

Despite a number of administrative reforms aiming at strictly monitoring the growth and use of public appropriations, progress in controlling current public

Table 13. **The weight of the general government**
As a per cent of GDP

	1985	1986	1987	1988	1989	1990	1991 ¹
Receipts							
Total direct taxes	8.7	8.0	8.1	7.9	9.3	9.2	9.7
<i>of which:</i> On households	6.0	5.6	4.8	5.4	6.4	6.4	6.7
On business	2.7	2.4	3.3	2.5	3.0	2.9	3.9
Social-security contributions	9.6	8.8	8.9	8.5	10.5	10.7	10.9
Other current transfers received	2.5	3.4	3.6	5.2	4.4	4.1	4.1
Indirect taxes	15.2	17.4	15.6	16.1	15.5	15.2	14.8
Property and entrepreneurial income	7.7	2.6	0.8	1.0	1.1	1.3	2.7
Current receipts, total	43.7	40.2	37.0	38.7	40.9	40.5	41.7
Disbursements							
Government consumption	15.5	15.4	15.2	15.5	15.6	16.2	16.9
Debt interest	9.3	9.7	8.8	8.4	7.1	8.2	8.6
Subsidies	3.6	3.0	1.9	2.1	1.6	1.5	1.7
Social-security outlays	8.2	9.3	9.9	10.3	10.7	10.7	11.0
Other current transfers paid	2.7	3.1	3.3	3.4	3.4	3.5	3.6
Current disbursements, total	39.4	40.5	39.1	39.7	38.4	40.2	41.7
Saving	4.2	-0.3	-2.1	-1.0	2.5	0.4	0.0
Gross investment	3.1	3.3	3.3	3.3	3.4	3.7	3.7
Net capital transfers received	-8.6	-2.8	-1.9	-1.5	-2.3	-2.0	-2.8
Net lending	-7.4	-6.4	-7.3	-5.9	-3.1	-5.4	-6.4

1. OECD estimates.

Source: OECD, *National Accounts*.

expenditure has clearly been insufficient. After an interruption in 1987, the trend rise in government current expenditure in terms of GDP resumed in 1988, as a result of the evolution of social-security outlays and government wages; the steepening in 1990 and 1991 reflected the major impact of the public-servants' pay-scale reform – amounting, according to the Ministry of Finance, to some 180 billion escudos (1.3 per cent of GDP in 1990 and 0.7 per cent in 1991) – and renewed pressure on debt-interest payments. Despite increasing inflows of EC funds to finance the development of infrastructures, the share of public investment in GDP has remained approximately stable since the mid-1980s at around 3¼ per cent, a level no greater than in most other more advanced OECD countries. By way of contrast, both subsidies and capital transfers fell sharply, from 11½ per cent of GDP in 1983-85 to 4 per cent in 1990-91; nevertheless this share remains among the highest in the OECD area. With the decline in the

borrowing requirement of the public-enterprise sector (from 8 per cent of GDP in 1985 to 1 per cent in 1991) as a result of its financial consolidation and owing to favourable cyclical factors, the State withdrawal from such intervention has been quite remarkable. Reflecting the latter and, more recently, increasing privatisation proceeds, the total borrowing of the broadly-defined non-financial public sector fell from 1985 to 1991 by 9.3 percentage points to perhaps 7.2 per cent. Over the three years to end-1991, the general-government debt/GDP ratio fell by 10 percentage points to probably 64 per cent, with privatisation proceeds estimated to have contributed nearly 3 points to the reduction. Nevertheless, the public finances remain in urgent need of further consolidation.

Monetary and exchange-rate policy

Overview

While the number one priority of the monetary authorities remains the reduction of inflation, they face a particularly difficult task in implementing a sustainable set of policies capable of achieving that goal in a context of rapid regulatory change. Substantial progress was made in 1990 with the recognition that the crawling-peg exchange-rate regime, instituted in 1977, was inconsistent with the desired pace of disinflation. However, policy makers have confronted a dilemma in attempting to maintain tight monetary conditions coupled with high interest rates at home, while wishing to avoid the resulting capital inflows and the consequent impact on the exchange rate out of a fear of overshooting and excessive regional and sectoral implications. Their response has been to attempt to insulate the domestic market through the imposition in mid-1990 of a 40 per cent unremunerated deposit requirement for all foreign borrowing (excluding trade credits) as well as a prohibition of foreign-currency swaps. Further controls on the inflow of capital were imposed in 1991. The authorities recognise that this strategy can only be transitional and that such controls can only be resorted to in the short term. Indeed, capital inflows were quite limited in the early months of 1991, but by the second quarter substantial pressures returned. At that point liquidity ballooned, as early repayment of public foreign debt ceased, given the virtual exhaustion of the stock of such debt. Thus, domestic sterilisation efforts proved inadequate, and the viability of the strategy came to be questioned.

Structural changes

Monetary policy implementation was difficult because of the structural changes to which it was subjected, especially in 1990. First among these has been the changeover from the system of direct quantitative limits on credit, in place since 1977, to one of more indirect monetary control via open market operations. This is intended to enhance the flexibility and timeliness with which policy can be conducted and to boost efficiency by improving resource allocation. Since the suspension of formal credit ceilings in March 1990 and of credit growth recommendations at end-1990, policy has become focused on the setting of cash reserves for the banking system in order to guide the growth of liquidity. However, while targets continue to be fixed for the increase in certain aggregates, these have not been strictly adhered to in the short run. Policy has been set with a degree of flexibility due to greater instability in the demand for money – especially its relationship with income/expenditure – resulting from the multitude of ongoing regulatory changes. Accordingly, attention has focused more on the exchange rate and nominal interest rates.

A number of reforms have been realised to facilitate the introduction of the new regime. First, in recognition that the reserve requirements imposed in June 1990 were punitive⁴³ and were accordingly subject to evasion, the system was streamlined in February 1991: rates of remuneration were modified with a view to their standardisation across all reserve assets and to their alignment, at the margin, on the Bank of Portugal's money-market intervention rate (initially 16 per cent)⁴⁴. Second, a "major operation" to soak up excess structural liquidity (caused by the outgoing credit-ceiling regime) deposited with the central bank occurred in several phases. A total of Esc 1 060 billion (about \$7 billion) worth of public-debt securities of varying maturities was issued (over 12 per cent of GDP) in order to "cleanse" the money market of such potentially liquid investments of the financial institutions concerned. The proceeds were used to make early repayment of external public debt, as well as to redeem some of the government debt held by the Bank of Portugal. Third, a new "Organic Law" governing the operation of the Bank was promulgated in October 1990. This reform conferred a greater degree of autonomy on the Bank by explicitly prohibiting it from financing the State other than by the underwriting of Treasury bills upon negotiated conditions. It also attributes to the Bank strengthened prudential supervisory responsibilities. These were exercised for example in December

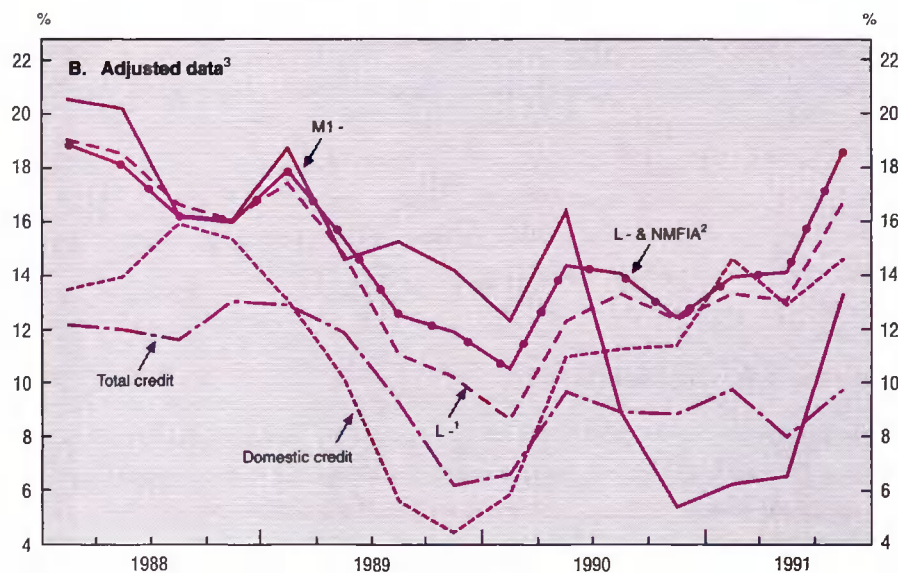
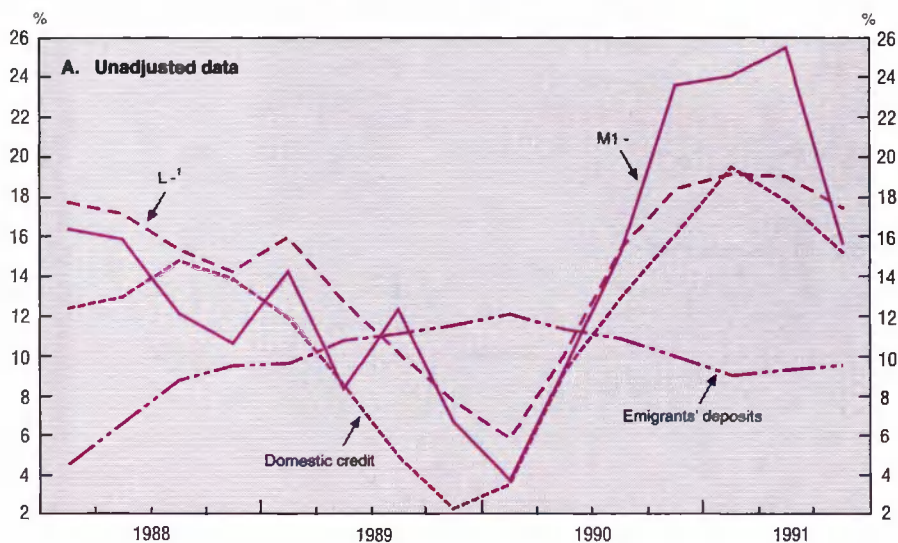
1990 when, in line with European standards, minimum solvency ratios for credit institutions were set at 4, 6 and 8 per cent at the end of 1990, 1991 and 1992, respectively.

Evolution of money and credit

At first glance the growth rates of all the major money and credit aggregates have moved up steadily since the beginning of 1990 (Diagram 11). Indeed, year-over-year M1⁻ growth jumped from less than 4 per cent in the first quarter of 1990 to 26 per cent in the second quarter of 1991. The overwhelming majority of that acceleration is ascribable to the evolution of demand deposits whose year-on-year growth rates have been in excess of 30 per cent since December 1990. However, much of that growth is believed to be fallacious: due to the credit ceilings and given that uncleared cheques were excluded from the ceilings until August 1990, banks were artificially reducing the amount of credit outstanding at month-end – when controls were in effect – by drawing down demand-deposit balances through an increase in float (the value of uncleared cheques). The Bank of Portugal has attempted to correct the data for this phenomenon⁴⁵ (Diagram 11, Panel B) and believes that the underlying growth of M1⁻ has been substantially lower (less than 7 per cent in the first half of 1991). By the third quarter, however, even adjusted data showed year-over-year growth in the 13 per cent range. Nevertheless, there has been a noticeable reversal of the easing in time-deposit increases (led by certificates of deposit) since the summer of 1990.

Overall liquidity (L⁻) growth (which includes the public's holdings of Treasury bills), once adjusted for the abnormal-float effect, appears to have accelerated significantly during the first half of 1990, before falling back to the 13 per cent range where it remained until mid-1991 when it rose to nearly 17 per cent⁴⁶. Accordingly, the Bank has judged that policy was unduly expansionary in the first half of 1990, but it succeeded in cutting the overshooting in liquidity from 10 per cent in June (when capital controls were introduced) to only 1.8 per cent by year-end. In 1991, the guideline for the growth of corrected L⁻ is 12 per cent⁴⁷, based on an assumed real growth rate of 3½ per cent. Although real growth has fallen to below the assumed level, liquidity growth in the first half was 13.2 per cent, an average of 1½ percentage points above programmed levels (2¾ points if daily data are used), mostly – and increasingly – due to the Bank's foreign asset holdings resulting from its exchange-market intervention.

Diagram 11. **MONEY AND CREDIT**
Year-over-year percentage change



1. Liquid assets held by resident non-financial sector.

2. L- plus non-monetary financial institutions' assets.

3. Adjusted for 'abnormal' component of cheques in process of collection by other monetary institutions.

Source : Bank of Portugal, *Monthly Bulletin*.

Table 14. **Recent credit growth**¹

Year-over-year rates in percent

	December 1988	December 1989	December 1990	September 1991
Total credit	13.5	6.0	9.6	9.8
Domestic credit to:	14.4	4.9	12.4	13.8
General government	18.8	-2.9	10.1	-2.6
Private sector	9.7	9.7	13.7	23.2
Non-financial private sector	11.9	9.3	10.9	21.1
Non-financial public enterprises	19.2	13.1	11.6	24.4

1. All figures are end-of-month measures and are adjusted, where relevant, for the abnormal component of cheques in the process of collection by the other monetary institutions.

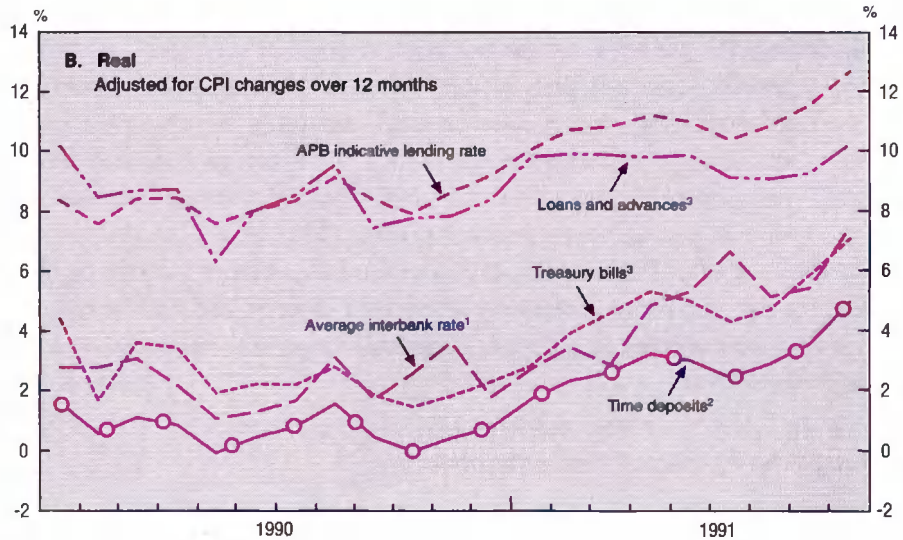
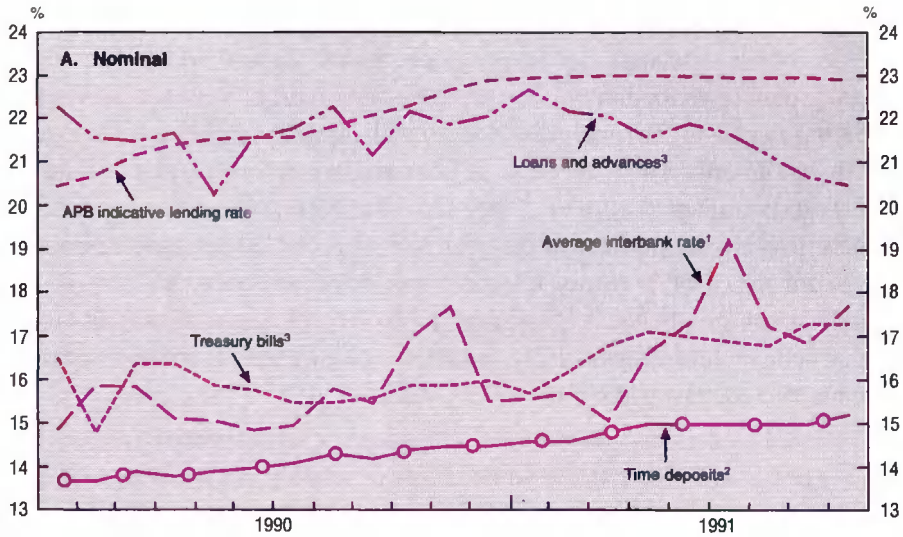
Source: Bank of Portugal, *Monthly Bulletin*.

An examination of the counterparts to liquidity creation shows that in 1990 the extension of bank credit to the household and business sectors was chiefly responsible for L⁺ growth. Domestic credit to the private sector grew by 13.7 per cent in the course of 1990 (9.7 per cent in 1989) and jumped to a 23.2 per cent year-on-year rate in September 1991 (Table 14)⁴⁸. Domestic credit provided to the general government also showed a pattern of acceleration during 1990, but there has been a noticeable slowdown in recent months due to initial overfunding of the State's financing requirements. External credit has been falling fairly steadily since early 1990 due to the external public-debt repayments as well as the restrictions on foreign borrowing; by June 1991 the year-on-year rate of decline was 27 per cent.

Interest-rate developments

Most Portuguese interest rates have followed a gently rising trend since the beginning of 1990, as the authorities have attempted to resist accommodation of credit demands (Diagram 12). The average interbank rate rose from 14.1 per cent in 1989 to 15.6 per cent in 1990 and 17.0 per cent during the first seven months of 1991. However, a notable amount of volatility was displayed by market rates from June 1990 to July 1991, especially at the shorter end of the term structure, due to the commercial banks' learning how to deal with the new required-reserves regime. The authorities were content with this instability given its

Diagram 12. **INTEREST RATES**



1. Weighted average.
2. 181 days up to one year.
3. 91 days up to 180 days.

Sources: Bank of Portugal, *Monthly Bulletin* and OECD, *Main Economic Indicators*.

possibly dissuasive effect on speculative capital inflows (although most such flows are probably of a longer duration) and attempted to sustain rates only at the longer end of the market. Most recently, volatility has been reduced through greater recourse to occasional intervention by the central bank. The Bank of Portugal's new rates for intervening on the money market were set in April 1991 at 16½ per cent and 21¾ per cent for regular liquidity draining and provision, respectively. In July 1991, faced with poor prospects for disinflation, the Bank raised these two rates to 17 and 22 per cent. But with some evidence of disinflation there was a reversal later in the year – to 15⅝ and 20 per cent, respectively. The upward thrust of Treasury bill rates has, however, been maintained: in the primary market they began 1990 at near 17½ per cent (gross of tax) and reached 18.7 per cent in July-August 1991, while the rise in the secondary market was somewhat muted, given the outstanding stock.

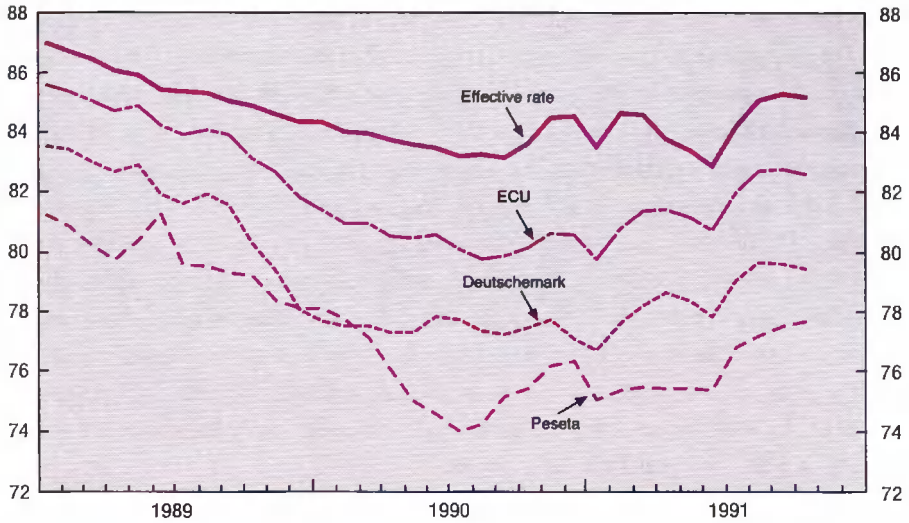
Intermediated rates followed a similar pattern: deposit rates rose by nearly some 1½ points since end-1989, while effective lending rates had varying trajectories. Some fell in the first half of 1990, but thereafter virtually all moved up. The oft-cited indicative lending rate of the Portuguese Banking Association (APB) – which measures rates for medium-risk borrowers – rose by 2½ points during 1990 to 23 per cent, where it has remained until a recent quarter-point decline. A general feature is that, in line with credit liberalisation, lending rates have become noticeably more differentiated according to customer risk. Of concern is the lack of any appreciable reduction in intermediation margins, at least until very recently, due, most probably, to inadequate competition in the domestic financial sector, despite recent privatisations as well as moves to pay interest on reserves. The authorities' disinflationary efforts would be greatly assisted if a rise in deposit rates – which remain slightly negative in real, after-tax terms⁴⁹ – were to lead to higher household savings at the expense of reduced private consumption.

