

## IS CONVERGENCE A SPONTANEOUS PROCESS? THE EXPERIENCE OF SPAIN, PORTUGAL AND GREECE

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## INTRODUCTION

For more than ten years prior to the first oil shock, the income levels of the poorer OECD countries had been catching up with those of the richer; they stopped doing so when the shock occurred. The small countries of southern Europe, particularly Spain, Portugal and Greece, which had enjoyed high growth rates during the 1960s and early 1970s, experienced flat growth compared with the European average during the following period. Greece joined the European Community in 1981, Spain and Portugal in 1986. Their per capita income was well below the EC average. In recent years the trend has differed across countries. In Spain and Portugal, income growth has been more rapid than in other European countries, as a result of which they have started to catch up again with the richer OECD countries. In contrast, the Greek economy has stagnated. Under a system of stable exchange rates, the process of European integration requires that price levels in different countries equalise in the medium to longer term. Besides promoting macroeconomic convergence, this process could also help to bring the per capita income levels of the participating countries closer to one another. This article will focus on the latter type of convergence, and particularly on the experience of southern European countries. To what extent are these countries catching up? Is the process a spontaneous one? What are the factors that are conducive to it?

Part I outlines trends in the OECD countries and puts forward some theoretical considerations regarding the catch-up process. Part II focuses on Spain, Portugal and Greece, with particular emphasis on their structural features at the beginning of the 1980s and on the microeconomic policies progressively implemented since then. Part III seeks to relate the economic performance of the countries in question to the structural reforms that they have implemented.

### I. CATCH-UP: EMPIRICAL EVIDENCE AND THEORETICAL CONSIDERATIONS

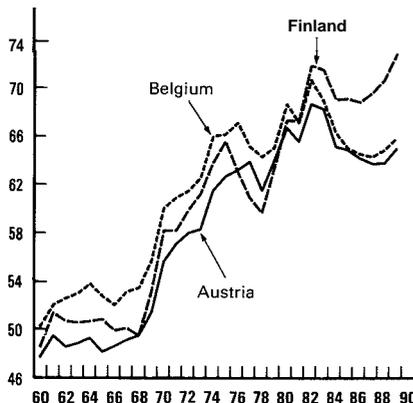
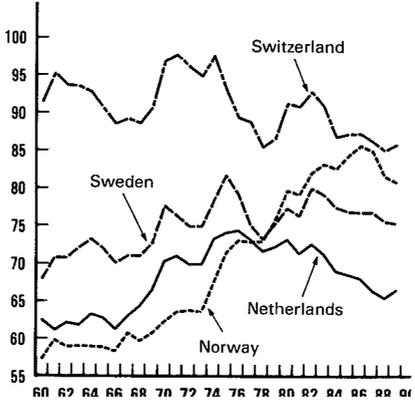
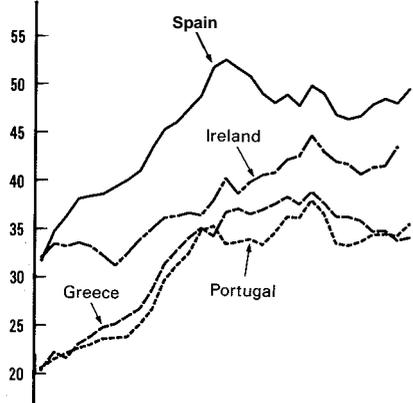
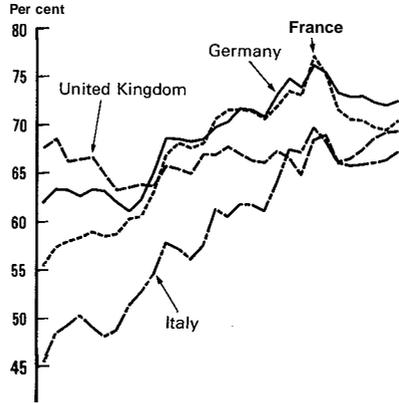
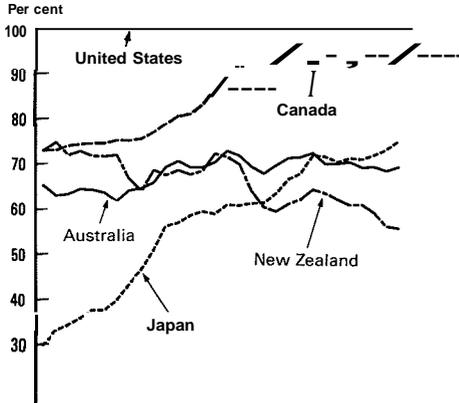
#### A. Unequal rates of catch-up

The trend of per capita income in the OECD countries since the 1960s indicates that the poorer countries have caught up to a certain extent (Chart 1).

CHART 1

TRENDS OF REVENUE PER HEAD IN OECD COUNTRIES (1)

United States = 100



1. GDP per head, current prices and PPPs  
Source: OECD. National accounts and estimates

Income has risen in all countries, and in relation to the United States, most of the countries with a low per capita income level at the start of the period have converged. Chart 1 prompts a few remarks:

- i)* Speeds of convergence vary substantially across countries.
- ii)* By and large, catch-up was stronger during the first period (from 1960 to the mid-1970s) than during the period following the first oil shock; since then per capita income in several countries appears to have stagnated or even declined in relative terms.
- iii)* Switzerland and New Zealand, whose per capita incomes were among the highest at the start of the period, have lost ground relative to the United States and to the OECD area as a whole.

The convergence of living standards can be shown fairly easily when comparing, as in this instance, a group of countries whose structures and living standards in the 1980s are roughly similar. In contrast, a comparison including the developing countries would not show a trend towards convergence (Helliwell et al., 1990).