Exchange-rate policies and outcomes

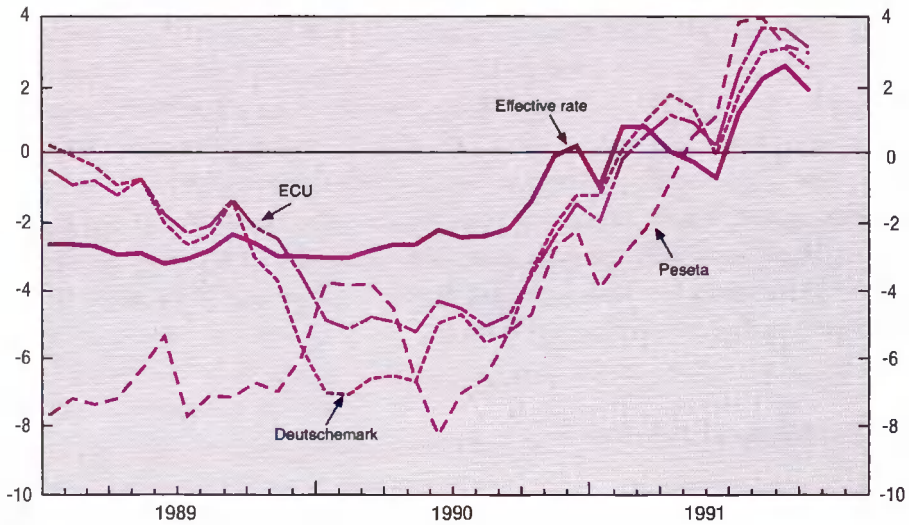
As already mentioned, 1990 saw the end of the crawling-peg exchange-rate regime. It proved unsustainable in the face of surging capital inflows which jeopardised the Bank of Portugal's attempts to control liquidity. Prior to its termination at the end of September, the Bank had already taken steps to inhibit inflows, first, in June, by suspending all forward purchases of foreign exchange

Diagram 13. EXCHANGE RATE OF THE ESCUDO
VIS-A-VIS SELECTED CURRENCIES¹

A. Index 1986 = 100



B. Year-over-year percentage change



1. Units of currency per escudo.

Source: OECD estimates.

from non-residents except as hedging operations to cover current transactions or authorised capital transfers, and then, in July, by imposing the 40 per cent unremunerated deposit requirement for non-trade-related foreign borrowing by non-financial residents. At the same time it allowed greater short-term volatility in the effective rate of the escudo than heretofore. As of October, the Bank ceased to provide firm quotations for the escudo; rather, the currency is now kept within an unannounced range measured against a basket of EMS currencies⁵⁰. In 1991 capital inflows have again proved unwelcome. Accordingly, in February 1991 non-outright portfolio sales of most securities became subject to prior central-bank authorisation, and a deposit requirement for foreign escudo accounts of 90 per cent for offshore branches and 40 per cent in other cases was instituted. In July 1991 non-resident purchases of floating-rate bonds also became subject to prior authorisation until the end of the year. In May, the Bank of Portugal went so far as to overfund the State financing requirement through the purchase of Treasury bills on the primary market at unchanged interest rates, before reselling those bills at higher rates (by some 1/2 point) on the secondary market (thereby incurring a loss) for sterilisation purposes⁵¹.

Following the regime change there was an effective appreciation of some 2 per cent before Bank intervention in December-January drove the escudo back to its pre-changeover level (Diagram 13). The same scenario has been repeated several times in 1991, with bouts of depreciation in April and June sandwiched between periods of escudo strength. Despite intervention of nearly \$3 billion thus far in 1991 (over \$1 billion in May alone), the effective exchange rate was about 2½ per cent (4 per cent against the ECU) above year-earlier levels, after having declined by a similar amount on average in 1990. Combined with the 7 percentage point inflation differential, the real appreciation has therefore been of the order of 10 per cent over the past year. In a longer term perspective the nominal value of the escudo has now regained its levels of mid-1989 but remains some 15 per cent below its average 1986 level.

Other structural reforms

With a view to enhancing investor confidence and diversifying the financing of the economy, substantial reform of the capital markets is underway. Indeed, the nation's two stock exchanges (Lisbon, Oporto) have been nearly dormant,

and a large and increasing share of all transactions are undertaken off these two exchanges⁵². In July 1991 the exchanges were privatised, and brokers are in the process of establishing an account-guarantee fund. In September 1991 continuous trading with real time quotations and electronic linkage at the national level began, and a new registration and control system allowing dematerialisation of securities through centralised delivery and settlement is imminent. Furthermore, the authorities established a new regulatory body to supervise the industry (insider trading, takeover bids, etc.), and reporting requirements were made more strict. Commissions are to be totally negotiable, and over-the-counter trading has been permitted in new markets created in 1990. Finally, the legalisation of commercial paper is under study.

In September 1991, the government indicated its intention to set up a deposit insurance scheme for all credit-granting institutions with 80 per cent coverage up to 1½ million escudos (about \$10 000) and 60 per cent for the next 1½ million, with no coverage thereafter. In addition, all distinctions (especially with regard to tax treatment) between commercial and investment banks would be eliminated. Other changes would also prove beneficial. For example, official controls on deposit rates would seem no longer of vital necessity. Also, capital outflows could usefully be totally liberalised prior to the December 1992 deadline, given the existing capital-account surplus.

Greater transparency of the public finances, enhanced efficiency and improved managerial control are three goals of the public-accounting reforms now being undertaken. For example, once the enabling legislation is enacted and the computer systems are available in 1992, the State's Treasury will be centralised; this is expected to generate interest savings of about ½ per cent of that year's GDP. Besides a set of accounts on a payments basis, a separate system of commitment accounts will be set up. In addition, a monthly forecast of expenditures will be made. The State will finally have at its disposal complete information on its employment level, its overall expenditures and its wage bill. Control should also improve as a result of changes to the "autonomous funds". Their spending represented almost 11 per cent of GDP in 1989, nearly one-quarter of overall general-government expenditure. Under a 1990 law only those autonomous public services with at least two-thirds of their expenditure covered by their own revenues are to remain independent of State control. This should help to rein in what has been termed "soft-budgetism" which has permeated the public

sector in Portugal as well as in other southern European countries (Rodrik, 1990). In addition to such needed moves, the State bureaucracy should be downsized: a public-service share of total employment larger than that of the Netherlands and Spain, for example, would seem difficult to justify.

Table 15. Environmental indicators: a Portugal-OECD comparison¹

	Portugal			OECD		
	1970	1980	1988	1970	1980	1988
Greenhouse gas emissions						
Tonnes per capita	n.a.	n.a.	3.0	n.a.	n.a.	6.1
Tonnes per 10 ³ \$US	n.a.	n.a.	0.7	n.a.	n.a.	0.4
of which:						
CO ₂ emissions from energy use						
Tonnes per capita	0.7	0.9	1.0	3.4	3.5	3.4
Tonnes per 10 ³ \$US	1.0	0.3	0.2	1.1	0.4	0.2
Sulphur oxide emissions						
Tonnes per capita	12.9	28.6	21.0	90.5	68.0	48.7
Tonnes per 10 ³ \$US	18.7	10.6	4.9	28.4	7.2	2.9
Nitrogen oxide emissions						
Tonnes per capita	8.0	17.8	11.9	45.3	48.4	44.2
Tonnes per 10 ³ \$US	11.6	6.6	2.8	14.2	5.1	2.7
Municipal waste generation						
Kg. per capita	n.a.	213	241	n.a.	436	513
Kg. per 10 ³ \$US	n.a.	79	56	n.a.	46	31
Industrial waste generation						
Tonnes per capita	n.a.	n.a.	0.7	n.a.	n.a.	1.7
Tonnes per 10 ⁶ \$US	n.a.	n.a.	158	n.a.	n.a.	105
Protected land area (%)	0.8	2.7	6.7 ²	1.9	5.9	7.1 ²
Nitrogenous fertiliser application on arable land (tonnes/km ²)	2.0	3.8	4.4	3.9	5.6	5.7
Pesticide application on arable land (tonnes/km ²)	n.a.	n.a.	0.4	n.a.	n.a.	0.3
Intensity of forest use (harvest/annual growth in %)	92 ³	n.a.	94 ⁴	n.a.	n.a.	52 ⁴

1. Caution should be exercised in making international comparisons, since measurement methods vary.

2. 1989.

3. 1970s average.

4. 1980-85 average.

Sources: OECD, *Environmental Indicators*, 1991 and *OECD Environmental Data, Compendium 1991*, 1991.

The environment is also an area where little has as yet been achieved. Fortunately, the quality of Portugal's environment benefits from its limited level of development relative to its OECD partners. When measured in per capita terms, virtually all indicators point to far superior outcomes than on average in the rest of the OECD (Table 15). For example, air pollutants are emitted at one-quarter to one-half corresponding levels observed abroad, and municipal waste generation is only 45 per cent of the OECD average. However, once expressed in per unit of GDP terms, comparisons are much less favourable. Indeed, industrial and municipal waste generation and greenhouse gas and sulphur oxide emissions are then up to double the corresponding OECD averages. Furthermore, some trends are disquieting, even after account has been taken of Portugal's rapid development in recent years. Carbon dioxide emissions have increased more rapidly than anywhere else in the OECD, and energy use (as pointed out in the previous *Survey*) remains substantial. The concentration of sulphur dioxide in Lisbon's air at the end of the 1980s was higher than in 1975 – the only major city in the OECD for which such information exists in which this is the case – and the level was only rarely exceeded elsewhere. And forest resources are utilised much more intensively than in virtually all other OECD countries, with little margin for any sustainable increase.

Finally, Portugal has been a leader in the incorporation of EC single-market directives into national law. Up to the end of May 1991, 77 per cent of notified measures had been embodied in national legislation, compared with an average of 72 per cent. Only Denmark and France were further advanced. At that point there were 89 of the original 282 proposals contained in the 1985 White Paper which remained to be approved by the EC Council of Ministers.

III. Recent trends and short-term outlook: an overheated economy

Recent economic performance

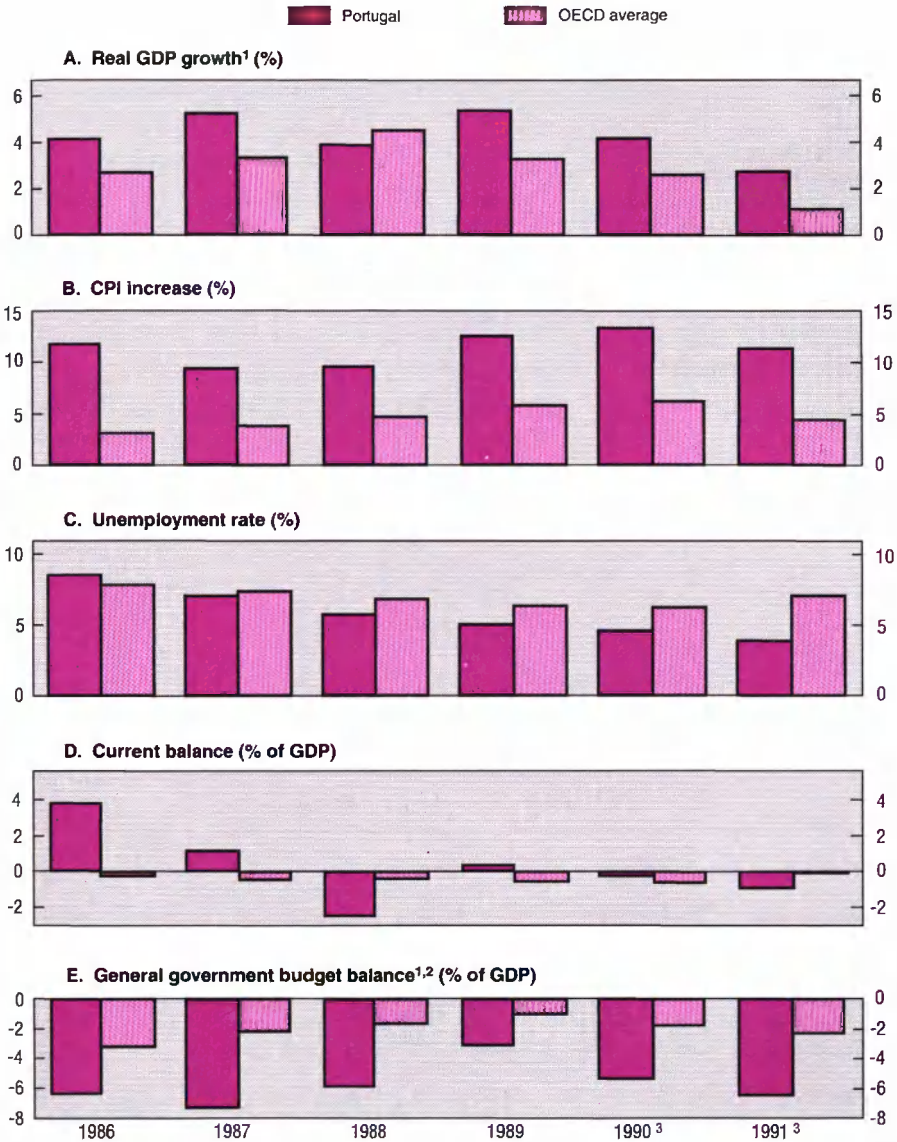
Portugal's economic performance in the past few years has been extremely favourable in terms of activity and employment, with the rate of output growth remaining well above that of the OECD area and the measured rate of unemployment becoming one of the lowest among OECD countries (Diagram 14). However, with weakening export market growth and a deterioration in price competitiveness, growth probably slowed markedly in the past few quarters. Inflation outcomes continue to be a major area of concern, with insufficient disinflation at the consumer price level.

Sustained, domestic-demand-led growth

Contrary to developments in most other OECD countries, real total domestic demand has remained buoyant, increasing by some $4\frac{3}{4}$ per cent in 1991, a rate $4\frac{1}{4}$ percentage points above the OECD average. There has been, however, a considerable change in the composition of domestic demand between 1990 and 1991. The growth of private consumption is estimated to have picked up to $5\frac{1}{2}$ per cent in 1991, with its contribution to total domestic demand growth reaching an unusually high proportion (two-thirds⁵³) (Table 16). Sales of durables, notably passenger cars, have been very strong since July 1990, when the credit restrictions implemented in March 1989 were lifted.

Real disposable income growth in 1990-91 reached higher rates than at any time in the 1980s (Table 17). With sustained employment gains and an acceleration in real wages, real labour incomes increased by more than 7 per cent on average. Transfer payments to households were boosted in 1990 by the decision to make a fourteenth month of pension payments, but their rise abated thereafter. Tax payments subsided in the aftermath of the surge associated with the 1989 tax

Diagram 14. **MACROECONOMIC PERFORMANCE**



1. OECD average is weighted by 1987 GDP and exchange rates.
2. OECD average excludes Iceland, Luxembourg, New Zealand, Portugal, Switzerland and Turkey.
3. Estimates and projections.

Sources : OECD, National Accounts, Main Economic Indicators and OECD estimates.

Table 16. Demand and output
Percentage changes, volume, 1985 prices

	1987 Current prices Esc. billion	1988	1989	1990	1991 ¹
Private consumption	3 335.7	6.6	3.3	4.9	5.6
Government consumption	787.8	5.3	1.5	3.7	3.0
Gross fixed capital formation	1 250.8	15.0	8.3	7.3	4.5
Final domestic demand	5 374.3	8.3	4.3	5.4	4.9
Change in stockbuilding ²	171.0	-0.8	-0.0	1.0	0.0
Total domestic demand	5 545.3	7.4	4.2	6.1	4.8
Exports of goods and services	1 774.7	10.2	16.8	11.1	1.5
Imports of goods and services	2 145.2	16.1	11.0	12.9	5.4
Change in foreign balance ²	-370.6	-4.5	0.5	-2.9	-2.9
GDP at market prices	5 174.7	3.9	5.4	4.2	2.7

1. OECD estimates.

2. As a percent of GDP in the previous period.

Sources: Ministry of Finance and Planning Department; OECD, *National Accounts* and estimates.

Table 17. Household appropriation account
Percentage changes from previous year

	1987 Esc. bill.	1988	1989	1990	1991 ¹
Compensation of employees	2 386.6	14.6	17.2	20.0	21.2
Income from property and others	1 810.5	14.7	19.3	16.9	15.5
Current transfers received	1 167.4	13.1	16.0	18.3	17.0
Total income	5 364.5	14.3	17.7	18.6	18.4
less: Direct taxes	250.0	29.6	40.4	18.5	23.6
Current transfers paid	658.4	14.6	21.6	19.3	20.5
Disposable income	4 456.1	13.4	15.6	18.5	17.6
Consumers' expenditure	3 335.7	17.2	15.8	19.0	17.6
Saving ratio	25.1	22.6	22.5	22.2	22.2
Real disposable income	3 588.8	3.1	3.1	4.5	5.6

1. Estimates.

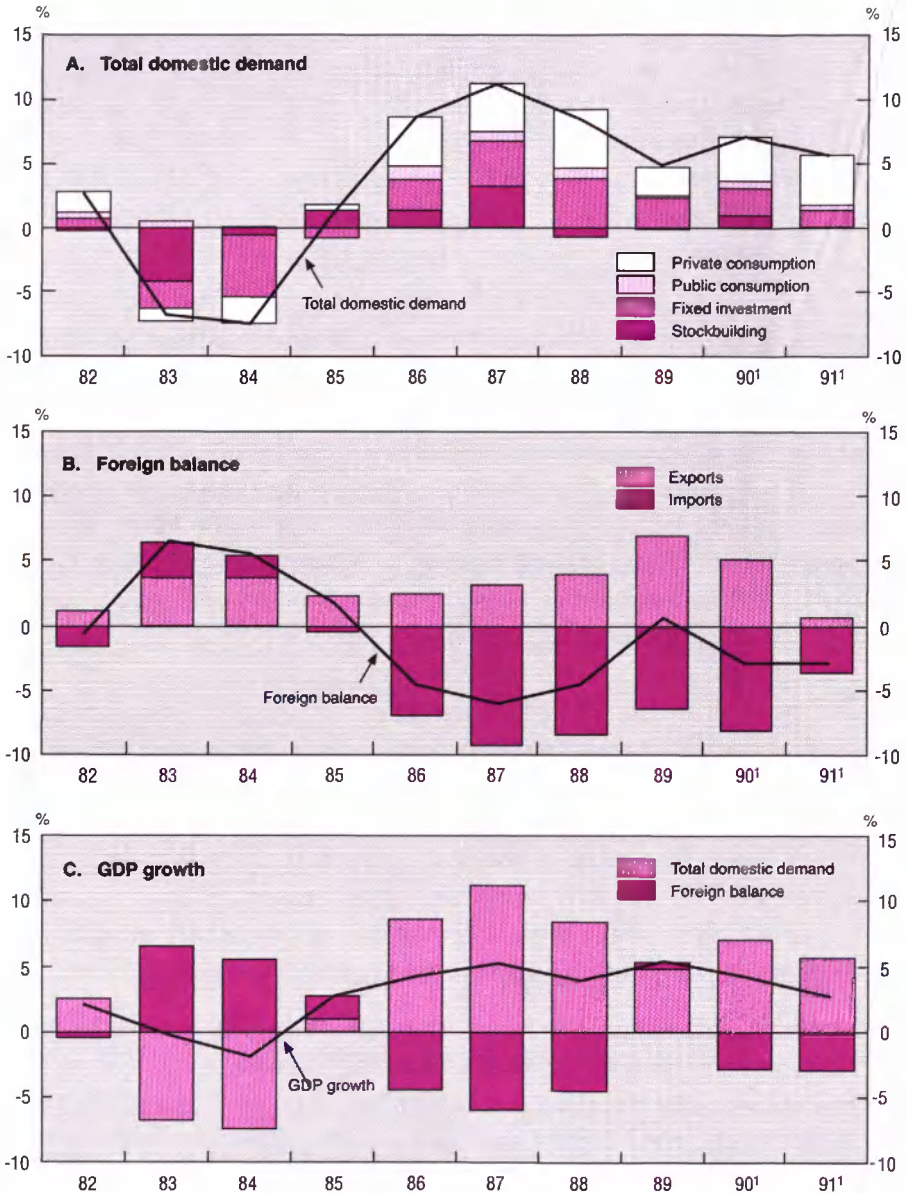
Sources: Bank of Portugal, *Annual Report* and OECD estimates.

reform. The saving ratio fell further, reflecting higher consumer confidence, reduced income uncertainty due to the favourable employment situation and the improvements made to the social-security system in recent years. However, at 22.2 per cent of disposable income, the level of Portugal's saving ratio remains well above those seen elsewhere in the OECD area. High saving rates are ascribable to the impact of high inflation rates on households' net worth, but could also be attributed to the importance of migrants' remittances and to the weight of the self-employed in the workforce: their propensity to save is boosted by higher income volatility and lower social protection. The narrowness of the consumer credit market could also play a role.

Investment growth, by contrast, continued to ease, reaching an estimated rate of 4½ per cent in 1991. The timing of the slowdown from the extremely high rates in 1987-88, which seems to have become more marked in the second half of 1990 and into the early months of 1991, can be explained in part by uncertainty generated by the Gulf Crisis, as well as by the normal operation of the accelerator mechanism and the recent stagnation of direct investment flows. However, investment growth seems to have picked up somewhat with the end of the Gulf War. Since 1988 investment has been less geared towards extending capacity, while replacement of existing capacity has had an increasing role⁵⁴. Equipment investment growth is estimated to have decelerated from over 9 per cent in 1990 to about 4 per cent in 1991. Construction investment growth slowed somewhat from a rate of 5-6 per cent in 1990 to perhaps 4-5 per cent in 1991, in line with public works investment (roads, schools, hospitals) co-financed by the EC. On the other hand, investment in the services sector, notably financial services where most foreign direct investment is focused, was especially strong, increasing its share in total fixed capital formation from 32 per cent in 1989 to an estimated 38 per cent in 1991. While little information on residential construction is available, a noticeable slowdown appears to have begun towards the end of 1990.

The trend to more moderate business investment growth over the past three years, despite the substantial inflows of direct investment, might be explained partly by the squeeze in corporate profits, resulting from the sharp acceleration in nominal unit labour costs in 1990 and, in the tradeables sector, from appreciation-induced price restraint. Another possible contributing factor could be the high effective cost of financing. Domestic borrowing rates have reached some 20 per cent. With the compulsory non-remunerated 40 per cent deposit at the

Diagram 15. **CONTRIBUTIONS TO REAL GDP GROWTH**
Percent of GDP in the previous year



1. Estimates and projections.

Sources: OECD, National Accounts and OECD estimates.

central bank of all capital raised abroad by non-financial enterprises, the largest companies borrowing in a major currency face effective interest rates in the 10-17 per cent range, excluding any coverage of the currency risk (see Part II). Indeed, for tradeables-goods producers, these rates imply double-digit costs in real terms. Furthermore, debt-financing appears to have become less attractive for industrial machinery since the 1989 tax reform (OECD, 1990). Finally, equity capital is costly, given the depressed state of the stock market, which has fallen by nearly half since January 1988.

In line with the public expenditure ceilings introduced in the 1991 Budget, the growth of real public consumption might have slowed down marginally to 3 per cent from $3\frac{3}{4}$ per cent in 1990. Changes in inventories added to domestic-demand growth in 1990, but probably not in 1991, with the destocking in early 1991 of the Gulf-crisis-induced precautionary stockpiling of oil and other raw materials in the latter part of 1990, and the unwinding since about the end of 1990 of the strong additions to retail trade stocks. Reflecting cyclical differences and some deterioration in export performance, the contribution of the real foreign balance to output growth has remained strongly negative (Diagram 15). Thus GDP growth eased to $4\frac{1}{4}$ per cent in 1990 and perhaps $2\frac{3}{4}$ per cent in 1991.

Industrial production growth, which accelerated sharply to 9 per cent in 1990, largely reflecting further expansion of capacity in the mining sector, showed some signs of slowdown in the fourth quarter of the year and again in the first four months of 1991, (to a year-on-year rate of 2.8 per cent). This slowdown at the beginning of 1991 was consistent with the fall in capacity utilisation rates in April to 78.9 per cent (from 81.6 per cent in January), the lowest level since early 1987 when the EC started publishing business survey results for Portugal. In line with the composition of demand, real value added in consumer-goods industries remained much stronger than in their intermediate- and investment-goods counterparts. The above-average growth in the services sector recorded in 1990 is likely to have continued in 1991. Real value added in agriculture, forestry and fisheries, on the other hand, may rebound in 1991 from its 3 per cent fall in 1990, when it was affected by adverse climatic conditions.

An extremely tight labour market

Labour-market conditions tightened further in 1990 and into 1991 (Table 18). Reflecting the lags in the adjustment of employment to activity and

Table 18. Labour-market indicators
Percentage changes from previous period

	1987	1988	1989	1990	1991 ¹
Employment	2.6	2.6	2.2	2.2	3.0
Total – full-time	2.3	2.4	2.3	..	..
– part-time	7.4	5.4	0.7	..	..
Agriculture	4.0	-4.4	-6.4	-4.1	..
Industries	4.9	3.3	2.9	0.9	..
Services	0.2	5.5	5.8	5.9	..
Civilian labour force ²	1.0	1.2	1.5	1.8	2.2
Men	-0.3	0.2	1.4	0.9	0.7
Women	2.8	2.5	1.6	2.9	4.0
Participation rate ^{2, 3}	70.2	70.4	70.9	71.7	72.9
Men	82.9	82.3	82.7	82.9	83.1
Women	58.1	59.1	59.7	61.0	63.1
Unemployment rate ²	7.1	5.7	5.0	4.6	3.9
Men	5.3	4.0	3.4	3.2	..
Women	9.5	8.0	7.2	6.6	..
Youth (15-24)	16.2	13.1	11.4	10.0	..
Long-term unemployment ⁴	47.5	42.0	38.2	34.7	..
Vacancies ⁵	0.2	0.2	0.2	0.2	..

1. OECD estimates.

2. Data based on the narrowest definition, which includes in the labour force, as unemployed, only persons who have been actively seeking a job during the four weeks prior to the survey.

3. As a percentage of population aged 15-64 years.

4. Unemployed for more than 12 months as a percent of total job-seekers.

5. As a percentage of labour force.

Sources: OECD, *Labour Force Statistics*, 1991; Bank of Portugal, *Monthly Bulletin*; and EC, *Eurostat*.

also the maturity of the business cycle, persistently strong activity was accompanied by a significant slowdown in the growth of productivity per employee to a rate of 2 per cent in 1990 and probably less than zero in 1991, from an average of 2.8 per cent in the 1985-89 period. However, with sharp rises in part-time employment, notably in early 1991, increases in hourly productivity were clearly stronger. Total employment rose by over 2½ per cent on average, compared with ¾ per cent in OECD-Europe. Substantial job creation took place in private services (6 per cent employment growth in 1990). On the other hand, employment in manufacturing fell by 2.3 per cent in 1990 but has seemed to be on an upward trend since early 1991. Extremely favourable labour-market conditions

contributed to continued rises in participation rates, yielding a 4 per cent rise in the labour force in the year to the second quarter of 1991 and further outflows of labour from agriculture.

Despite sizeable increases in the labour force, unemployment has continued to fall. The rate of unemployment declined from 8½ per cent in the mid-1980s to 3.6 per cent in the spring of 1991⁵⁵. Hard-core unemployment has been diminishing: the youth unemployment rate has fallen to less than 10 per cent, and long-term unemployment, though still representing a third of total unemployment, has been receding. Furthermore, according to calculations both by the Ministry of Finance and the Bank of Portugal, the actual unemployment rate has been below sustainable levels for about two years⁵⁶. Consistent with this evaluation, signs of shortages have appeared in some segments of the labour market, notably in construction and civil engineering and in the textile industry⁵⁷, and for some skills, mainly at the management level.

Persistently rapid wage and price inflation

Insufficient progress has been achieved on the inflation front. Labour-market tensions have fuelled an acceleration of wage increases since the beginning of 1990. Despite the agreement on wage moderation reached by the social partners in October 1990, the private-sector wage rate rose by 15½ per cent in 1991, led notably by the pick-up in private services. With the reform of the public-sector pay scales decided at the end of 1989, rises in government wages have been accelerating steadily to rates much above those in the private sector. Economy wide, real wages rose more than 5 per cent in 1991. The combination of slowing productivity gains and the pick-up in wage increases resulted in a noticeable acceleration in unit labour costs in both 1990 and 1991 (Table 19).

Consumer price inflation was on an upward trend until late in 1990; only recently has it been abating, as the year-on-year rate fell to 9.8 per cent in October. Nevertheless the Government's objective of an average rate of inflation in 1991 of 10¾ per cent, embodied in the Budget, is unlikely to be met. Furthermore, underlying inflation, i.e. excluding raw food and energy products, was, according to the Bank of Portugal, accelerating through most of 1990, largely reflecting the pressure of domestic demand, before easing markedly as of mid-1991. Nevertheless, at an annual rate of 12.0 per cent in October it was no lower than it had been at the beginning of 1990. Food-price inflation (with a

Table 19. **Cost and price deflators¹**
 Percentage changes from previous year

	1988	1989	1990	1991 ²
Private consumption	10.0	12.2	13.4	11.4
Total domestic demand	11.7	11.9	12.9	12.5
Export prices	8.8	7.5	4.5	4.1
Import prices	11.5	6.9	4.9	3.5
GDP	11.6	12.7	14.3	14.3
Compensation per employee ³	9.7	13.2	16.7	16.9
Unit labour costs ³	10.2	11.2	15.2	18.0

1. Price deflators are calculated at 1985 relative prices.

2. OECD estimates.

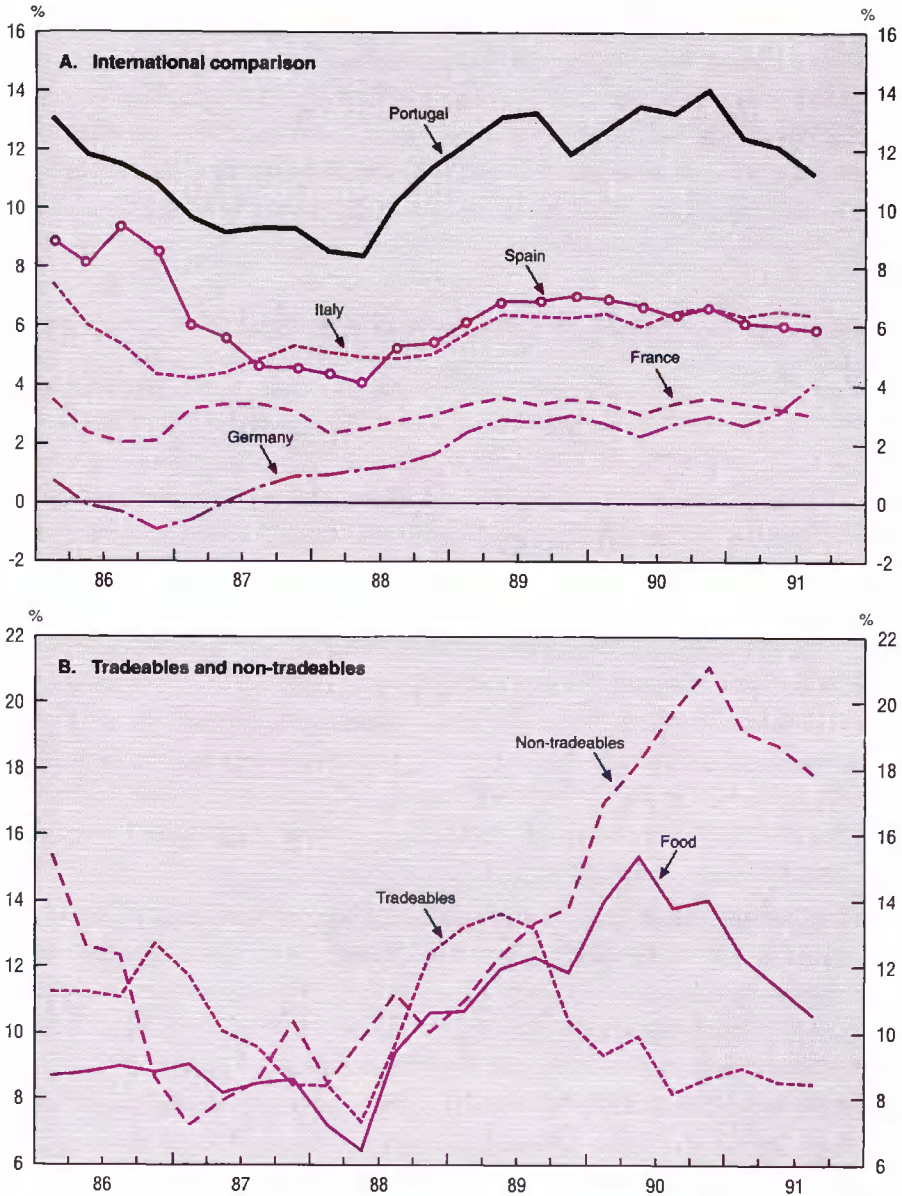
3. Total economy.

Sources: OECD, *National Accounts* and estimates.

weight of 48.6 per cent in the consumer price index), which had increased in the first half of 1990 because of difficult weather conditions, the withdrawal of some food price controls and the transferring of some items to classes with higher VAT rates, dropped substantially thereafter, assisted by a better harvest in 1991 and the beginning of the alignment process on Common Agricultural Policy price levels (Diagram 16). After the usual annual fuel-price rise in July 1990, developments in the Persian Gulf induced further increases already in September and October 1990, by nearly 10 per cent, as the authorities decided to allow higher oil prices to be fully reflected in higher energy prices to final users⁵⁸. Only in March 1991 were petrol prices lowered by 2½ per cent, leaving their level still 12 per cent above that of a year earlier. The inflation differential with the other EC countries on average, which continued widening during most of 1990, has recently fallen to 5½ percentage points in September 1991 (7.7 percentage points in 1990)⁵⁹.

Since about the end of 1989, price increases have not kept pace with cost inflation. The ‘real product wage’, i.e. nominal wage gains less the increase in the GDP deflator, rose more than productivity, implying some fall in the share of profits in national income. Indeed, faced with rising foreign competition because of the marked appreciation of the real effective exchange rate and the opening of the domestic market to EC producers, business had to accept a sizeable squeeze on profit margins, mostly on export sales. As a result, prices of tradeables,

Diagram 16. **CONSUMER PRICES**
Year-over-year percentage change



Sources: Bank of Portugal, *Monthly Bulletin*, and OECD, *Main Economic Indicators*.

calculated by the Bank of Portugal, have been slowing markedly, by $6\frac{3}{4}$ percentage points since the summer of 1989, helped by the rising trend of the escudo after the ending of the managed depreciation in October 1990. On the other hand, price rises of non-tradeables, mainly services, doubled to a rate of 21 per cent in the two years to the end of 1990, probably reflecting some catch-up effect from their low levels, as the level of real per capita income rises (see Part I). The inflation gap between tradeables and non-tradeables has since narrowed, as by October 1991 non-tradeables' price rises had abated to 12.6 per cent year-on-year.

Current-account balance and capital-account surplus

With the weakening of world trade expansion and recent losses of market shares by Portuguese exporters, the trade deficit widened from \$6.8 billion (11.4 per cent of GDP) in 1990 to an estimated \$7.7 billion (11 $\frac{1}{4}$ per cent of GDP) in 1991 (Table 20). A major part of the recent net foreign trade outcomes can be explained by relative cyclical positions, with Portugal's total domestic demand growing at rates of nearly 4 percentage points faster than those of its main trading partners. Reflecting the strength of domestic demand, merchandise-import growth accelerated sharply in 1990 (Table 21). The more moderate rise in domestic demand, combined with waning foreign demand for Portuguese goods, resulted in weaker import growth in 1991. In line with the buoyancy of private consumption, imports of consumer goods have increased especially sharply over the past two years. On the other hand, imports of equipment goods and intermediate goods in 1991 were affected, respectively, by the weakening trend of gross fixed capital formation and of exports.

Merchandise-export growth abated sharply both in the course of 1990 and in the first half of 1991 when they fell by 1 per cent in nominal terms (year-on-year rate), compared with a rise of nearly 17 per cent in the same period a year earlier. With export markets for goods growing by $5\frac{1}{2}$ per cent in 1990 and an estimated $3\frac{3}{4}$ per cent in 1991, export-market-share gains of some $6\frac{3}{4}$ per cent in 1990 may have given way to losses of 4 per cent in 1991. Overall, market penetration of Portuguese goods increased further in Spain, stabilised in Germany, but fell in the United Kingdom, the United States and France. This deterioration in export performance, in marked contrast with the medium-term strength of market-share gains, some 4 per cent on average since 1984, probably implies nascent competi-

Table 20. **Balance of payments**

US \$ million

	1988	1989	1990 ¹	1990 ¹ Jan-June	1991 ¹ Jan-June
Exports (Fob)	10 875	12 716	16 301	7 931	8 225
Imports (Fob)	16 393	17 594	23 129	11 070	12 132
Trade balance	-5 518	-4 878	-6 828	-3 139	-3 907
Services, net	1 014	1 196	1 381	368	245
<i>of which:</i> Tourism	1 869	2 102	2 688	1 004	1 067
Investment income, net	-877	-718	-243	-175	0
Transfers, net	4 317	4 539	5 500	2 368	2 604
Private	3 598	3 729	4 506	1 811	2 089
Public	719	810	994	557	524
Current balance	-1 064	139	-190	-578	-1 058
(as per cent of GDP)	(-2.4)	(0.4)	(-0.3)	(-0.7)	(-1.1)
Medium and long-term capital, net	843	2 798	3 401	1 313	1 877
<i>of which:</i> Foreign direct investment, net	658	1 500	1 832	894	715
Basic balance	-221	2 937	2 851	735	819
Short-term capital and unrecorded transactions, net	1 826	911	1 097	637	1 393
Balance on non-monetary transactions	1 605	3 848	3 948	1 372	2 212
(as per cent of GDP)	(2.7)	(5.4)	(4.6)	(1.7)	(2.3)
Short-term capital of private monetary institutions, net	-671	633	-446	1 572	-139
Balance on official settlements	934	4 481	3 502	2 944	2 073

1. Provisional figures.

Source: Bank of Portugal.

tiveness problems. The upward trend of the nominal effective exchange rate since the escudo has been allowed to float, has implied an even more rapid pace of appreciation of the real exchange rate in terms of relative unit labour costs and relative consumer prices (Diagram 17). The deterioration in relative export prices was more limited, as Portuguese exporters have absorbed a large share of the appreciation through a further compression of their profit margins, rebuilt over the 1984-88 period, in order to safeguard their market shares. But, with the

Table 21. **Foreign trade**
Percentage changes

	1988	1989	1990	1991 ¹
A. Volumes				
Total exports	10.2	19.8	12.0	-0.2
<i>of which:</i> Capital goods	20.5	34.9	10.5	..
Consumer goods	9.6	19.3	12.7	..
Intermediate goods	4.7	12.9	12.2	..
<i>Memorandum item:</i>				
Growth in markets	9.6	9.0	5.6	3.8
Total imports	22.1	8.3	15.6	6.9
<i>of which:</i> Capital goods	30.0	8.9	11.7	..
Consumer goods	41.9	7.2	26.4	..
Intermediate goods	12.5	5.3	16.1	..
Energy	7.8	22.4	6.6	..
B. Average values				
Total exports	9.5	6.3	3.5	2.2
Total imports	7.1	7.8	3.4	2.8
<i>of which:</i> Energy	-11.6	23.8	14.6	3.1

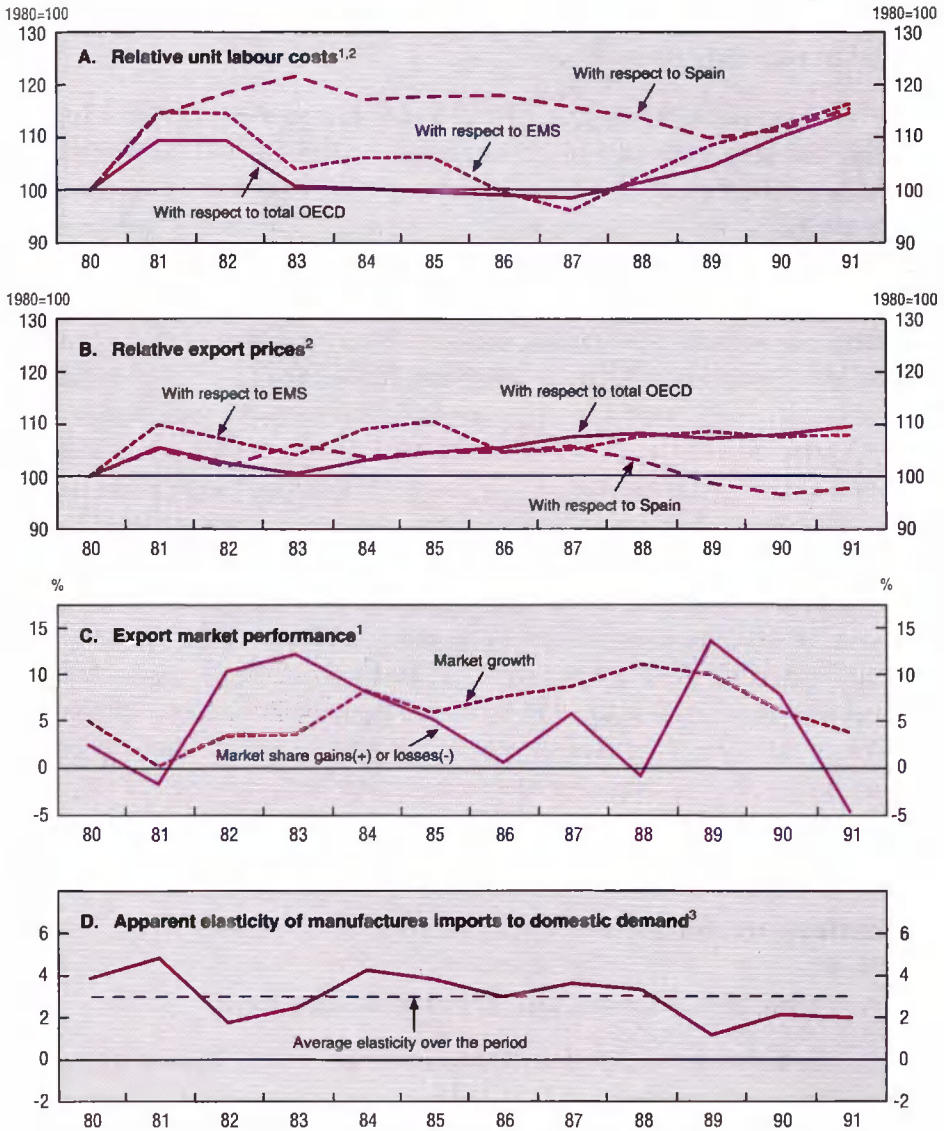
1. OECD estimates.

Sources: Ministry of Trade and Tourism and OECD.

dynamism of domestic demand, weak export margins may have contributed to diverting some production from foreign to domestic markets.

The current account was in approximate balance in 1990⁶⁰ but is likely to register a deficit of nearly 1 per cent of GDP in 1991, as the deterioration in the trade balance may not be offset by an increase in the traditional surplus on services and net transfers. The surplus in the balance on invisibles widened further in dollar terms, though remaining at some 11 per cent of GDP in both 1990 and probably also in 1991, as in 1989. The surplus on services was supported by net tourism receipts, as the Gulf events did not affect 1990 outcomes, and, according to preliminary estimates, the 1991 summer season was especially good. The widening of the surplus on transfers was induced by increases in migrants' remittances in 1990, accelerating in the first half of 1991, and by EC transfers. The deficit in net investment income shrank from \$718 million in 1989 to \$243 million in 1990, directly linked to the accumulation of foreign currency reserves; in the first six months of 1991, according to prelimi-

Diagram 17. INDICATORS OF COMPETITIVENESS AND FOREIGN TRADE



1. Manufacturing.
 2. In a common currency.
 3. Domestic demand plus exports, in volume.
 Source: OECD estimates.

nary estimates by the Bank of Portugal, net investment income was in approximate balance for the first time since the early 1970s.

Capital movements and external debt

A salient feature of the external accounts lies in the sizeable surplus on medium- and long-term capital account since 1989. In a context of favourable interest-rate differentials and limited exchange-rate risk, foreign direct investment contributed most, representing 3 per cent of GDP, while foreign credits received have been falling since the middle of 1990, reflecting the restrictive measures introduced in July of that year and the early repayment of medium- and long-term public debt (see above). Thus, the basic balance, with a surplus of \$2.9 billion (3 per cent of GDP) in 1990 and \$0.8 billion (1 per cent of GDP) in the first half of 1991, was in a strong position, leading to the very high levels of foreign-exchange reserves (\$20.3 billion by the end of 1990 and \$21.6 billion, or more than ten months of imports, by the end of July 1991). The short-term capital balance was in comfortable surplus in 1990 and the first half of 1991, entirely due to the item "other short-term operations, errors and omissions". This may possibly indicate that the series of capital controls, introduced beginning in July 1990 in order to check excessive liquidity increases, have to some extent been circumvented. With a fall in the external short-term debt of public non-financial enterprises and, as in 1989, advanced repayments of public foreign debt, total non-monetary foreign debt shrank by end-1990 to \$18.4 billion, or 28.9 per cent of GDP. The nation appears to have become a net creditor as of the second half of 1989.

The outlook to end-1993

The economic-policy stance and external environment

As is customary, the OECD's short-term projections are based on the technical assumption that economic policies remain unchanged over the relevant horizon. With the Budget for 1992 delayed by the October general elections, no new fiscal policy measures have been incorporated, and, on present trends, the general-government budget deficit might increase to 6 $\frac{3}{4}$ per cent of GDP in 1992 and 1993, due to cyclical factors as well as the ongoing increases in the effective

interest rates on government debt. Monetary policy is expected to aim at bearing down on inflation, with the result that short- and long-term interest rates should remain high both in nominal and real terms. Under the assumption of fixed nominal exchange rates, the escudo experiences further real appreciation.

Growth in the OECD area is projected to pick up during 1992 and 1993, though slightly less so in Europe. The present OECD projections, as published in *Economic Outlook 50* in December 1991, put annual growth of activity in Member countries at around $2\frac{1}{4}$ and $3\frac{1}{4}$ per cent in the coming two years and export market growth for Portugal's manufactures at $5\frac{3}{4}$ per cent in 1992, accelerating to $7\frac{1}{4}$ per cent in 1993. On the basis of unchanged nominal exchange rates from those in early November 1991, high domestic inflation would lead to further losses in cost competitiveness. However, if exporters absorb the largest part of the appreciation through further cuts in their profit margins, as they have done in the past two years, the deterioration in relative export prices should be more limited. Finally, the projection is based on an oil-price assumption of \$19 a barrel in the second half of 1991, with no change in real terms thereafter.

Short-term prospects: persistent imbalances

On the basis of this hypothesis of largely accommodating domestic policies and against the external background discussed above, the present set of projections are for no unwinding of the existing macroeconomic imbalances. Overheating of the domestic economy is projected to persist, while the strongly negative contribution of real net exports to output growth might worsen further (Table 22). Total domestic demand should continue to increase at rates of nearly 5 per cent, based on robust private consumption and a stabilisation in gross fixed capital formation increases, following the slowdown in recent years. The former is expected to be sustained by strong rises in real disposable incomes and further falls in the personal saving ratio to just above 21 per cent by the end of the projection period, in line with slightly moderating inflation and improved access to credit in 1993. Export growth is projected to recover from its very weak increase in 1991. With the pick-up in total sales and assuming that the average demand elasticity of imports rises only slightly from its 1991 outcome ($1\frac{1}{2}$), the growth of imports should accelerate to a rate of over 7 per cent by 1993. GDP

Table 22. **The short-term outlook**
Percentage changes

	1991	1992	1993
Demand and output			
Private consumption	5.6	5.3	5.1
Government consumption	3.0	3.2	3.3
Gross fixed investment	4.5	4.5	4.4
Final domestic demand	4.9	4.9	4.7
Stockbuilding ¹	0.0	0.1	0.1
Total domestic demand	4.8	4.8	4.6
Exports of goods and services	1.5	3.6	4.8
Imports of goods and services	5.4	7.1	7.3
Foreign balance ¹	-2.9	-3.2	-3.0
GDP	2.7	2.6	2.7
Inflation			
Private consumption deflator	11.4	10.5	9.9
GDP deflator	14.3	13.5	12.5
Labour market			
Employment	3.0	0.5	0.2
Unemployment rate	3.9	4.5	5.3
Trade balance ²	-11½	-12¼	-12¼
Current balance ²	-1	-2	-2½
Saving ratio ³	22.2	21.7	21.1

1. Change as a per cent of GDP in the previous period.

2. As a per cent of GDP.

3. As a per cent of households' disposable income.

Source: OECD, *Economic Outlook*, No. 50, December 1991

growth is projected to stabilise at rates near 2¾ per cent, below the growth rate of potential output.

Employment is expected to adjust with a lag to more moderate output growth, and job creation should weaken markedly in 1992 and 1993. The unemployment rate is likely to increase, and the labour market will probably remain very tight throughout the projection period. Real wage gains will accordingly continue to exceed productivity growth, although by a declining margin. Thus, inflation may subside only gradually, and consumer price rises could fall to a rate of less than 10 per cent by 1993. With almost stable increases in both export and import prices, little in the way of terms-of-trade changes is expected in 1992 and

1993. Along with the projected falls in real net exports, this could result in a further enlargement of the current-account deficit to perhaps 2½ per cent of GDP by 1993, as the traditional surplus on invisibles is not expected to be sufficient to offset the widening in the trade deficit.

Risks and uncertainties

The present set of projections is characterised by especially large uncertainty, notably with respect to the stance of fiscal policy. Pending the 1992 budget, the authorities are assumed here to continue to follow an expansionary fiscal policy. However, recognising the unsustainability of present economic developments, they may tighten fiscal policy in 1992, in line with past post-election experience, which would cool domestic demand, bring about faster labour-market adjustment and quicker disinflation. Another particularly uncertain element is the sharp slowdown of employment growth. Continued labour hoarding leading to less easing in labour-market tensions and a failure by employees to moderate their wage demands could boost disposable incomes and therefore domestic demand still further, thus preventing cost pressures from abating significantly. In a context of accommodating macroeconomic policy, higher labour costs could largely pass into price rises, thereby further slowing the inflation adjustment and delaying entry into the exchange-rate mechanism of the EMS. In any case, competitiveness problems, which seem to have appeared during 1991, could become even more serious than projected here. In this connection, recent trade developments seem to imply possibly larger losses of market shares, despite the still low level of relative wages, as the effects of the deterioration in price competitiveness may have begun to surpass those of the ongoing increases in aggregate supply. Financing higher current-balance deficits should be relatively easy in the short to medium-term. However, should ever-widening deficits occur, their financing might eventually become a matter of concern, insofar as investors' confidence could be affected.

IV. Conclusions

The lengthy period of expansion has shown signs of maturity over the past year with a marked deceleration in GDP growth in 1991. In conjunction with the world-wide cyclical downturn, inflation looks as if it has put an end to the remarkable record of activity increases achieved over the five years to 1990. A substantial further improvement in inflation outcomes would appear to be vital in order to resume higher growth rates. While Portugal has succeeded in continuing to narrow the real-income gap with the rest of the EC, this has been accompanied by ever-mounting utilisation of available resources. It has been clear for some years now that demand pressures were straining the economy's supply potential. Over the past year such strains have become even more obvious, with signs of overheating manifest: domestic demand has soared; employment growth has picked up, and unemployment has plunged to historic lows; exporters have begun to experience competitive difficulties in foreign markets; and profits have been squeezed by the scissors movement of surging real wages and waning productivity growth. While increases in the consumer price index have slowed in recent months, thanks primarily to easing food- and energy-price rises, other measures of inflation have abated to a lesser extent, despite the restraining effects of an appreciating currency. The inflation differential with the rest of the EC remains nearly 6 percentage points for consumer prices.

Real GDP growth probably fell back to about $2\frac{3}{4}$ per cent in 1991 from an average of $4\frac{1}{2}$ per cent in the preceding five years. However, increases in final domestic demand, at close to 5 per cent, greatly exceeded this rate. Even more troubling, however, has been the ongoing shift in the composition of domestic demand from supply-enhancing capital formation to current consumption. With strong demand pressures, the real foreign balance continued to deteriorate rapidly, as export volumes failed to keep pace with market growth for the first time since 1988. The current account has probably moved from a broadly balanced to

a modest deficit position, as the worsening on goods and services account was only partly offset by a near-elimination of the deficit on investment income and a further increase in transfer receipts. The financing of this current deficit has been easily accomplished by capital inflows; indeed, those of a long-term duration alone have been more than sufficient to yield a sizeable basic-balance surplus.

Based on the usual technical hypothesis that economic policies remain unchanged, a particularly tenuous assumption given the imminent presentation of the post-electoral 1992 budget along with the authorities' ambitious medium-term targets, the salient features of the current conjuncture could continue over the next two years. Output growth – at about $2\frac{3}{4}$ per cent per year – would continue to exceed that registered by nearly all others in the OECD but fall short of potential rates of $3\frac{1}{2}$ to 4 per cent. The boom in private consumption would be sustained, but investment growth would feel the pinch of high real interest rates and reduced profitability. The significant negative contribution to GDP growth from the foreign balance could persist, despite the expected rebound in export market growth, due to diminished cost competitiveness resulting from the continuing real effective appreciation. The visible-trade deficit, already some $11\frac{1}{2}$ per cent of GDP in 1991, is likely to widen further, while the invisible surplus is more likely to rise only in line with GDP, leaving a growing shortfall on current account, which might reach some $2\frac{1}{2}$ per cent of GDP by 1993. Job creation would undoubtedly slow, as employers finally begin to adjust their labour demands to the slowdown in activity, and the downward trend in joblessness would reverse, although tensions may not subside before the end of the projection horizon. Thus, under the usual fixed exchange rate assumption and in the absence of other policy changes, especially as regards a fiscal adjustment strategy, disinflation may be quite limited, with all measures of wage and price inflation still close to the double-digit range through 1993.

There is little doubt that joining the EC has contributed towards Portugal's excellent output performance over the period since accession. Most obviously, membership has made available a wide range of EC programmes grouped together under the Community Support Framework. Generous amounts of Community assistance have been provided in order to help overcome Portugal's long-standing infrastructural weaknesses and to upgrade the nation's stock of both physical and human capital. While the efficiency of some of these expenditures may be open to question, there is no denying that they have had a favourable

microeconomic impact. But, equally importantly, EC accession has led to a change in foreign investors' perceptions of Portugal's prospects, leading to a surge in long-term capital inflows. By complementing national saving to the tune of some 30 per cent, such flows, like the official transfers represented by EC structural funds, have boosted the amount of domestic investment which could be undertaken without encountering financing difficulties, and the share of fixed capital formation in GDP has jumped by over five percentage points since 1985. Inward direct investment in particular has most probably served to restructure and modernise supply capacity, strengthen international competitiveness and supplement the stock of indigenous managerial skills. The external constraint has also been eased via the substantial amount of trade creation that has taken place: exports to EC partners have benefited from a sizeable expansion in recent years, as barriers have been dismantled and business strategies have been re-oriented. At the same time, increased openness to imports has no doubt injected a much-needed dose of competition into domestic markets.

Portugal has also availed itself of the opportunity represented by EC integration to undertake some vital structural reforms designed to improve the functioning of markets as resource-allocation mechanisms. The former system of sales taxes was replaced by a value added tax in 1986, and the outmoded income tax was updated in 1989 by lowering effective marginal rates, broadening the base and curtailing opportunities for evasion. Also in 1989 labour-market legislation was revised so as to reduce rigidity by facilitating lay-offs. The swollen public-enterprise sector has been shrunk through an ongoing series of privatisations which should enhance performance by reducing state intervention, spurring competition and stimulating efficiency, besides cutting government indebtedness. At the same time substantial progress was made in trimming the sector's borrowing requirement. Finally, the capital markets have been refashioned through a liberalisation of interest rates and credit extension, a reform of the stock exchanges and, until controls were recently introduced on capital inflows, a diminished segregation from foreign markets. All told, these policy changes, combined with the aforementioned additional investments, have provided a significant boost to the growth rate of potential output.

However, there are two areas where the integration process has not yet made sufficient progress. First and foremost is the lack of so-called "nominal convergence": the failure to achieve a sufficient reduction in the inflation gap with EC

partners. Initially, the target date for the elimination of this differential was 1989, but while rapid progress had been made in 1984 and 1985, gains slowed in 1986 and 1987, and the process began to reverse as of the spring of 1988, leaving a substantial residual gap in recent years. Persistently high inflation is the natural outcome of excess demand, initially in product markets and later in the labour market as well. This demand has been fuelled by the massive inflows of EC transfers and private capital but has also been compounded by a substantial rise in public spending. As of 1986, additions to domestic demand consistently outpaced increases in output (by an average of 2½ percentage points), and labour demand growth was not matched by increases in the labour force. The unemployment rate fell steadily and eventually dropped below its sustainable level, resulting in unmistakable tensions by 1990, despite the availability of underutilised labour in the agricultural sector.

The macroeconomic policy response to this imbalance was insufficient, partly due to certain implementation difficulties. Some degree of optimism with regard to the economy's potential capacity, and the availability of external financing, mitigated the urgency of dealing with the problem. As a result, inflation targets have been overshoot. Budgetary policy, which had been mildly restrictive, turned inappropriately expansionary in 1990 and 1991. The cost of the civil-service pay-scale reform was underestimated, and current expenditure ballooned: its share in GDP jumped by some 3 percentage points, and the deficit surged to 6½ per cent of GDP, the same as in 1986. However, this represents not merely a reversal of gains previously made, for the economy has since moved from a state of some excess capacity to one of considerable overheating, implying that the underlying structural deficit is greater than the current high actual deficit. This is a problem which will have to be solved as a condition for Portugal's full participation in Economic and Monetary Union, as is explicitly recognised in the programme of the Government elected in October.

Monetary policy has tried in vain to fill the anti-inflationary vacuum, but it has faced a nearly impossible task, given a set of incompatible objectives and binding constraints. With quantitative controls on credit in the process of being phased out, any tightening would be effective only if it led to higher interest rates to cool domestic demand and currency appreciation to switch expenditure to foreign goods. Upward pressure on the escudo was in any case the natural result of the increase in autonomous current and capital inflows which normally would

have made at the same time for a larger deficit on current account and, equivalently, to a desirable increase in domestic investment for any given amount of saving. However, underestimating the easing of the external constraint and possibly not realising the extent of the eventual real appreciation and its vital role in achieving internal and external equilibrium, the monetary authorities have resisted any significant nominal appreciation due to the risk of overshooting and a fear of its competitiveness impact on the balance of payments. Accordingly, substantial foreign-exchange reserves, averaging nearly 6 per cent of GDP per year since 1987, have been accumulated, and, more recently, a wide range of controls on the inflow of capital have been imposed. While the crawling peg exchange-rate regime had eventually to be jettisoned in late 1990, the central bank was unable to sterilise fully such inflows, which have continued despite the controls, and domestic liquidity has tended to overshoot targeted levels. It is therefore not surprising that the result has been unexpectedly strong domestic demand and persistently high inflation, with only a limited deterioration of the current account.

After the government's mandate had been renewed, it reiterated its commitment to correct the current policy imbalances and set the economy firmly on a path of rapid disinflation. In order to be successful in attaining nominal-convergence goals, the broad outlines of a set of intended policy changes were presented to the European Commission for assessment at Community level. The core element is to be a substantial move to budgetary contraction, primarily through a cut in public consumption combined with enhanced efficiency in the delivery of public services. The reduction in current spending is all the more vital in that public investment remains relatively low as a share of GDP and will need to be raised so as to improve physical infrastructures. In addition, consideration is given to moves designed to generate increased tax receipts through moves toward indirect tax harmonisation with the rest of the EC. Not only is budgetary tightening called for in order to dampen domestic demand and ease labour-market pressures, it will also make for a superior policy mix, as the resulting increase in domestic saving will minimise the need for further real appreciation, and the associated eventual reduction in interest rates will temper the inflow of foreign capital. Of course, the consolidation of Portugal's public finances is also a desirable goal in its own right, given the high level of the structural budget deficit. Furthermore, without fiscal compression the recent trend to declining

levels of indebtedness in relation to GDP might not be sustainable, as the growth rate of nominal GDP may fall, and the effective interest rate on public debt may continue to rise.

While monetary policy formation has been beset by conflicting objectives, a more effective control of liquidity is imperative. This is likely to entail a greater degree of flexibility of exchange-rate policy: indeed, market forces should be allowed to play a greater role, and resistance to nominal appreciation should be reduced. Possible regional and sectoral difficulties should not impede sufficiently ambitious disinflationary policies. Low-exchange rate policies should not be used to support manufacturing activities for which Portugal may no longer have a comparative advantage or may lose it in the near future. Portugal plans to participate in the EMS exchange rate mechanism as soon as conditions are appropriate. The optimal time to join the mechanism is a complex and difficult question, but it is clear that the advisability of early entry depends on the success achieved in moves to tighten budgetary policy and in curbing inflation expectations. Entry with a large inflation differential might imply significant problems in determining the optimal parity so as to avoid future currency misalignment which would undermine competitiveness; it might also lead to excessive pressures for interest-rate reductions. However, in conjunction with the adoption of credible policies, adherence to the ERM would assist in breaking the inflation/depreciation psychology that has been so important in the past. The discipline that it would impose, and be seen to impose, could help to ease the costs of lowering inflation, in turn contributing to the credibility of the overall policy stance. Incomes policy might also prove more effective in the context of appropriate macroeconomic policies and of more substantial progress on the disinflation front.

While macroeconomic policy changes are a prerequisite for faster disinflation, further structural reforms designed to enhance the economy's supply responsiveness would also lessen its inflation proneness. Remaining constraints on lay-offs could usefully be eased, while efforts should be made to improve regional and sectoral mobility. Greater attention should be paid to the use made of EC structural funds, especially those destined for the upgrading of human capital, for shortages in this dimension are likely to spread in coming years. After the slowdown imposed by the Gulf War and the October elections, the authorities have moved to accelerate the pace of privatisations, especially in the industrial

sector, in order to permit a further reduction in government subsidies to public enterprises and instil more competition into domestic markets. Other efforts have also been announced to step up the degree of competition, especially in the services sector where inflation is particularly rife, and profitability is still very high. With these policy reforms in place, the natural development of the economy should make for a satisfactory evolution of the sectoral structure of production and external trade without the need for direct intervention.

Over the years since EC accession the Portuguese economy has faced immense challenges and has already successfully overcome many of them. Output and employment performance have been excellent, and the balance of payments has remained strong. However, it is likely that the long-term success of its integration into the European Community will be judged not so much by the results achieved thus far, but rather by the nation's ability to complete the process of monetary and economic union as an equal partner among the twelve. To do so clearly requires that the inflation problem be mastered. Decisive steps in this direction are essential if Portugal is to be in a position to meet the eventual requirements of European economic and monetary union. Thus, it is to be hoped that the Government's recent medium-term convergence programme will be successfully implemented, starting in the 1992 Budget.

Notes and references

1. In 1988 Portugal was given the right to a possible three-year delay on the elimination of capital controls. In spirit, this was meant to be reserved for the case of inhibiting capital outflows, rather than the recent problem of excessive inflows.
2. The only available evidence (Lopes Porto, 1982) shows simple averages of 14 and 33 per cent for nominal and effective rates of protection across 45 sectors in 1982 for Portugal as against 11 and 23 per cent for the EC. However, the latest *OECD Economic Survey of Spain* (Table 15) quoted Spanish research which placed the average common external tariff at 5 and 4 per cent respectively. In the mid-1970s Spanish tariffs as well as non-tariff barriers exceeded those in Portugal (Donges and Schatz, 1985).
3. Furthermore, Portugal was allowed to keep the revenues it collected in the form of levies and duties on agricultural imports for the first five years. Also part of Portugal's contribution to the EC budget was to be refunded until end-1991.
4. Gordon (1991) enumerates a list of possible rationales for EC structural funds: first, equity-based arguments to reduce regional disparities and promote social cohesion; second, efficiency-based explanations of market failure due to imperfect information and to spillovers between jurisdictions associated with factor movements; and third, the fulfilment of stabilisation objectives in the face of regional exogenous shocks. In the future, there will also be grounds for transfer payments in order to compensate losers from the 1992 programme, to offset revenue effects from tax harmonisation and to substitute for the removal of national instruments to achieve regional objectives.
5. In 1985 it was estimated that Portugal's infrastructural endowment was only 40 per cent of the EC average and that ECU 40.8 billion would be needed over ten years in order to raise it to 80 per cent of the then-existing OECD average – see Padoa-Schioppa (1987, Table E.3).
6. The PEDIP is intended to revitalise the existing industrial base, to develop and create new industries, to eliminate or at least attenuate structural competitive disadvantages and to promote dynamic specialisation and reinforce competitive-

ness. It represented 2 per cent of GDP in 1988/89 but is scheduled to rise to 4½ per cent by 1993.

7. Negotiation is now underway on what will follow in 1994.
8. Care should be taken when interpreting such data, as there is a considerable lag between commitments and actual cash transfers.
9. This risk of bureaucratic “capture” is parallel to that of regulatory capture in the literature on regulation – see, for example, Baldwin (1990).
10. The authorities undertake a meticulous evaluation of each individual firm and set the offer price based on a targeted real after-tax rate of return of 8 per cent. Special price advantages are offered to employees (about 10 to 15 per cent) and small investors (approximately 5 per cent). Such shares may not be disposed of for at least one year.
11. 1) 33 per cent of Banco Português do Atlântico (BPA) in December 1990; 2) 100 per cent of Sociedade Financeira Portuguesa in May 1991; 3) last 51 per cent of Aliança Seguradora in May 1991; 4) 100 per cent of Diario de Noticias in May 1991; 5) 60 per cent of Bonança in June 1991; 6) 40 per cent of the Banco Espirito Santo e Comercial de Lisboa in July 1991; and 7) 100 per cent of Banco FONSECAS e Burnay in August 1991.
12. The required period of employment in order to qualify for unemployment benefit was fixed at 18 months during the previous two years, the replacement rate at 65 per cent and the duration of benefits as a function of age (21 months for those over 40). Portugal has one of the highest shares of dependent employees on temporary contracts in the EC (17 per cent).
13. Eurostat data show that 11.8 per cent of Portuguese labour costs in industry in 1988 were comprised of bonus payments, compared to a simple average of only 4.2 per cent in Denmark, France, Germany and the United Kingdom.
14. It would appear that in as many as ¼ of all cases, the common external tariff actually exceeded Portugal’s previous tariff rate – see Lopes Porto (1982).
15. The magnitude of this shift is of macroeconomic significance. If Portuguese exports to the EC had grown only in line with exports to non-EC destinations after accession, the value of exports would have been reduced by an amount which rose from 1.4 per cent of GDP in 1986 to 3 per cent of GDP in 1990.
16. This is probably largely the result of relative price movements, as Portugal has only very gradually integrated into the CAP.
17. Given relatively high employer-social-security contribution rates, relative costs are a bit higher when total compensation is considered. Note that once differential levels of labour productivity are allowed for, the gap is assuredly much smaller. In Commission of the European Communities (1990, Table 9.2), it is reported that unit labour costs in Portugal were some 14 per cent below the EC average in 1987.

However, level comparisons of relative unit labour costs are notoriously difficult because of differences in industrial structure.

18. It should be noted that Portuguese agriculture suffered a very bad harvest in 1988, thereby exaggerating the shrinkage apparent in Table 9, Part A.
19. The problems of the agriculture sector were treated in detail in the 1988/89 *OECD Economic Survey of Portugal*.
20. Up to 45 per cent of farmers are said to be illiterate.
21. About half of all Portuguese farms have less than 1 hectare of land, 72 per cent less than 5 hectares and 94 per cent less than 20 hectares. Furthermore, there is a substantial amount of land parcellation – fragmentation due to non-contiguous holdings.
22. This is the lowest in the OECD outside of Turkey. A few years ago only 250 industrial firms performed any R&D, while two-thirds of the largest did none; see Pereira (1988).
23. Domestic saving is also supplemented by the capital component of the EC structural funds, estimated by the authorities at a further 7 per cent of national saving.
24. Simões (1985) has shown that in the Portuguese case affiliates of foreign firms have higher productivity levels and are more oriented to hi-tech and skilled-labour-intensive industries; in addition, there may be a favourable demonstration effect on Portuguese entrepreneurs. However, they undertake little domestic R&D, have restricted vertical linkages and may engage in transfer-price manipulation. Viñals *et al.* (1990) demonstrate for Spain that manufacturing sectors with high FDI levels had higher output and labour-productivity growth in the years since accession.
25. There is some evidence that the Portuguese tax system, like that of Ireland, albeit to a lesser extent, provides a moderate incentive to import capital – see Centre Européen de Recherches et de Documentation Parlementaire (1990).
26. Witness its position in the annual Institutional Investor ranking which moved up from 39th in 1986 to 23rd most recently.
27. The quality of a nation's telecommunications system and its road network were named as the two most important factors in locational decisions in the EC in a recent survey of the business community – see *Regional Policies in the European Single Market* (1990).
28. Averaging over the period 1986-88, the North, Alentejo and Algarve were among the five regions with lowest per capita incomes in PPP terms of the 170 in the EC (de Macedo, 1991).
29. It would be desirable to adjust the output/income concept used for such comparisons; rather than GDP, a preferred aggregate is national disposable income which includes net factor and current-transfer income and excludes consumption of fixed capital. Over the years since accession this aggregate has grown slightly faster than

GDP and its level is 2 per cent greater than that of GDP. By way of comparison, Spain's national disposable income is over 11 per cent less than its GDP, while for Greece the gap is 5 per cent.

30. Because EC transfers are not repaid, income growth can continue at the higher level since there is no income transfer required to effect repayment.
31. The number of years required is $\ln(x)/\ln(y)$ where x is the current gap, i.e. the ratio of Portugal's real GDP per capita to that of the EC (in PPP terms) and y is the growth rate differential in the form $1 + r/100$, r being measured in percentage points.
32. For example, recent Bank of Portugal research places potential growth at 4.7 per cent in the early 1990s (Marques, 1990). This is a rate unequalled since the 1970s. The rebound is ascribable to a pick-up in labour-efficiency growth resulting from the investment boom. The calculation assumes that the boom will continue, total investment growing at 8 per cent in volume terms. This is significantly above Secretariat projections. Furthermore, the implied investment rate (the ratio of investment to capital) at $11\frac{1}{2}$ per cent is high by international standards: the corresponding figures for the major European countries are in the 6 per cent range, and only 9 per cent even for Spain.
33. This is perfectly consistent with the results of Bank of Portugal research (Marques, 1990).
34. See, for example, Table 5 of the previous *OECD Economic Survey of Portugal*.
35. An unsustainable appreciation might also have negative competitiveness and resource allocation effects through hysteresis-in-market-shares arguments. For an exposition of the reasons to fear currency revaluation in the current Portuguese context, see Chau (1990).
36. The concomitant increase in the relative price of non-tradeables (see Part III) is typical of the development process due, at least in part, to their high income elasticities. It has long been known that there is a relationship between a country's real income level and its real exchange rate – see, for example, Hill (1986) and, more recently, Helliwell *et al.* (1990).
37. But even that was insufficient to offset the capital inflows, and capital controls had to be imposed in 1990 (see section on monetary policy). However, it is likely that the real exchange rate is little affected by capital controls (van Wijnbergen, 1989) other than in the very short run. Furthermore, there are direct financial costs to the nation resulting from this reserve accumulation: while non-residents earn high returns on the acquired Portuguese assets, the central bank earns much lower returns on its reserve assets (usually U.S. Treasury bills).
38. The inflation-reduction effect of the ERM has been hotly debated. See Haldane (1991) for a recent review.

39. However, creditor risk will probably remain. For example, if one examines the share of general-government receipts that would be allocated to interest payments were effective rates to converge to 1990 market rates, one finds shares varying from 7 per cent (France) to 42 per cent (Greece). Portugal ranks fourth highest at 26 per cent. See Bishop (1991).
40. Real GDP increased by 4.2 per cent in 1990, against 4 per cent projected in the Budget, and consumer prices rose by 13.4 per cent, against a projected range of 9 1/2 to 10 1/2 per cent. In addition, a greater share of interest earned on the public debt was taxable.
41. According to the OECD, the effective value-added-tax rate in Portugal, at 9.0 per cent of total public and private consumption expenditure in 1989, was very similar to the average rate of EC countries. 30.9 per cent of total consumption was exempted from VAT, 33.7 per cent was subjected to the reduced rate of 8 per cent, 35 per cent to the standard rate of 17 per cent, while the remaining 0.4 per cent was taxed at the luxury-goods rate of 30 per cent.
42. A noteworthy development in 1991 was the issuance of some unindexed long-term debt. This was intended to lower the volatility of interest payments and to stop the vicious circle between increases in short-term rates in order to combat inflation and increases in demand-stimulating capital inflows *via* rises in indexed longer-term rates.
43. The average rate of remuneration was about 7 1/2 per cent, but rates varied from zero to 16 per cent depending on the instrument. Given inflation of over 13 per cent, these returns were decidedly negative.
44. It should be noted that, while this more effectively wipes out seigniorage, the effectiveness of monetary control suffers due to the weakness of credit supply effects to the extent that the resulting opportunity cost of reserves is low.
45. See Banco de Portugal, *Quarterly Bulletin*, 13,1, March, 1991 for an explanation of the underlying methodology utilised for these corrections. However, they are of a fragile nature, and there is evidence that they may be overdone: when measured by daily data excluding the unusual end-of-month periods, the year-on-year growth of L^* has consistently exceeded the adjusted growth since the spring of 1990 with an average difference of 2 percentage points (at an annual rate). It is possible that even without credit ceilings commercial banks are trying to limit month-end liquidity and credit in order to convince the central bank to ease policy.
46. Given rather moderate increases in emigrants' deposits the pick-up in overall liquidity held by the public (L) was rather less than that of L^* (which excludes such deposits). For 1990, the Bank used corrected L^* plus non-monetary financial assets as a reference for monetary policy. This aggregate grew slightly faster than corrected L^* alone.

47. The Bank had anticipated a 1 percent increase in velocity in setting its 1991 target. Given the average 6 per cent increase in 1989-90, this was clearly normative. Indeed, based on the Bank's own latest projections, velocity may have risen by even more than in the two previous years, with inflation as measured by the GDP deflator 5 points above its accommodated level.
48. Again, the correction for the abnormal float may be overdone: using average weekly data the corresponding figures for 1990 were 15.5 per cent and for June 1991 20.3 per cent. While it is likely that the end of the credit-ceiling regime resulted in some increased recording of credit extensions and bank re-intermediation, there is no doubt that private-sector demand for credit is extremely strong and has shown no signs of abating thus far.
49. The relevant withholding rate is 20 per cent. This generated a real, annual after-tax return of -0.5 per cent in June 1991.
50. The basket is comprised of the Deutschmark (with a weight of about 36 per cent), the peseta (20 per cent), the French franc (19 per cent), sterling (15 per cent) and the lira (11 per cent). In September 1991 the Bank ceased providing a daily fixing for all foreign currencies.
51. The advantage of not raising the primary-market rate was that virtually all of the State's longer-term debt is remunerated at rates which are indexed to the primary bill rate. Thus, such a move would have been extremely costly for the Treasury. Furthermore, higher bond rates would have attracted even greater capital inflows – a potential vicious circle. The procedure, however, gave way to the further tightening of controls as well as official intervention rate increases, described in the text.
52. Excluding the special sessions held for privatisation purposes, over half of all equities were traded off the exchanges in 1990, compared with one-third in 1988, while for bonds the corresponding figure is about 80 per cent. However, 1990 saw the first limited signs of success in effecting a greater proportion of new share issues through public subscriptions; nevertheless, this share remains very limited.
53. Over the period 1985-90, real private consumption growth accounted for about 50 per cent of total domestic demand growth.
54. According to EC surveys, the breakdown of recent industrial investment by type is as follows:

	1988	1989	1990	1991
	Per cent			
Extension	63	47	43	41
Replacement	18	21	26	29
Rationalisation	13	24	21	23
Other	7	8	7	8

55. The broader measure of the unemployment rate, based on registration data, fell even more markedly from 10.4 per cent in 1985 to 4.2 per cent in the spring of 1991.
56. However, in a country where some 17 per cent of total employment is in agriculture, the measured rate of unemployment might overestimate labour-market tightness.
57. According to the Ministry of Industry, one-third of surveyed textile producers cited shortages of skilled labour as a major problem.
58. According to simulations made with the OECD INTERLINK model, the energy-price increases seem to have added less than $\frac{1}{2}$ a percentage point (annual rate) to inflation in the latter part of 1990, as the US dollar depreciation absorbed most of the rise in international oil price rises.
59. The commonly-used definition of consumer-price inflation in Portugal is based on the consumer price index excluding rent. Once rent is included, inflation over the five years ending in 1990 was $\frac{1}{2}$ percentage point higher. In 1990, the difference was 0.2 point (13.6 per cent versus 13.4 per cent).
60. When the previous *OECD Economic Survey of Portugal* was finalised towards the end of 1990, the current-account deficit was projected to reach some 2 per cent of GDP. The 1990 current deficit is now estimated to have amounted to 0.3 per cent of GDP, as the merchandise trade deficit had been overestimated and the surpluses on services and unrequited transfers were underestimated.

Annex 1

Determinants of Portuguese Private-Sector Wages

As stated in the main text, the Secretariat has been singularly unsuccessful in its efforts to estimate a satisfactory econometric wage equation for Portugal. Coe (1985) excluded Portugal from his sample, as has done virtually all OECD research since then. The principal reason for the exclusion was the lack of an adequately long time series for the relevant aggregates, as well as the non-existence of data on the government wage bill. By now, sufficiently long time series exist, and despite many remaining shortcomings in the data, an attempt was made to explore them in order to discern a typical Phillips-curve wage equation with a view to: 1) estimating the implied NAWRU; and 2) testing the hypothesis, often advanced, that real wages are relatively flexible in Portugal.

It is immediately obvious that the period of the revolution (1974-75) was extraordinary (an acceleration of over 24 percentage points in wage increases in 1974, for example), and attempts were made to test for parameter instability at that point. The most satisfactory outcome was the following:

$$\begin{aligned} \dot{WR} = & 3.55 + 23.36 D74 + 0.76 [\dot{PCP}(-1)*D + \dot{PGDP}*(1 - D)] \\ & (2.28) \quad (10.08) \quad (11.86) \\ & + (1 - 0.76) \dot{WR}(-1) + 0.76[(3*\dot{PROD} + \dot{PROD}(-1))/4] - 1.00 UNR \\ & (11.86) \quad (11.86) \quad (4.09) \end{aligned}$$

$$RBSQ = 0.888 \quad SEE = 2.55 \quad DW = 2.21 \quad SMPL \ 1966-89$$

where WR is the private-sector wage rate;
D74 is a dummy variable equal to unity in 1974 and 1975, zero otherwise;
PCP is the private consumption deflator;
PGDP is the gross domestic product deflator;
D is a dummy variable equal to unity beginning in 1976, zero otherwise;
PROD is real gross domestic product per employee;
UNR is the unemployment rate (standardised definition); and a dot represents a percentage change.

This result is satisfying to the extent that: 1) it is homogeneous in both prices and in productivity; 2) it generates the expected negative parameter on the unemployment rate. Furthermore, it manifests an interesting shift at the time of the revolution in its price inflation term from producer to consumer prices. The implication is that the burden of changes in the terms of trade shifted from employees to employers, which is more in line with wage determination elsewhere. The implied NAWRU estimate is about 3.5 per cent in recent years, despite the fact that the unemployment rate has not in fact been that low

since 1975. Indeed, when an intercept-shift dummy for the post-1975 period is added to the regression, it takes a significant negative parameter, while that on the unemployment rate becomes zero. The unit semi-elasticity of wages with respect to the unemployment rate is very high by international standards – only Japan and Sweden have larger elasticities (in absolute value). It indicates substantial long-run real wage flexibility, likely due to the marked degree of employment rigidity, at least prior to 1989. Therefore, perhaps not surprisingly, the equation does not track recent observations particularly well.

Subsequent experimentation revealed substantial evidence of hysteresis in the unemployment rate, that is, of an effect emanating from the *change* in rather than the *level* of the unemployment rate. With this specification of net excess demand in the labour market the following results were obtained:

$$\begin{aligned} \dot{WR} = & -3.95 D + 24.11 D74 + 0.70 [\dot{PCP}(-1)*D + \dot{PGDP}*(1-D)] \\ & (6.17) \quad (12.62) \quad (11.54) \\ + (1-0.70)\dot{WR}(-1) + & 0.70[(3*\dot{PROD} + \dot{PROD}(-1))/4] - 4.06 \ln(\text{UNR}/\text{UNR}(-1)) \\ & (11.54) \quad (11.54) \quad (2.06) \end{aligned}$$

$$\text{RBSQ} = 0.909 \quad \text{SEE} = 2.31 \quad \text{DW} = 2.71 \quad \text{SMPL 1966-89}$$

This equation has a far superior recent tracking performance – the mean absolute error since 1986 is 0.6 per cent rather than 1.7 per cent. However, it implies that the NAWRU is constantly increasing – at a rate of nearly 0.4 percentage points per year. It does not yield an estimate of its level, however. A possible interpretation of the regression results is that real wage flexibility has been declining in recent years due to the end of the period when firms' financial situation was critical as well as, most recently, enhanced employment flexibility.

Annex II

References

- BALDWIN, J.R. (1990), *Regulatory Failure and Renewal*, Economic Council of Canada, Ottawa.
- BISHOP, G. (1991), "Public debt: credit spreads or currency spreads? A European perspective", paper prepared for a conference of the Société Universitaire Européenne de Recherches Financières, Lisbon, 23-25 May.
- BLISS, C. (1990), "Adjustment, compensation and factor mobility in integrated markets" in C. Bliss and J.B. de Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- CENTRE EUROPÉEN DE RECHERCHES ET DE DOCUMENTATION PARLEMENTAIRE (1990), "Principaux éléments du rapport sur la fiscalité en Europe", 17 May.
- CHAU, F. (1990), "The escudo-budget mix and the current account in the eighties: fiscal restraint or revaluation for the 90s", xerox, December.
- COMMISSION OF THE EUROPEAN COMMUNITIES (1990), "Social Europe", *European Economy*, Special edition.
- COMMISSION OF THE EUROPEAN COMMUNITIES (1991), "Portugal", Directorate General for Economic and Financial Affairs, Economic Papers Number 2, February.
- DONGES, J.B. and K.-W. SCHATZ, (1985), "The Iberian countries facing EC membership: Starting conditions for their industry", *Weltwirtschaftliches Archiv*, 121,4.
- EICHENGREEN, B. (1990), "One money for Europe? Lessons from the U.S. currency union", *Economic Policy*, 10, April.
- GASPAR, V. (1990), "Discussion" in C. Bliss and J.B. Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- GASPAR, V. and A.M. PEREIRA (1991), "The impact of integration and unilateral public transfers on investment and economic growth", xerox, May.
- GIAVAZZI, F. and M. PAGANO (1990), "Can severe fiscal contractions be expansionary? Tales of two small European countries", *NBER Macroeconomics Annual*, MIT Press, Cambridge and London.
- GORDON, J. (1991), "Structural funds and the 1992 program in the European Community", IMF Working Paper WP/91/65, June.

- HALDANE, A.G. (1991), "The exchange rate mechanism of the European Monetary System: a review of the literature", *Bank of England Quarterly Bulletin*, February.
- HELLIWELL, J. F. *et al.* (1990), "Tripolar growth and real exchange rates: how much can be explained by real convergence?", xerox, October.
- HILL, P. (1986), "International price levels and purchasing power parities", *OECD Economic Studies*, No. 6, Spring.
- HUDSON, M. (1989), *Portugal to 1993: Investing in a European Future*, Economist Intelligence Unit Special Report No. 1157, January.
- KRUGMAN, P. (1990), "Macroeconomic adjustment and entry into the EC: a note" in C. Bliss and J.B. Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- LARRE, B. and R. TORRES (1991), "Is convergence a spontaneous process? The experience of Spain, Portugal and Greece", *OECD Economic Studies*, No. 16, Spring.
- LLOYD, P.J. (1991), "Regionalisation and World Trade", xerox, June.
- LOPES PORTO, M.C. (1982), "Estrutura e política alfandegárias: o caso português", Coimbra, Separata do Boletim de Ciências Económicas, volumes XXV, XXVI and XXVII.
- LUZ, S. (1990), "As restrições de liquidez e o consumo privado: uma aplicação ao caso português", xerox, Banco de Portugal, December.
- DE MACEDO, J.B. (1990), "External liberalization and ambiguous public response: the experience of Portugal" in C. Bliss and J.B. de Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- DE MACEDO, J.B. (1991), "Labour mobility, fiscal solidarity and the exchange rate regime: a parable of European union and cohesion", paper prepared for a conference of the Société Universitaire Européenne de Recherches Financières, Lisbon, 23-25 May.
- MARQUES, C.R. (1990), "Produto Potencial, Desemprego e Inflação em Portugal", Banco de Portugal documento de trabalho (Nova Serie) No. 1.
- MODESTO, L. *et al.* (1990), "Some aspects of the Portuguese labour market, 1977-1988: neutrality, hysteresis and the wage gap", xerox, December.
- NEVEN, D. (1990), "EEC integration towards 1992: some distributional aspects". *Economic Policy*, 10, April.
- OECD (1989), *OECD Economic Surveys Portugal*, 1989.
- OXLEY, H. *et al.* (1990), "The public sector: issues for the 1990s.", OECD Department of Economics and Statistics Working Paper No. 90, December.
- PADOA-SCHIOPPA, T. (1987), *Efficiency, stability and equity: a strategy for the evolution of the economic system of the European Community*, Oxford University Press.

- PEREIRA, J.M. (1988), "Urgent infrastructural needs of Portuguese industry in science, research and technological development - final report", DGXII and DGXXII, Commission of the European Communities, June.
- Regional Policies in the European Single Market* (1990), Proceedings of a conference held at Dublin Castle, 10-11 June.
- RODRIK, D. (1990), "Soft budgets, hard minds: stray thoughts on the integration process in Greece, Portugal and Spain" in C. Bliss and J.B. de Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- SIMÕES, V.C. (1985), "Portugal" in J.H. Dunning (ed.), *Multinational enterprises, economic structure and international competitiveness*, Wiley, New York.
- STRAUBHAAR, T. (1988), "International labour migration within a common market: some aspects of EC experience", *Journal of Common Market Studies*, 27,1, September.
- TORRES, F. (1990) "Portugal, the EMS and 1992: stabilization and liberalization" in P. de Grauwe and L. Papademos (eds.), *The European Monetary System in the 1990s*, Longman, London and New York.
- VIÑALS, J. *et al.* (1990), "Spain and the 'EC cum 1992' shock" in C. Bliss and J.B. de Macedo (eds.), *Unity with diversity in the European economy: the Community's southern frontier*, Cambridge University Press.
- VAN WIJNBERGEN, S. (1989), "Capital controls and the real exchange rate", National Bureau of Economic Research Working Paper No. 2940, April.

Annex III

Chronology of economic events

FISCAL POLICY

1990

October

Privatisation of 51 per cent of the capital of Companhia de Seguros Tranquilidade, the fourth largest insurance company, yielding Esc 18.9 billion.

Under the assumptions of 3½ per cent real GDP growth and 10¼ per cent inflation, the draft 1991 budget is presented. It includes:

- Higher household income-tax allowances and cuts in business taxes, to be met by higher sales duties on alcohol and tobacco;
- Increased spending on public works, education, health and social security, to be offset by a freeze in most other areas.

This would lead to a rise in the deficit, compared with the expected outcome for 1990, from Esc 547 to Esc 613 billion.

November

Total privatisation of the brewery Centralcer, yielding Esc 34.6 billion.

December

Privatisation of 33 per cent of the capital of Banco Portugues do Atlântico, yielding Esc 49.8 billion.

Retirement and invalidity pensions paid by the social-security scheme increased by 17 per cent on average.

1991

January

The Government increases social-security benefits for dependent children (29 per cent), marriage (87.5 per cent), birth (15 per cent), etc. Overall, 2½ million persons benefit from these measures.

In order to supplement Portuguese capital in the privatisation process, a wider share of the capital of non-strategic enterprises will be made available to foreign investors.

May

Full privatisation of the investment bank Socieda Financeira Portuguesa, yielding Esc 16.5 billion, and of the newspaper Diario de Noticias, yielding Esc 9 billion.

June

Privatisation of 40 per cent of the capital of the BESCL bank, yielding Esc 60.9 billion.

MONETARY, FINANCIAL AND EXCHANGE-RATE POLICY

1990

October

The following changes are introduced in the management of exchange-rate policy:

- An index with the main currencies of the ERM, weighted by their share in Portuguese external trade, will be used as a reference for the long-term objective of exchange-rate policy, i.e. an annual depreciation of 3 per cent;
- The exchange rate will respond to supply and demand pressures; it will fluctuate within an interval of a few percentage points around the central objective.

To drain excess liquidity, Esc 210 billion of foreign debt are placed with domestic credit institutions.

Approval of the Organic law of the Bank of Portugal, conferring upon the Central Bank a greater degree of autonomy in the conduct of monetary and exchange-rate policy and forbidding the Bank from financing the State, except through a non-remunerated current account and the underwriting of Treasury Bills.

1991

January

As part of the gradual shift to indirect monetary control, the Bank of Portugal will no longer set limits or make formal recommendations on internal credit growth but will instead conduct monetary policy by daily market interventions.

The Government approves measures reforming the Lisbon and Oporto stock exchanges, including the introduction of a computerised continuous pricing system and steps to reduce direct government control of the markets.

February

Changes in the regulations of foreign-exchange and gold operations.

Sales of futures and options on domestic securities to non-residents are subject to prior authorisation of the Bank of Portugal.

Foreign accounts in escudos are subject to a non-remunerated compulsory deposit with the Bank of Portugal of 90 per cent of the amount for off-shore branches and 40 per cent otherwise.

Modification of the regime for remunerating bank reserves from a fixed rate to a rate indexed to the money-market rate.

March

Completion of the "Big Operation" worth Esc 939 billion to soak up excess liquidity.

April

As part of the gradual shift to indirect monetary control, the Bank of Portugal will:

- Use money markets on a daily basis and offer banks liquidity through repurchases of Treasury bills and other financial instruments (at a rate of 16½ per cent);
- Introduce a lending rate, at 21¾ per cent, for occasional use with certain banks.

The Government announces that, pending the introduction of market makers and continuous electronic trading later this year, the market in government debt (which is sharply expanding under the policy of absorbing excess liquidity) will be open to any Portuguese bank willing to guarantee a certain volume of trading.

May

The Bank of Portugal lifts a 15-year-old ban on the buying and selling of foreign currency and travellers' cheques by agencies other than banks.

July

The purchase by non-residents of floating-rate bonds is to be subject to prior authorisation by the Bank of Portugal until the end of 1991.

The Bank of Portugal raises its intervention rate on the money market by $\frac{1}{2}$ percentage point to 17 per cent, and its lending rate (liquidity provision) by $\frac{1}{4}$ percentage point to 22 per cent.

August

The Bank of Portugal lowers its intervention rate on the money market to $16\frac{3}{4}$ per cent and its lending rate to $21\frac{3}{4}$ per cent.

A White Paper on the financial system recommends the adoption of the system of global banking and the strengthening of existing prudential rules.

September

The Bank of Portugal lowers its intervention rate on the money market to 16 per cent and its lending rate to $20\frac{3}{4}$ per cent.

Abolition of the exchange-rate daily fixing against all currencies other than the DM.

October

The Bank of Portugal lowers its intervention rate on the money market to $15\frac{3}{4}$ per cent and its lending rate to $20\frac{1}{4}$ per cent.

INCOMES POLICY

1990

October

Employers and trade unions reach a new national pact for 1991 involving:

- A non-binding commitment to keep average wage increases below $13\frac{1}{2}$ per cent; a tripartite commission will be empowered to raise this ceiling if insufficient progress is made in meeting the government's $10\frac{3}{4}$ per cent inflation target;
- A cut in the maximum working week from 48 to 44 hours, and further to 40 hours by 1995; and,
- A "social peace" clause requiring unions to resolve labour disputes through negotiation rather than strikes.

1991

January

Following the October 1990 national pact (see above), minimum wage raised by 14.6 per cent in the non-agricultural sectors, 16.2 per cent in the agricultural sector and 19.6 per cent for household services. Most pension and social-security benefits raised by 15 per cent.

OTHER

1990

November

The Government decides to end the monopolies of the state airline (TAP) on international air travel and of the state-owned company EDP on the production and transportation of electricity.

1991

July

The EC Commission approves a plan to grant Esc 97 billion in aid to Ford Motor Company and Volkswagen AG to build a passenger-van plant in Setubal.

BLANK PAGE

Annex IV
Supplementary tables

Table A1. Concentration of foreign trade in smaller OECD countries¹

	Exports							Imports						
	1980-84	1985	1986	1987	1988	1989	1990	1980-84	1985	1986	1987	1988	1989	1990
Portugal	13.5	12.6	11.6	10.8	10.8	10.8	10.3	17.1	18.8	15.1	13.7	12.9	12.6	12.5
Spain	17.4	15.7	13.0	12.3	12.1	11.6	10.7	18.2	19.5	15.1	14.1	13.3	13.1	12.7
Sweden	16.4	14.8	14.3	14.6	14.9	15.1	15.1	12.7	11.6	11.5	11.2	11.5	12.0	12.3
Switzerland	14.2	13.2	12.2	12.0	12.0	12.2	11.6	8.1	7.5	6.6	6.5	6.5	6.6	6.6
Norway	5.2	5.9	7.5	8.2	8.6	8.3	8.5	10.9	10.8	10.6	11.0	13.0	15.1	13.3
Austria	8.0	8.2	7.1	6.3	6.3	6.4	6.0	5.3	5.2	4.6	4.6	4.6	4.7	4.7
Finland	9.7	10.4	10.4	11.7	11.8	12.1	12.7	9.5	10.1	10.9	11.0	11.8	11.7	12.4
Iceland	8.7	7.6	8.7	9.4	9.5	10.3	9.6	14.0	13.6	12.8	13.0	13.3	13.3	11.9
Turkey	13.7	11.9	13.7	12.2	15.0	14.6	11.8	14.5	15.7	15.9	16.0	15.9	15.1	16.4
Australia	10.2	9.8	10.2	10.6	9.9	10.3	10.3	9.3	8.3	8.5	9.6	9.4	9.1	9.0
New Zealand	10.9	11.3	10.8	10.6	10.9	11.3	10.8	8.7	8.4	8.5	8.4	9.1	8.4	8.5
BLEU	8.6	9.1	8.5	8.3	8.5	8.7	8.3	9.3	8.7	7.9	7.9	7.8	8.2	7.9
Denmark	12.3	12.7	12.7	12.8	12.6	12.4	11.7	11.4	10.8	10.1	10.3	10.6	11.0	11.0
Greece	13.1 ²	12.2	9.8	9.0	9.2	9.3	9.9	14.7 ²	14.1	11.6	11.5	11.5	11.6	11.1
Ireland	5.6	6.8	6.5	6.5	6.2	6.6	6.5	3.9	4.4	4.7	4.6	4.6	4.8	4.6
Netherlands	7.3	7.3	7.6	7.8	8.1	8.1	7.6	11.2	10.9	8.7	8.7	8.8	9.0	9.1

1. Based on the Herfindahl index: $1/\sum X_i^2$ where X_i is the share of total exports (imports) going to each destination country i (coming from each source country i).

2. 1976-80.

Source: OECD, *Foreign Trade Statistics, Series A*.

Table A2. **Export shares by product, 1985 and 1990**

Per cent

	1985	1990
Food and live animals	4.5	3.8
Beverages and tobacco	3.3	2.9
Crude materials, inedible, except fuels	8.5	8.8
<i>of which:</i> Pulp and waste paper	5.1	4.2
Metalliferous ores and metal scrap	0.4	2.1
Mineral fuels, lubricants and related materials	4.4	3.5
Animal and vegetable oils, fats and waxes	1.6	0.5
Chemicals and related products	7.0	5.3
<i>of which:</i> Organic chemicals	1.7	1.4
Medicinal and pharmaceutical products	0.8	0.6
Plastics	1.1	1.4
Manufactures classified chiefly by material	27.2	22.6
<i>of which:</i> Cork and wood manufactures	4.5	4.7
Paper and paper manufactures	1.6	1.4
Textiles	11.6	8.1
Non-metallic minerals	3.6	4.4
Iron and steel	2.4	0.8
Machinery and transport equipment	15.6	19.7
<i>of which:</i> Electrical machinery	4.1	5.9
Road vehicles	2.4	5.9
Other transport equipment	1.3	0.8
Miscellaneous manufactures	27.6	32.9
<i>of which:</i> Furniture	0.3	0.9
Clothing	17.8	21.3
Footwear	5.7	8.0

Source: OECD, *Foreign trade by commodities 1990, Series C, Volume 3, 1991.*

Table A3. Share of intra-industry trade in intra-EC trade

	1970	1980	1987	Difference 1987-1980
Belgium-Luxembourg	0.69	0.76	0.77	+0.01
Denmark	0.41	0.52	0.57	+0.05
Germany	0.73	0.78	0.76	-0.02
Greece	0.22	0.24	0.31	+0.07
Spain	0.35	0.57	0.64	+0.07
France	0.76	0.83	0.83	+0.00
Ireland	0.36	0.61	0.62	+0.01
Italy	0.63	0.55	0.57	+0.02
Netherlands	0.67	0.73	0.76	+0.03
Portugal	0.23	0.32	0.37	+0.05
United Kingdom	0.74	0.81	0.77	-0.04

Source: Commission of the European Communities (1990).

Table A4. Rate of return on capital of US firms abroad

	1985	1986	1987	1988	1989	1990	Average
Portugal	22.2	32.4	26.9	30.2	27.1	20.3	26.6
World	15.0	15.7	19.3	15.4	15.2	12.9	15.6
EC	21.6	21.6	25.6	18.1	15.9	14.1	19.5
Greece	-8.5	-82.2	30.1	35.5	19.6	27.3	3.6
Italy	19.5	39.8	25.8	17.6	14.8	15.5	22.2
Spain	14.1	17.3	39.8	30.2	28.0	20.2	25.0

Source: OECD calculations based on data published by the U.S. Department of Commerce in its August issues of *Survey of Current Business*.

STATISTICAL ANNEX

Selected background statistics

	Average 1981-90	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<i>A. Percentage changes</i>											
Private consumption ¹	2.7	2.9	2.4	-1.4	-2.9	0.7	5.6	5.4	6.6	3.3	4.9
Government consumption ¹	3.5	5.2	3.6	3.7	0.1	0.1	7.2	4.9	5.3	1.5	3.7
Gross fixed capital formation ¹	3.1	5.5	2.3	-7.1	-17.4	-3.5	10.9	15.1	15.0	8.3	7.3
Total domestic demand ¹	2.9	3.4	2.2	-5.7	-6.7	0.9	8.3	10.4	7.4	4.2	6.2
Exports of goods and services ¹	8.6	-4.4	4.7	13.6	11.6	6.7	6.8	8.6	10.2	16.8	13.0
Imports of goods and services ¹	7.2	2.3	3.9	-6.1	-4.4	1.4	16.9	20.0	16.1	11.0	14.5
GDP ¹	2.7	1.6	2.1	-0.2	-1.9	2.8	4.1	5.3	3.9	5.4	4.2
GDP price deflator	17.9	17.6	20.7	24.7	24.5	21.8	20.4	11.2	11.6	12.7	14.3
Industrial production	4.8	2.2	7.8	3.5	2.7	0.6	7.3	4.3	3.8	6.8	9.1
Employment	1.4	0.5	-0.1	3.9	-0.1	-0.5	0.2	2.6	2.7	2.2	2.2
Compensation of employees (current prices)	19.5	22.2	22.4	19.6	16.1	22.8	21.7	18.8	14.5	17.2	20.0
Productivity (real GDP/employment)	1.3	1.1	2.2	-4.0	-1.8	3.3	4.0	2.6	1.2	3.1	1.9
Unit labour costs (compensation/real GDP)	16.4	20.2	19.8	19.8	18.3	19.5	16.9	12.9	10.2	11.2	15.2
<i>B. Percentage ratios</i>											
Gross fixed capital formation as percent of GDP at constant prices	26.7	29.6	29.7	27.6	23.2	21.8	23.2	25.4	28.1	28.8	29.7
Stockbuilding as percent of GDP at constant prices	1.1	2.6	2.3	-1.9	-2.5	-1.2	0.2	3.2	2.4	2.2	3.1
Foreign balance as percent of GDP at constant prices	-13.0	-18.0	-18.0	-11.5	-6.0	-4.1	-8.2	-13.5	-17.3	-15.9	-18.1
Compensation of employees as percent of GDP at current prices	47.7	52.6	52.3	50.2	47.7	46.8	45.5	46.1	45.6	45.0	45.3
Direct taxes as percent of household income	5.4	5.0	5.1	5.9	4.9	5.3	5.3	4.7	5.3	6.3	6.3
Household saving as percent of disposable income	25.9	27.2	28.7	27.7	27.6	28.3	26.7	25.1	22.6	22.5	22.2
Unemployment rate ²	7.1	7.7	7.5	7.9	8.6	8.7	8.6	7.1	5.8	5.1	4.6
<i>C. Other indicator</i>											
Current balance (billion dollars)	-0.6	-2.5	-3.1	-0.8	-0.5	0.4	1.1	0.4	-1.0	0.2	-0.2

1. At constant 1985 prices.

2. Data based on the narrowest definition of unemployment.

Sources: National Institute of Statistics (INE); Bank of Portugal; OECD estimates.

Table A. Expenditure on gross domestic product

Billion escudos

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<i>A. At current prices</i>											
Private consumption	845.0	1 045.5	1 286.4	1 597.9	1 990.9	2 392.1	2 875.1	3 334.6	3 907.8	4 527.8	5 388.1
Government consumption	182.8	225.8	278.0	351.9	423.2	547.9	680.0	787.5	960.8	1 144.3	1 611.6
Gross fixed investment	358.8	463.0	574.8	671.5	663.7	768.0	977.0	1 250.8	1 611.2	1 885.0	2 287.0
Stockbuilding	53.2	55.8	56.4	-20.8	-37.7	-40.8	10.6	171.0	169.8	192.2	0
Total domestic demand	1 439.8	1 790.1	2 195.5	2 600.5	3 040.1	3 667.2	4 542.6	5 543.8	6 649.7	7 749.3	9 286.8
Exports	344.0	389.6	487.5	719.3	1 047.4	1 315.2	1 465.8	1 773.7	2 125.9	2 670.6	3 101.6
Imports	527.9	678.5	832.6	1 016.0	1 272.8	1 458.6	1 590.0	2 144.0	2 773.9	3 292.3	3 900.5
GDP (at market prices)	1 256.0	1 501.2	1 850.4	2 303.7	2 814.8	3 523.7	4 418.4	5 173.6	6 001.7	7 127.6	8 487.9
Net factor income from abroad	-30.6	-61.0	-103.0	-119.6	-177.3	-196.4	-151.6	-130.8	-125.8	-113.1	-54.2
GNP (at market prices)	1 225.4	1 440.2	1 747.4	2 184.1	2 637.5	3 327.3	4 266.8	5 042.8	5 875.9	7 014.5	8 433.7
<i>B. At 1985 prices</i>											
Private consumption	2 359.4	2 427.8	2 485.0	2 449.3	2 377.2	2 393.2	2 527.0	2 663.1	2 838.3	2 932.0	3 076.8
Government consumption	483.0	508.2	526.6	546.0	546.5	546.9	586.1	614.6	647.3	657.0	681.3
Gross fixed investment	961.9	1 014.9	1 037.8	963.8	796.2	768.0	851.4	979.7	1 126.3	1 219.8	1 309.3
Stockbuilding	104.2	90.5	81.6	-65.0	-86.8	-40.8	6.1	125.3	95.9	94.6	135.4
Total domestic demand	3 908.5	4 041.4	4 130.9	3 894.1	3 633.0	3 667.3	3 970.7	4 382.7	4 707.9	4 903.4	5 202.9
Exports	972.1	928.9	972.2	1 104.5	1 233.0	1 315.2	1 404.1	1 525.0	1 680.2	1 962.5	2 181.1
Imports	1 508.8	1 544.0	1 603.7	1 505.2	1 438.3	1 458.6	1 704.8	2 045.1	2 374.0	2 635.1	2 976.1
GDP (at market prices)	3 371.7	3 426.3	3 499.5	3 493.4	3 427.7	3 523.9	3 669.9	3 862.6	4 014.1	4 230.8	4 407.9

Sources: National Institute of Statistics (INE); Bank of Portugal.

Table B. Household appropriation account

Billion escudos

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Compensation of employees	790.3	967.3	1 157.1	1 343.4	1 650.2	2 008.9	2 386.6	2 733.8	3 205.2	3 846.2
Property and entrepreneurial income	532.7	687.1	912.5	1 208.2	1 493.8	1 716.3	1 810.5	2 076.1	2 477.0	2 895.9
Domestic transfers	176.3	250.0	314.2	386.5	469.4	547.7	687.5	800.1	944.4	1 175.0
Foreign transfers	178.6	215.0	242.0	320.3	358.3	395.6	479.9	520.6	587.9	637.9
Gross total income	1 677.9	2 119.4	2 625.8	3 258.4	3 971.7	4 668.5	5 364.5	6 130.6	7 214.5	8 555.0
Direct taxes	84.6	108.5	155.1	160.4	209.8	249.0	250.0	324.0	454.9	539.1
Social security contributions	157.5	205.5	264.0	348.9	426.3	493.8	658.4	754.8	918.0	1 095.3
Disposable income	1 435.7	1 805.4	2 206.7	2 749.1	3 335.6	3 925.7	4 456.1	5 051.8	5 841.6	6 920.6
Consumption	1 045.4	1 287.1	1 596.2	1 990.3	2 393.2	2 876.2	3 335.7	3 909.2	4 527.1	5 387.2
Savings ratio ¹	27.2	28.7	27.7	27.6	28.3	26.7	25.1	22.6	22.5	22.2
Real disposable income percentage change	0.8	4.6	-3.0	-3.0	1.7	3.4	3.1	3.1	3.1	4.5

1. As a percentage of disposable income.

Sources: Ministry of Finance; Bank of Portugal.

Table C. **General government account**

Billion escudos

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Current receipts	502.6	659.7	875.4	1 145.8	1 539.1	1 775.5	1 914.1	2 322.9	2 915.4	3 439.6
Direct taxes	119.5	156.5	206.9	249.8	306.5	353.0	419.0	473.2	665.3	784.2
Social security contributions	131.6	172.3	227.7	275.0	337.4	388.6	461.4	510.6	750.5	910.0
Indirect taxes	215.1	275.4	358.5	436.8	534.2	767.9	804.8	967.2	1 105.5	1 286.8
Capital income	2.6	5.1	5.9	94.7	272.3	115.2	41.1	60.9	81.5	108.6
Other current receipts	33.8	50.4	76.4	89.5	88.7	150.8	187.8	311.0	312.6	350.0
Current expenditure	565.3	669.4	835.8	1 085.0	1 389.5	1 787.4	2 023.9	2 384.0	2 736.0	3 408.8
Expenditure on goods and services	225.9	276.2	348.4	423.1	546.9	678.8	787.8	929.6	1 109.5	1 371.6
Subsidies	81.4	79.6	91.8	120.1	127.1	131.1	98.4	128.6	115.5	130.3
Interest paid	80.9	98.0	141.7	231.0	329.0	428.0	452.9	504.8	509.5	698.6
Current transfers	172.8	242.4	310.1	383.1	466.7	664.6	776.1	907.4	1 005.3	1 140.2
Saving	-62.7	-9.7	39.6	60.8	149.6	-11.9	-109.8	-61.1	179.4	30.8
Capital expenditure	96.7	131.3	273.0	259.3	410.8	269.5	268.3	292.6	401.7	486.4
Fixed investment	74.6	79.9	88.6	90.7	108.9	144.0	170.9	200.0	239.6	314.7
Transfers	22.1	51.4	184.4	168.6	301.9	125.5	97.4	92.6	162.1	171.7
Overall balance	-159.4	-141.0	-233.4	-198.5	-261.2	-281.4	-378.1	-353.7	-222.3	-455.6
(as a percentage of GDP)	-10.6	-7.6	-10.1	-7.1	-7.4	-6.4	-7.3	-5.9	-3.1	-5.4
Loans	18.2	25.9	30.9	39.3	37.1	78.0	107.5	82.2	97.9	78.9
Total borrowing requirement	-177.6	-166.9	-264.3	-237.8	-298.3	-359.4	-485.6	-435.9	-320.2	-534.5
(as a percentage of GDP)	-11.8	-9.0	-11.5	-8.4	-8.5	-8.1	-9.4	-7.3	-4.5	-6.3

Source: Ministry of Finance.

Table D. Prices and wages

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Percentage changes										
Consumer prices¹										
Total ²	20.0	22.4	25.5	29.3	19.3	11.7	9.4	9.6	12.6	13.4
Food and drink	..	24.1	25.1	30.8	17.7	9.1	8.8	9.2	14.4	13.6
Clothing and footwear	..	15.6	19.8	24.4	23.3	23.5	15.8	13.2	10.5	9.5
Housing costs	..	20.1	29.0	33.8	20.0	10.7	7.4	10.1	11.8	11.9
Miscellaneous	..	22.7	27.8	24.7	21.9	14.5	9.0	6.0	11.6	11.3
Wages in manufacturing industry										
Nominal	..	20.5	18.7	18.8	21.1	16.8	14.0	11.3	14.8	..
Real	..	-1.5	-5.4	-7.8	1.2	4.5	4.2	1.5	2.0	..

1. Mainland. New index as from 1988.

2. Excluding rent.

Sources: INE; Bank of Portugal; OECD, *Main Economic Indicators*.

Table E. Civilian employment by sector¹

Thousands

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Agriculture	1 017.0	991.0	933.9	931.1	933.0	891.0	926.0	885.0	830.0	796.3
Mining	21.0	25.0	28.3	28.2	28.3	27.0	27.0	29.0	34.0	34.1
Manufacturing	1 009.0	1 016.0	1 040.8	1 029.4	1 010.8	995.0	1 040.0	1 074.0	1 108.0	1 082.5
Construction	398.0	412.0	298.8	305.7	328.3	332.0	354.0	362.0	365.0	351.9
Electricity, gas and water	22.0	19.0	44.4	39.7	34.8	32.0	33.0	38.0	38.0	38.1
Transport and communication	151.0	160.0	190.2	187.5	179.8	174.0	168.0	177.0	183.0	183.2
Trade	486.0	470.0	659.7	638.6	610.5	599.0	585.0	630.0	667.0	663.7
Banking, insurance, real estate	89.0	97.0	134.7	135.0	131.9	127.0	132.0	140.0	155.0	162.3
Personal services	725.0	737.0	883.5	889.7	885.2	887.0	906.0	945.0	997.0	1 008.0
Total	3 918.0	3 927.0	4 214.3	4 184.9	4 142.6	4 064.0	4 171.0	4 280.0	4 377.0	4 320.1

1. New series as from 1983.

Sources: OECD, *Labour Force Statistics* and OECD estimates.

Table F. **Money supply and its counterparts**

Billion escudos at end of period

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total money supply (L)	1 736.9	2 199.0	2 650.3	3 385.8	4 310.7	5 280.3	6 045.1	6 892.6	7 544.0	8 882.4
Money (M1-)	524.6	610.5	666.3	772.4	980.8	1 334.3	1 526.5	1 722.1	1 827.8	2 352.2
Notes and coins in circulation	188.4	219.5	240.1	267.3	319.0	399.3	457.7	509.5	577.3	623.9
Sight deposits of households and enterprises	336.2	391.0	426.2	505.1	661.8	935.0	1 068.8	1 212.6	1 250.5	1 728.3
Quasi money ¹	1 212.3	1 588.5	1 984.0	2 613.4	3 329.9	3 946.0	4 518.6	5 170.5	5 716.2	6 530.2
Counterparts										
Net foreign assets	370.5	470.7	565.9	773.7	972.6	935.1	1 180.5	1 826.6	2 511.9	2 715.6
Net lending to the public sector	321.4	495.6	654.1	900.6	1 348.7	1 865.5	2 332.2	2 616.0	2 536.6	2 795.9
Lending to the private sector	1 335.5	1 675.3	2 102.5	2 545.8	2 785.3	3 097.2	3 199.7	3 525.5	3 703.8	4 981.5
Miscellaneous net	-290.5	-442.6	-672.2	-834.3	-795.9	-617.5	-667.3	-1 075.5	-1 208.3	-1 610.6

1. Including migrant deposits and Treasury bills.

Source: Bank of Portugal, *Quarterly Bulletin*.

Table G. Breakdown by nationality of foreign visitors

Thousands

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	7 277.0	7 299.3	8 875.0	9 811.0	11 691.7	13 056.9	16 173.3	16 076.7	16 470.9	18 422.1
Spain	5 226.9	5 173.3	6 512.6	7 308.8	8 798.2	9 960.2	12 583.3	12 124.4	12 185.9	13 806.3
United Kingdom	548.5	570.6	629.5	709.7	880.4	1 069.1	1 204.3	1 139.7	1 137.3	1 202.9
Germany	306.6	289.5	355.3	344.0	413.0	430.3	526.0	568.7	611.0	681.0
France	239.0	288.4	327.9	326.6	347.3	350.1	434.8	593.4	646.4	658.2
Netherlands	128.7	124.7	156.2	151.9	163.8	171.7	214.2	285.2	332.7	329.5
United States	141.7	154.2	186.8	209.4	229.5	149.8	195.1	223.3	234.7	252.1
Italy	68.3	72.5	66.1	71.8	93.4	108.5	134.4	154.7	185.1	221.1
Brazil	64.4	80.2	57.4	60.2	69.2	82.5	71.7	92.1	102.4	118.9
Canada	43.5	42.0	46.8	56.1	70.3	73.8	77.5	79.1	90.9	90.8
Sweden	71.3	71.1	65.5	71.5	54.1	69.4	70.1	86.5	94.7	97.6
Belgium	48.4	48.6	61.4	59.1	67.6	67.7	90.3	116.9	150.7	173.1
Switzerland	41.3	41.2	46.1	53.2	61.1	66.4	70.6	73.3	77.7	78.0
Other countries	348.4	343.0	363.4	388.7	443.9	457.3	501.5	539.5	621.3	712.7

Source: INE, Boletim mensal de estatística.

Table H. **Foreign trade by main commodity groups**

Million US dollars and percentages

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Imports, total (Million \$)	9 787.4	9 540.7	8 256.7	7 975.3	7 649.7	9 454.0	13 965.7	17 884.8	19 043.1	25 332.6
<i>As a percentage of total</i>										
Food and beverages	13.9	11.3	10.7	11.5	11.0	11.0	10.6	10.3	9.9	9.7
Basic material and semi-finished goods	33.3	35.9	37.1	42.3	39.1	25.0	19.4	15.9	17.5	16.9
Manufactures	52.6	52.6	51.9	46.0	49.6	63.4	69.6	73.7	72.5	73.3
Chemicals	9.8	9.2	10.0	9.9	10.2	11.3	10.5	9.8	9.2	9.1
Goods classified chiefly by material	13.0	13.3	12.4	12.0	14.5	17.7	19.2	19.2	19.8	19.6
Machinery and transport equipment	26.5	26.4	26.1	21.1	21.6	29.3	33.9	38.3	36.8	36.9
Miscellaneous	3.4	3.6	3.4	3.0	3.3	5.1	6.1	6.3	6.7	7.7
Unspecified	0.1	0.2	0.3	0.2	0.3	0.6	0.3	0.1	0.1	0.1
Exports, total (Million \$)	4 147.1	4 173.3	4 601.4	5 207.5	5 685.4	7 204.9	9 318.3	10 989.7	12 797.7	16 415.7
<i>As a percentage of total</i>										
Food and beverages	10.4	9.7	9.6	8.8	7.8	8.2	7.3	7.7	7.0	6.6
Basic material and semi-finished goods	18.4	15.2	15.6	15.2	14.5	12.2	11.9	12.8	14.0	12.8
Manufactures	69.9	73.3	72.6	75.3	76.0	78.4	80.1	79.1	78.6	80.3
Chemicals	6.0	8.2	7.5	7.7	7.0	6.1	5.4	6.0	5.6	5.2
Goods classified chiefly by material	31.5	29.9	28.7	28.1	27.7	26.4	25.4	25.4	23.7	23.4
Machinery and transport equipment	12.6	14.0	15.4	17.3	15.6	15.7	16.5	16.7	19.1	19.6
Miscellaneous	19.9	21.1	21.0	22.2	25.7	30.3	32.8	31.0	30.3	32.1
Unspecified	1.3	1.8	2.2	0.8	1.7	1.2	0.7	0.4	0.4	0.3

Source: OECD, *Foreign Trade Statistics, Series C.*

Table 1. **Geographical breakdown of foreign trade**
Billion escudos and percentages

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Exports, total (Billion escudos)	268.2	356.7	538.0	796.6	951.0	1 055.5	1 304.8	1 598.8	2 037.1	2 252.6
<i>As a percentage of total</i>										
OECD countries	77.8	82.0	82.8	84.1	85.4	89.1	91.0	90.6	90.7	91.2
EC	56.8	61.0	63.1	62.1	62.6	68.3	71.1	72.0	71.8	74.2
Germany	12.6	13.1	13.6	13.8	13.8	14.7	15.4	14.7	15.7	16.8
France	12.6	13.1	13.7	12.5	12.7	15.2	15.8	15.2	15.0	15.5
Italy	4.2	4.8	4.1	4.3	4.0	3.9	3.9	4.2	4.3	4.0
United Kingdom	14.5	14.8	14.7	15.4	14.6	14.2	14.1	14.3	12.3	12.1
Spain	2.9	3.6	4.1	4.4	4.2	6.9	9.3	11.5	12.7	13.6
Other EC	9.9	11.5	13.0	11.7	13.4	13.3	12.6	12.1	11.8	12.2
United States	5.2	6.1	6.0	8.8	9.2	7.0	6.4	5.9	5.9	4.8
Other OECD countries	15.8	14.9	13.7	13.1	13.6	13.8	13.5	12.6	12.9	12.2
Non OECD countries	19.8	15.9	15.5	14.5	13.3	10.0	8.2	8.1	8.3	7.8
of which: OPEC	3.6	2.9	3.6	2.5	2.5	1.6	1.5	1.1	0.7	0.6
Previous Escudo Area	7.6	4.9	4.5	4.4	3.9	2.1	2.1	2.7	3.3	3.4
Imports, total (Billion escudos)	631.3	809.0	949.2	1 195.0	1 282.0	1 400.1	1 956.0	2 597.8	3 035.8	3 462.6
<i>As a percentage of total</i>										
OECD countries	69.1	69.3	69.8	66.7	67.1	78.4	81.7	84.0	83.5	83.2
EC	44.7	46.7	44.9	43.3	46.1	58.9	63.8	67.3	68.2	69.4
Germany	11.0	11.9	11.5	10.2	11.7	14.4	15.1	14.7	14.6	14.4
France	7.7	8.6	8.1	7.9	8.0	10.0	11.2	11.5	11.7	11.5
Italy	5.4	5.5	5.1	4.7	5.1	7.9	8.7	9.3	9.1	9.9
United Kingdom	8.0	7.7	7.7	6.8	7.5	7.5	8.1	8.3	7.5	7.5
Spain	6.6	6.1	5.2	7.1	7.4	11.0	11.7	13.2	14.5	14.4
Other EC	6.1	6.9	7.3	6.4	6.3	8.2	8.9	10.3	10.8	11.5
United States	12.0	10.8	14.3	13.6	9.7	7.0	4.8	4.3	4.4	3.9
Other OECD countries	12.4	11.8	10.6	9.8	11.3	12.4	13.0	12.5	10.8	9.9
Non OECD countries	30.8	30.3	29.7	32.8	32.0	21.2	18.2	15.9	16.5	16.7
of which: OPEC	18.9	19.5	18.6	18.9	17.6	8.5	6.0	4.9	6.1	6.8
Previous Escudo Area	0.4	0.4	0.4	0.7	1.2	0.8	0.4	0.2	0.4	0.4

Source: INE, Boletim mensal das estatísticas do comércio externo.

Table J. **Balance of payments**

Million US dollars

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Exports, fob	4 088	4 108	4 569	5 177	5 673	7 202	9 268	10 875	12 716	16 420
Imports, fob	9 283	8 941	7 643	7 307	7 177	8 882	12 849	16 393	17 594	23 001
Trade balance	-5 195	-4 833	-3 074	-2 130	-1 504	-1 680	-3 581	-5 518	-4 878	-6 581
Services net	-544	-1 092	-742	-674	-361	-85	250	137	478	1 043
Travel	777	609	588	728	901	1 203	1 721	1 869	2 102	2 718
Transports	-147	-282	-200	-192	-184	-135	-373	-587	-663	-925
Investment income	-975	-1 269	-1 066	-1 202	-1 152	-1 014	-932	-877	-718	-376
Government transactions	-141	-65	-37	-40	-44	-56	-123	-131	-135	-153
Other services	-58	-85	-27	32	118	-83	-43	-137	-108	-221
Transfers, net	2 887	2 680	2 171	2 179	2 251	2 915	3 775	4 317	4 539	5 477
Current balance	-2 852	-3 245	-1 645	-625	386	1 150	444	-1 064	139	-61
Medium and long-term capital	1 954	2 582	1 458	1 333	1 109	-293	194	843	2 798	3 401
Private	1 433	1 946	858	835	729	-196	195	811	2 243	2 683
Official	521	636	600	498	380	-97	-1	32	555	718
Short-term and unrecorded	750	786	-564	-221	-523	-1 079	1 273	1 826	911	1 097
Non-monetary transactions net	-148	123	-751	487	972	-222	1 911	1 605	3 848	3 948
Private monetary institutions short-term capital	42	-15	-310	-289	4	199	-101	-671	633	-446
Balance on official settlements	-106	108	-1 061	198	976	-23	1 810	934	4 481	3 502
Use of IMF credit	-55	-43	366	221	0	0	0	0	0	0
Miscellaneous official accounts	-9	-103	0	-287	-284	-82	-309	-556	92	26
Changes in reserves (increase = -)	170	38	695	-132	-692	105	-1 501	-378	-4 573	-3 528

Source: Bank of Portugal.

Table K. Labour-market indicators

A. LABOUR MARKET PERFORMANCE				
	Cyclical Peak: 1979	Cyclical Trough: 1984	1985	1990 ¹
Standardised unemployment rate	..	8.4	8.5	4.6
Unemployment rate: Total	7.5	8.1	8.1	4.6
Male	4.0	5.7	6.1	3.1
Women	12.5	11.3	11.0	6.5
Youth ²	17.8	19.6	19.5	10.2
Share of long-term unemployment in total unemployment ³	..	47.0	52.9	38.2
B. STRUCTURAL OR INSTITUTIONAL CHARACTERISTICS				
	1975	1980	1985	1990 ¹
Participation rate ⁴ : Total	70.7	71.8	71.8	71.6
Male	93.3	90.8	85.8	84.3
Women	50.6	54.9	58.8	59.7
Employment/population (15-64 years)	64.3	65.0	62.7	65.2
Non-wage labour costs ⁵ (as a percentage of total compensation)	13.4	14.4	18.7	20.1
Unemployment insurance replacement ratio ⁶	..	39.0	29.0	31.0
Minimum wage, non-agricultural sector (workers of 20 years and more, as a percentage of the average earnings)	..	..	56.4	50.4
Average percentage changes (annual rates)	1970 1960	1980 1970	1985 1980	1989 1984
Labour force	0.5	2.0	0.7	0.6
Employment: Total	0.4	1.4	0.5	1.4
Industries	0.7	2.7	-0.9	2.2
Services	4.3	1.4	3.8	3.1

1. Long-term unemployment, employment/population, unemployment insurance : 1989.

2. People between 15 and 24 years as a percentage of the labour force of the same age group.

3. Persons seeking a job for 12 months and over as a percentage of total unemployed.

4. Labour force as a percentage of relevant population group, aged between 15 and 64 years.

5. Employers' contributions to social security and pension funds.

6. Unemployment benefits per unemployed as a percentage of compensation per employee.

Sources: OECD, *Labour Force Statistics*; OECD Secretariat.

Table L. Public sector

A. BUDGET INDICATORS : GENERAL GOVERNMENT ACCOUNT				
Per cent of GDP ¹				
	1970	1980	1985	1990
Current receipts	26.0	45.1	43.7	40.5
Non-interest expenditure	23.9	36.4	41.8	37.7
Primary budget balance	2.0	8.6	1.9	2.9
Interest payments	0.5	3.1	9.3	8.2
General government budget balance	1.5	5.5	-7.4	-5.4
B. THE STRUCTURE OF EXPENDITURE AND TAXATION				
Per cent of GDP				
1. Structure of general government expenditure				
	1970	1980	1985	1990
Total expenditure	24.5	39.5	51.1	45.9
<i>Of which:</i> Current consumption	14.2	14.5	15.5	16.2
Transfers to persons	4.2	10.7	13.2	13.4
Subsidies	1.5	5.2	3.6	1.5
Capital formation	2.5	4.1	3.1	3.7
Expenditure by fonction:				
Education	..	3.4	3.8	..
Health	..	2.6	3.5	..
Pensions	..	0.9	0.7	..
2. Structure of taxation ²				
	Portugal		EC	
	1980	1989	1980	1989
Total tax revenue	28.7	35.1	36.4	39.9
Income tax	5.7	9.3	12.5	13.8
Social security	8.5	9.2	10.5	11.3
Consumption tax	12.9	15.8	11.2	12.6

1. On a national accounts basis.

2. On the basis of revenue statistics which may be different from National Accounts.

Sources: OECD, *National Accounts*; *Revenue Statistics of OECD Member Countries*.

Table M. **Production and employment structures**

	Per cent share of GDP at factor cost (current prices)				Per cent share of total employment			
	1977	1980	1985	1989	1977	1980	1985	1989
Agriculture, forestry and fishing	11.9	10.3	8.0	6.2	31.8	27.2	25.4	21.6
Manufacturing	27.9	31.0	30.4	28.8	23.6	25.1	24.3	23.7
<i>Of which:</i> Food, forestry and tobacco	5.7	5.7	6.1	5.5	3.5	3.3	3.2	3.2
Textiles, clothing, leather	5.4	7.0	7.8	7.7	7.6	8.1	8.3	8.2
Wood, paper and paper products	3.4	3.7	3.2	3.8	3.1	3.2	2.9	2.8
Chemicals and products of petroleum, coal, rubber, etc.	3.0	2.8	3.3	2.8	1.5	1.7	1.6	1.5
Non-mineral products except products of petroleum and coal	2.4	2.6	2.1	2.1	1.8	1.9	1.7	1.6
Fabricated metal products, machinery and equipment	5.6	6.8	5.6	4.5	4.0	4.5	4.2	3.9
Electricity, gas and water	1.9	2.1	3.5	2.9	0.6	0.8	0.9	0.8
Construction	7.7	7.1	5.7	6.3	9.5	10.1	9.5	9.7
Services	50.6	49.5	52.5	55.7	34.4	36.8	39.9	44.3
<i>Of which:</i> Wholesale and retail trade, restaurants, and hotels	21.4	21.7	22.4	19.6	13.0	13.4	13.6	16.5
Transport, storage and communication	5.6	5.5	7.7	5.8	4.6	4.5	4.4	4.4
Finance, insurance, real estate and business services	10.7	10.5	10.1	11.8	2.2	2.6	3.0	3.2

Source: OECD, *National Accounts*.

BASIC STATISTICS

BASIC STATISTICS:
INTERNATIONAL COMPARISONS

BASIC STATISTICS: INTERNATIONAL COMPARISONS

Units	Reference period ¹	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Greece	Iceland	Ireland	Italy	Japan	Luxembourg	Netherlands	New Zealand	Norway	Portugal	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States	Yugoslavia		
Population																												
Total	Thousands	1989	16 833	7 624	9 938	26 248	5 132	4 964	56 160	61 990	10 033	253	3 515	57 525	123 120	378	14 849	3 343	4 227	10 337	38 888	8 493	6 723	55 255	57 236	248 762	23 690	
Inhabitants per sq. km	Number	1989	2	91	326	3	119	15	102	249	76	2	50	191	326	145	364	12	13	112	77	19	163	71	234	27	93	
Net average annual increase over previous 10 years	%	1989	1.5	0.1	0.1	1.0	0.0	0.4	0.5	0.1	0.5	1.1	0.4	0.2	0.6	0.4	0.6	0.6	0.4	0.5	0.5	0.2	0.6	2.4	0.2	1.0	0.8	
Employment																												
Total civilian employment (TCE) ²	Thousands	1989	7 725	3 342	3 670	12 486	2 610	2 460	21 484	27 208	3 671	140	1 077	20 833	61 280	181	6 065	1 461	2 014	4 377	12 260	4 466	3 518	16 771	26 457	117 342	..	
Of which: Agriculture	% of TCE		5.5	8.0	2.8	4.3	5.7	8.9	6.4	3.7	25.3	10.0	15.1	9.3	7.6	3.3	4.7	10.3	6.6	19.0	13.0	3.6	5.6	50.1	2.1	2.9	..	
Industry	% of TCE		26.5	37.0	28.5	25.7	27.4	30.9	30.1	39.8	27.5	30.7	28.4	34.3	31.5	26.5	25.4	25.3	35.3	32.9	29.4	35.1	20.5	29.4	26.7	..	..
Services	% of TCE		68.0	55.1	68.7	70.1	66.9	60.2	63.5	56.5	47.1	59.3	56.5	58.2	65.2	68.8	64.3	68.1	45.7	54.0	67.0	59.3	29.5	68.4	70.5	..	..
Gross domestic product (GDP)																												
At current prices and current exchange rates	Bill US \$	1989	282.4	126.5	153.0	545.5	106.2	115.5	958.2	1 189.1	54.2	5.2	33.9	865.8	2 869.3	7.0	223.7	41.7	90.2	45.3	380.3	189.9	177.2	79.1	837.5	5 132.0	81.8	
Per capita	US \$		16 800	16 603	15 393	20 783	20 685	23 270	17 061	19 182	5 399	20 516	9 644	15 051	23 305	18 613	15 063	12 503	21 341	4 623	9 711	22 360	26 350	1 432	14 642	20 629	3 454	
At current prices using current PPP's ³	Bill US \$	1989	240.4	102.1	135.0	506.7	74.9	74.6	818.0	929.0	72.8	4.0	31.6	799.7	1 934.4	6.5	203.6	38.2	72.1	401.2	72.1	401.2	131.7	119.0	247.4	820.6	5 132.0	..
Per capita	US \$		14 304	13 407	13 587	19 305	14 594	15 030	14 565	14 985	7 253	15 870	8 984	13 902	15 712	17 192	13 709	11 446	16 422	7 360	10 244	15 511	17 699	4 481	14 345	20 629	..	
Average annual volume growth over previous 5 years	%	1989	3.9	2.7	2.6	3.9	2.0	4.0	2.7	2.6	2.2	3.1	3.2	3.1	4.5	4.4	2.4	0.8	2.2	4.3	4.2	2.3	3.0	5.1	3.8	3.6	..	
Gross fixed capital formation (GFCF)																												
Of which: Machinery and equipment	% of GDP	1989	25.5	24.0	19.1	22.2	18.2	27.6	20.8	20.5	18.5	18.7	18.4	20.2	31.0	24.1	21.0	27.5	26.2	24.0	21.2	27.6	22.8	22.8	19.6	16.6	14.5	
Residential construction	% of GDP		10.7	10.2	9.5	7.5	8.0	10.9	9.3	8.0	5.1	9.9	10.6	13.0	10.9	10.6	10.5	9.4	9.8 (86)	8.5	9.6	9.5	11.7 (87)	9.4	7.8	..	..
Average annual volume growth over previous 5 years	%	1989	6.1	4.6	7.5	8.1	3.5	6.3	5.3	3.5	1.3	1.6	0.5	4.1	8.1	7.8	5.7	3.2	0.2	8.9	11.1	6.5	6.7	4.6	6.9	3.9	..	
Gross saving ratio⁴																												
	% of GDP	1989	22.5	26.0	20.9	19.9	17.4	25.6	21.3	26.5	14.7	16.6	19.7	20.2	34.2	60.9	24.3	17.4	24.8	26.0	22.1	18.7	34.0	24.0	15.4	15.6	..	
General government																												
Current expenditure on goods and services	% of GDP	1989	16.4	18.1	14.4	18.7	25.1	19.8	18.3	18.7	21.6	19.07	15.4	16.8	9.2	16.0	15.3	16.4	21.0	16.1	15.1	26.0	12.9	16.0	19.4	17.9	14.4	
Current disbursements ⁵	% of GDP	1989	32.1	44.9	53.3	41.6	56.0	35.1	46.2	41.6	47.7	32.1	49.9 (87)	47.1	25.6	45.0 (86)	51.7	..	50.9	40.4 (86)	35.5 (88)	57.3	29.9	..	37.6	34.6	..	
Current receipts	% of GDP	1989	34.2	46.1	48.5	39.6	57.4	39.9	46.5	44.6	31.8	36.6	43.7 (87)	41.1	33.3	52.9 (86)	50.1	..	54.9	37.6 (86)	36.3 (88)	64.1	34.1	..	39.7	31.8	..	
Net official development assistance																												
	% of GNP	1989	0.38	0.23	0.43	0.43	0.88	0.57	0.75	0.41	0.07	0.04	0.16	0.39	0.32	0.26	0.97	0.23	1.05	0.18	0.06	0.88	0.33	..	0.31	0.17	..	
Indicators of living standards																												
Private consumption per capita using current PPP's ³	US \$	1989	8 258	7 434	8 486	11 225	7 705	7 766	8 733	8 120	5 026	9 447	5 079	8 577	9 068	9 534	8 133	7 007	8 224	4 683	6 443	8 090	10 181	2 768	9 154	13 768	1 638*	
Passenger cars, per 1 000 inhabitants	Number	1988	435 (87)	370	349	454 (86)	321	344	394	457	130	488	210 (87)	408	241	443	348	490	388	190 (87)	263	400	419	20 (83)	318	559	129 (87)	
Telephones, per 1 000 inhabitants	Number	1987	550 (85)	525	478	780	864	617 (85)	608 (85)	650	413	525	265 (85)	488	555 (85)	425 (86)	639	697	622 (84)	202	396	890 (83)	856 (86)	91	524 (84)	650 (84)	154 (86)	
Television sets, per 1 000 inhabitants	Number	1986	472	323	301	546	386	372	332	379	174	306	216	255	585	253	327	358	348	157	322	393	411	165	534	813	176	
Doctors, per 1 000 inhabitants	Number	1989	2.3 (86)	2.1	3.3 (88)	2.2 (88)	2.7 (88)	2.0	2.6	3.0	3.2 (88)	2.7 (88)	1.5 (88)	1.3 (88)	1.6 (88)	1.9 (88)	2.4	1.9	2.5 (87)	2.8	3.7	3.1	2.9	0.8	1.4 (88)	2.3 (88)	1.8 (86)	
Infant mortality per 1 000 live births	Number	1989	7.9	8.3	8.6	7.2 (88)	7.5	6.1 (88)	7.5	7.5	9.9	5.3	7.6	8.9	4.6	9.9	6.8	10.8 (88)	8.3 (88)	12.2	7.8	5.8	7.3	6.5 (88)	8.4	9.7	24.8 (88)	
Wages and prices (average annual increase over previous 5 years)																												
Wages (earnings or rates according to availability)	%	1989	5.3	4.7	2.9	3.9	6.0	7.6	3.9	4.1	16.1	..	6.1	6.9	3.3	..	2.1	9.0	15.6	8.8	7.9	..	..	8.4	2.7	220.8	
Consumer prices	%	1989	7.8	2.2	2.4	4.3	4.3	4.9	3.6	1.3	17.1	23.7	3.7	6.2	1.1	1.8	0.7	11.2	6.6	12.6	6.9	5.6	2.1	50.6	5.3	3.6	210.2	
Foreign trade																												
Exports of goods, fob *	Mill US \$	1989	37 191	32 448	100 081 ⁷	117 154	28 113	23 279	179 192	340 987	7 595	1 429	20 782	140 596	274 266	.. ⁸	107 760	8 883	27 145	12 722	43 408	51 592	51 683	11 557	153 121	363 811	13 363	
As % of GDP	%		13.2	25.7	65.4	21.5	26.5	20.2	18.7	28.7	14.0	27.5	61.3	16.2	..	48.2	21.3	30.1	28.1	11.4	27.2	29.2	14.6	18.3	7.1	16.3		
Average annual increase over previous 5 years	%		10.0	15.6	14.0	6.2	12.0	11.5	13.0	14.7	9.5	14.2	16.6	13.9	10.1	..	10.4	10.2	7.5	19.6	13.3	11.9	14.8	10.1	10.3	10.8	9.8	
Imports of goods, cif *	Mill US \$	1989	40 981	38 902	98 586 ⁷	114 288	26 720	24 537	186 159	269 403	16 200	1 407	17 490	152 910	209 763	..	104 224	8 822	23 630	18 842	70 971	49 113	58 464	15 793	197 806	473 211	14 802	
As % of GDP	%		14.5	30.8	64.4	21	25.2	21.2	19.4	22.7	29.9	27.1	51.6	17.7	..	46.6	21.1	26.2	41.6	18.7	25.9	33.0	20.0	23.6	9.2	18.1		
Average annual increase over previous 5 years	%		12.7	14.7	12.2	9.2	10.0	14.5	13.2	12.0	11.0	10.8	12.5	12.7	..	10.9	7.4	11.2	18.9	19.8	13.2	14.7	7.8	13.5	7.8	8.6		
Total official reserves⁶																												
As ratio of average monthly imports of goods	ratio	1989	10 486	6 543	8 192 ⁷	12 217	4 868	3 889	18 728	46 196	2 453	257	3 087	35 551	63 887	..	12 562	2 303	10 490	7 573	31 554	7 274	19 234	3 638	26 456	48 358	3 147	
			3.1	2.0	1.0	1.3	2.2	1.9	1.2	2.1	1.8	2.2	2.8	3.7	..	1.4	3.1	5.3	4.8	5.3	1.8	3.9	2.8	1.6	1.2	2.6		

* At current prices and exchange rates.
1. Unless otherwise stated.
2. According to the definitions used in OECD Labour Force Statistics.
3. PPP's = Purchasing Power Parities.
4. Gross saving = Gross national disposable income minus Private and Government consumption.
5. Current disbursements = Current expenditure on goods and services plus current transfers and payments of property income.
6. Gold included in reserves is valued at 35 SDR's per ounce. End of year.
7. Including Luxembourg.

8. Included in Belgium.
9. Including non-residential construction.
Sources: Population and Employment: OECD Labour Force Statistics.
GDP, GFCF, and General Government: OECD National Accounts, Vol. I and OECD Economic Outlook, Historical Statistics.
Indicators of living standards: Miscellaneous national publications.
Wages and Prices: OECD Main Economic Indicators.
Foreign trade: OECD Monthly Foreign Trade Statistics, series A.
Total official reserves: IMF International Financial Statistics.

EMPLOYMENT OPPORTUNITIES

Economics and Statistics Department, OECD

The Economics and Statistics Department of the OECD offers challenging and rewarding opportunities to economists interested in applied policy analysis in an international environment. The Department's concerns extend across the entire field of economic policy analysis, both macroeconomic and microeconomic, and it is also responsible for the collection, processing and dissemination of a wide range of internationally consistent statistics. On the economic side, its main task is to provide, for discussion by committees of senior officials from Member countries, documents and papers dealing with current policy concerns. Within this programme of work, three major responsibilities are:

- To prepare regular surveys of the economies of individual Member countries;
- To issue full twice-yearly reviews of the economic situation and prospects of the OECD countries in the context of world economic trends;
- To analyse specific policy issues in a medium-term context for the OECD as a whole, and to a lesser extent for the non-OECD countries.

The documents prepared for these purposes, together with much of the Department's other economic work and its statistical output, appear in published form in the *OECD Economic Outlook*, *OECD Economic Surveys*, *OECD Economic Studies*, the Department's *Working Papers* series, and an extensive list of statistical publications.

The Department maintains a world econometric model, INTERLINK, which plays an important role in the preparation of the policy analyses and twice-yearly projections. The availability of extensive cross-country data bases and good computer resources facilitates comparative empirical analysis, much of which is incorporated into the model.

The Department is made up of about 100 professional economists and statisticians from a variety of backgrounds from all Member countries. Most projects are done by small teams and last from four to eighteen months. Within the Department, ideas and points of view are widely discussed; there is a lively professional interchange; and all professional staff have the opportunity to contribute actively to the programme of work.

Skills ESD is looking for:

- a) Solid competence in using the tools of both microeconomic and macroeconomic theory to answer policy questions. In our experience this requires the equivalent of a PhD in economics or substantial relevant professional experience to compensate for a lower degree.
- b) Solid knowledge of economic statistics and quantitative methods; this includes how to identify data, estimate structural relationships, apply and interpret basic techniques of time series analysis, and test hypotheses. It is essential to be able to interpret results sensibly in an economic policy context.
- c) A keen interest in and knowledge of policy issues, economic developments and their political/social contexts.

- d) Interest and experience in analysing questions posed by policy-makers and presenting the results to them effectively and judiciously. Thus, work experience in government agencies or policy research institutions is an advantage.
- e) The ability to write clearly, effectively, and to the point. The OECD is a bilingual organisation with French and English as the official languages. Candidates must have excellent knowledge of one of these languages, and some knowledge of the other. Knowledge of other languages might also be an advantage for certain posts.
- f) For some posts, expertise in a particular area may be important, but a successful candidate can expect to be asked to contribute in a broader range of topics relevant to the work of the Department. Thus, except in rare cases, the Department does not recruit narrow specialists.
- g) The Department works on a tight time schedule and strict deadlines. Moreover, much of the work in the Department is carried out in small groups of economists. Thus, the ability to work with other economists from a variety of professional backgrounds, and to produce work on time is important.

General Information

The salary for recruits depends on educational and professional background but positions carry a basic salary from FF 252 888 or FF 312 036 for Administrators (economists) and from FF 363 012 for Principal Administrators (senior economists). This may be supplemented by expatriation and/or family allowances, depending on nationality, residence and family situation. Initial appointments are for a fixed term of two to three years.

Vacancies are open to candidates from OECD Member countries. The Organisation seeks to maintain an appropriate balance between female and male staff and among nationals from Member countries.

For further information on employment opportunities in the Economics and Statistics Department, contact:

**Executive Assistant
Economics and Statistics Department
OECD
2, rue André-Pascal
75775 PARIS CEDEX 16
FRANCE**

Applications citing "ECSUR", together with a detailed curriculum vitae in English or French, should be sent to:

**Head of Personnel
OECD
2, rue André-Pascal
75775 PARIS CEDEX 16
FRANCE**

WHERE TO OBTAIN OECD PUBLICATIONS - OÙ OBTENIR LES PUBLICATIONS DE L'OCDE

Argentina - Argentine
CARLOS HIRSCH S.R.L.
 Galería Güemes, Florida 165, 4° Piso
 1333 Buenos Aires Tel. 30.7122, 331.1787 y 331.2391
 Telegram: Hirsch-Bairas
 Telex: 21112 UAPE-AR. Ref. s/2901
 Telefax: (1)3331-1787

Australia - Australie
D.A. Book (Aust.) Pty. Ltd.
 648 Whitehorse Road, P.O.B 163
 Mitcham, Victoria 3122
 Telex: (03)873.5679 Tel. (03)873.4411

Austria - Autriche
 OECD Publications and Information Centre
 Schoedstrasse 7
 D-W 5300 Bonn I (Germany) Tel. (49.228)21.60.45
 Telefax: (49.228)26.11.04
Gerold & Co.
 Graben 31
 Wien I Tel. (0222)533.50.14

Belgium - Belgique
Jean De Lannoy
 Avenue du Roi 202
 B-1060 Bruxelles
 Telex: 63220 Tel. (02)538.51.69/538.08.41
 Telefax: (02) 538.08.41

Canada
Renouf Publishing Company Ltd.
 1294 Algona Road
 Ottawa, ON K1B 3W8
 Telex: 053-4783
 Stores:
 61 Sparks Street
 Ottawa, ON K1P 5R1
 211 Yonge Street
 Toronto, ON M5B 1M4
Federal Publications
 165 University Avenue
 Toronto, ON M5H 3B8
 Telex: (416)581.1743
Les Publications Fédérales
 1185 rue de l'Université
 Montréal, PQ H3B 3A7
Les Éditions La Liberté Inc.
 3020 Chemin Sainte-Foy
 Sainte-Foy, PQ G1X 3V6
 Telex: (418)658.3763

Denmark - Danemark
Munkgaard Export and Subscription Service
 35, Nørre Søgade, P.O. Box 2148
 DK-1016 København K
 Telex: 19431 MUNKS DK Tel. (45 33)12.85.70
 Telefax: (45 33)12.93.87

Finland - Finlande
Akatemien Kirjakauppa
 Keskuskatu 1, P.O. Box 128
 00100 Helsinki
 Telex: 125880 Tel. (358 0)121.441
 Telefax: (358 0)121.4441

France
 OECD/OCDE
Mail Orders/Commandes par correspondance:
 2, rue André-Pascal
 75775 Paris Cédex 16
 Bookshop/Librairie:
 33, rue Octave-Feuillet
 75016 Paris
 Telex: 620 160 OCDE
 Telefax: (33-1)45.24.85.00 (33-1)45.24.81.76
Librairie de l'Université
 12a, rue Nazareth
 13100 Aix-en-Provence
 Telex: 42.26.63.26

Germany - Allemagne
 OECD Publications and Information Centre
 Schoedstrasse 7
 D-W 5300 Bonn I
 Telex: (0228)26.11.04 Tel. (0228)21.60.45

Greece - Grèce
Librairie Kauffmann
 28 rue du Stade
 105 64 Athens
 Telex: 218187 LIKA GR Tel. 3222.21.60

Hong Kong
Swindon Book Co. Ltd.
 13 - 15 Lock Road
 Kowloon, Hong Kong
 Telex: 50 441 SWIN HX Tel. 366.80.31
 Telefax: 739.49.75

Iceland - Islande
Mál Mog Menning
 Laugaveg 18, Pósthólf 392
 121 Reykjavík
 Tel. 51199/24240

India - Inde
Oxford Book and Stationery Co.
 Scindia House
 New Delhi 110001
 Telex: 31 61990 AM IN
 Telefax: (11)332.5993
 17 Park Street
 Calcutta 700016 Tel. 240832

Indonesia - Indonésie
Pdii-Lipi
 P.O. Box 269 /JKSMG/88
 Jakarta 12790
 Telex: 62 875 Tel. 583467

Ireland - Irlande
TDC Publishers - Library Suppliers
 12 North Frederick Street
 Dublin 1 Tel. 744835/749677
 Telex: 33530 TDCP EI Telefax: 748416

Italy - Italie
Libreria Commissionaria Sansoni
 Via Benedetto Fortini, 120/10
 Casella Post. 552
 50125 Firenze
 Telex: 570466 Tel. (055)64.54.15
 Via Bertolini 29
 20155 Milano Tel. 36.50.83
 La diffusione delle pubblicazioni OCSE viene assicurata dalle principali librerie ed anche da:

Editrice e Libreria Herder
 Piazza Montecitorio 120
 00186 Roma Tel. 679.46.28
Libreria NATEL 1 621427
Libreria Hoepfli
 Via Hopti
 20121 Milano Tel. 86.54.46
 Telex: (02)805.20.86
Libreria Scientifica
 Dott. Lucio de Biasio 'Aelou'
 Y. de Biasio 16
 20123 Milano Tel. 805.68.98
 Telex: 800175

Japan - Japon
 OECD Publications and Information Centre
Landis Akasaka Building
 2-3-4 Akasaka, Minato-ku
 Tokyo 107 Tel. (81.3)586.2016
 Telex: (81.3)3584.7929

Korea - Corée
Kyobo Book Centre Co. Ltd.
 P.O. Box 1658, Kwang Hwa Moon
 Seoul Tel. (REP)730.78.91
 Telex: 735.0030

Malaysia/Singapore - Malaisie/Singapour
Co-operative Bookshop Ltd.
 University of Malaya
 P.O. Box 1127, Jalan Pantai Baru
 59700 Kuala Lumpur
 Malaysia Tel. 756.5000/756.5425
 Telex: 757.3661

Indonesia - Indonésie
Information Publications Pte. Ltd.
 Pte-Fu Industrial Building
 24 New Industrial Road, No. 02-06
 Singapore 1953 Tel. 283.1786/283.1798
 Telex: 284.8875

Netherlands - Pays-Bas
SDU Uitgeverij
 Christoffel Plantijnstraat 2
 Postbus 20014
 2500 EA's-Gravenhage
 Voor bestellingen:
 Telex: 32486 sidru Tel. (070 3)778.99.11
 Tel. (070 3)778.58.80
 Telex: (070 3)47.63.51

New Zealand - Nouvelle-Zélande
GP Publications Ltd.
 Customer Services
 3 The Esplanade - P.O. Box 38-900
 Petone, Wellington
 Tel. (04)685-555 Telex: (04)685-333

Norway - Norvège
Narvesen Info Center - NIC
 Bertrand Narvesens vei 2
 P.O. Box 6125 Etterstad
 0602 Oslo 6 Tel. (02)57.33.00
 Telex: (02)68.19.01

Pakistan
Mirza Book Agency
 65 Shahrah Quaid-E-Azam
 Lahore 3 Tel. 66839
 Telex: 44886 UBL PK. Attn: MIRZA BK

Portugal
Libreria Portugal
 Rua do Carmo 70-74, Apart. 2681
 1117 Lisboa Codex
 Telex: (01) 347.02.64 Tel. 347.49.82/31/4/5

Singapore/Malaysia - Singapour/Malaisie
 See Malaysia/Singapore - Voir Malaisie/Singapour

Spain - Espagne
Libreria Prensa Libros S.A.
 Castelló 37, Apartado 1223
 Madrid 28001 Tel. (91) 431.33.99
 Telex: 49370 MPLI Telefax: 575.39.98

Libreria Internacional AEDOS
 Consejo de Ciencia 391
 08009 - Barcelona Tel. (93) 301-86-15
 Telex: (93) 317-01-41
Libreria de la Generalitat
 Palau Moja, Rambla dels Estudis, 118
 08002 - Barcelona Tel. (93) 412.18.54
 Telex: (93) 302.67.23 (Publicacions)

Sri Lanka
Centre for Policy Research
 c/o Mercantile Credit Ltd.
 55, Janadhipathi Mawatha
 Colombo 1
 Telex: 21138 YVALEX CE Tel. 438471-9, 440346
 Telefax: 94.1.448900

Sweden - Suède
Fritzes Fackbokforlaget
 Box 16356, Regeringsgatan 12
 103 27 Stockholm
 Telex: 12387 Tel. (08)23.89.00
 Telefax: (08)20.50.21
Subscription Agency/Abonnements:
Wennergren-Williams AB
 Nordenflychtvägen 74, Box 30004
 104 25 Stockholm Tel. (08)11.67.00
 Telex: 19937 Telefax: (08)16.62.32

Switzerland - Suisse
 OECD Publications and Information Centre
 Schoedstrasse 7
 D-W 5300 Bonn I (Germany) Tel. (49.228)21.60.45
 Telefax: (49.228)26.11.04

Librairie Payot
 6 rue Grenus
 1211 Genève 11 Tel. (022)731.89.50
 Telex: 28356
Subscription Agency - Service des Abonnements
 Naville S.A.
 7, rue Lévrier
 1201 Genève Tél.: (022) 732.24.00
 Telex: (022) 738.48.03
Maditex S.A.
 Chemin des Palettes 4
 1020 Renens/Lausanne Tel. (021)635.08.65
 Telex: (021)635.07.80
United Nations Bookshop/Librairie des Nations-Unies
 Palais des Nations
 1211 Genève 10
 Telex: 412962 Tel. (022)734.14.73
 Telex: (022)740.09.31

Taiwan - Formose
Good Faith Worldwide Int'l. Co. Ltd.
 9th Floor, No. 118, Sec. 2
 Chung Hsiao E. Road
 Taipei Tel. 391.7396/391.7397
 Telex: (02) 394.9176

Thailand - Thaïlande
Sukait Siam Co. Ltd.
 1715 Rama IV Road, Samyan
 Bangkok 5 Tel. 251.1630

Turkey - Turquie
Kültür Yayınları Is-Türk Ltd. Sti.
 Atatürk Bulvarı No. 191/Kat. 21
 Kavaklıdere/Ankara
 Dolmabahçe Cad. No. 29
 Beşiktaş/Istanbul
 Telex: 43482B Tel. 25.07.60
 Telex: 160.71.80

United Kingdom - Royaume-Uni
HMSO
 Gen. enquiries Tel. (071) 873 0011
 Postal orders only:
 P.O. Box 276, London SW8 5DT
 Personal Callers HMSO Bookshop
 49 High Holborn, London WC1V 6BB
 Telex: 297138 Tel. (071) 873 2000
 Branches at: Belfast, Birmingham, Bristol, Edinburgh,
 Manchester

United States - États-Unis
 OECD Publications and Information Centre
 2001 L Street N.W., Suite 700
 Washington, D.C. 20036-4910
 Telex: (202)785.0350 Tel. (202)785.6323

Venezuela
Librería del Este
 Avenida F. Miranda 52, Aptdo. 60337, Edificio Galipán
 Caracas 106 Tel. 951.1705/951.2307/951.1297
 Telegram: Librestate Caracas

Yugoslavia - Yougoslavie
Jugoslovenska Knjiga
 Knez Mihajlova 2, P.O. Box 36
 Beograd
 Telex: 12466 kj bgd Tel. (011)621.992
 Telefax: (011)625.970

Orders and inquiries from countries where Distributors have not yet been appointed should be sent to: OECD Publications Service, 2 rue André-Pascal, 75775 Paris Cédex 16, France. Les commandes provenant de pays où l'OCDE n'a pas encore désigné de distributeur devraient être adressées à: OCDE, Service des Publications, 2, rue André-Pascal, 75775 Paris Cédex 16, France.

PRINTED IN FRANCE



OECD PUBLICATIONS

2 rue André-Pascal

75775 PARIS CEDEX 16

No. 45901

(10 92 23 1) ISBN 92-64-13625-8

ISSN 0376-6438



OECD ECONOMIC SURVEYS

Latest Surveys Available:

AUSTRALIA, *FEBRUARY 1990*
AUSTRIA, *MARCH 1991*
BELGIUM-LUXEMBOURG, *DECEMBER 1990*
CANADA, *AUGUST 1991*
DENMARK, *AUGUST 1991*
FINLAND, *AUGUST 1991*
FRANCE, *MAY 1991*
GERMANY, *JULY 1991*
GREECE, *JUNE 1991*
ICELAND, *JUNE 1991*
IRELAND, *MAY 1991*
ITALY, *SEPTEMBER 1991*
JAPAN, *NOVEMBER 1991*
NETHERLANDS, *DECEMBER 1991*
NEW ZEALAND, *FEBRUARY 1991*
NORWAY, *FEBRUARY 1991*
PORTUGAL, *JANUARY 1992*
SPAIN, *DECEMBER 1990*
SWEDEN, *DECEMBER 1990*
SWITZERLAND, *SEPTEMBER 1991*
TURKEY, *MARCH 1991*
UNITED KINGDOM, *AUGUST 1991*
UNITED STATES, *NOVEMBER 1991*
YUGOSLAVIA, *JUNE 1990*

Surveys of "Partners in Transition" Countries

HUNGARY, *JULY 1991*
CZECH AND SLOVAK FEDERAL REPUBLIC, *DECEMBER 1991*
POLAND (forthcoming 1992)

(10 92 23 1) ISBN 92-64-13625-8
ISSN 0376-6438

Per issue: FF 70
Subscription: FF 850