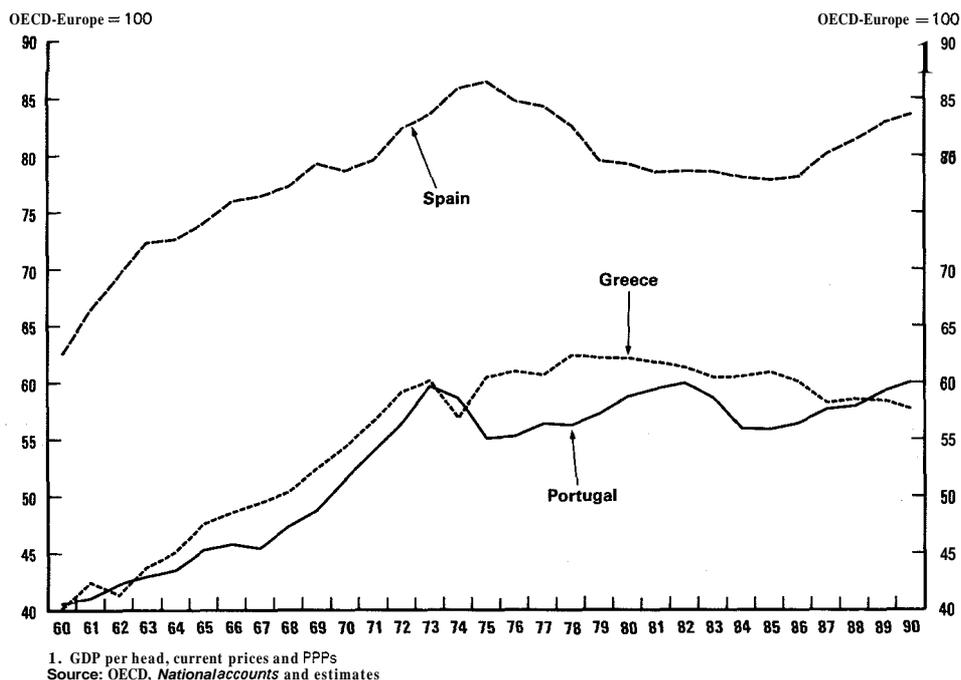
As will be seen later, several factors may help explain the differences in the rate of catch-up in the OECD area, particularly certain institutional and structural features and the degree of development of market mechanisms. The experience of three southern European economies, which are among the least advanced in the OECD area, can help to shed some light. In Spain, Greece and Portugal, per capita income growth between 1960 and 1973 was more rapid than in the more advanced OECD economies. The catch-up was also significant in relation with the European average (Chart 2).

But the consequences of the first oil shock for these countries were more adverse and lasting than for most other OECD countries. Over a period of ten years, the catching up of southern European countries stopped. This interruption is in line with a trend that can be observed generally, whereby convergence takes place during periods of wide-scale expansion, while gaps widen during cyclical slowdowns (Darwick and Nguyen, 1989).

Macroeconomic imbalances worsened during the 1980s, with unemployment in Spain rising to over 20 per cent in 1984-85. In Greece and Portugal the annual rate of increase in consumer prices over the period 1980-85 was 21 and 24 per cent respectively, while the general government borrowing requirement was more than 10 per cent of GDP. The current account deficit in Portugal was also one of the highest among the OECD countries (nearly 13 per cent of GDP in 1981 and 1982).

From the mid-1980s, growth picked up again rapidly in Spain and Portugal, implying a resumption of the catch up with the more advanced European economies (Chart 2). In contrast, Greece continued to record growth rates below the European average. To the extent that these three countries had fairly similar

CHART 2  
**REVENUE PER HEAD IN THREE SOUTHERN  
 EUROPEAN COUNTRIES (I)**



structural features when they joined the European Community, the question arises as to why two of them seem to be benefiting more from the new opportunities created.

### B. Complexity of the catch-up concept

Analysis of the process whereby the less advanced economies catch up with the more advanced ones does not come explicitly within the province of the neo-classical theory on which modern economics is founded. However, starting from the equilibrium conditions of the neo-classical growth model, it is possible to highlight the various aspects of the catch-up process and some of the main mechanisms and factors involved.

In the neo-classical growth model, average labour productivity is a function of the efficiency of the economic system (also known as the rate of technical

progress) and the average quantity of capital goods per worker (or capital intensity)'. In other words, the more efficiently the means of production are used and the greater the amount of productive equipment, the higher the average income. Neo-classical theory thus explains the international disparities in labour productivity described earlier primarily by technological backwardness and a shortage of capital.

### ***Technological backwardness and catch-up***

In neo-classical growth theory, the efficiency of factors of production is determined by technology, or more broadly by the "stock of useful knowledge", to use Kuznets' expression. To the extent that there is no impediment to the dissemination of technological knowledge, the efficiency of the way factors of production are used is thus related intrinsically to the ability to assimilate this knowledge.

Olson (1982) and Abramowitz (1986) have made major contributions to the analysis of technological progress and diffusion. According to them, living standards do indeed converge over the long-term, but the speed of catch-up and the economic rise and decline of nations are determined to a large extent by the existence of a "favourable environment" comprising both economic factors, particularly the degree of development of market mechanisms, social factors (level of education), sociopolitical factors (pressures from lobbies, social structures, property law), cultural and other factors. The existence of a favourable environment determines an economy's long-term level of efficiency and the speed at which it moves towards this level, thus influencing both the level and rate of growth of productivity.

In a recent article, Lucas (1990) expanded the neo-classical model by adjusting the rate of technical progress (which is considered to be exogenous and identical in all economies) for the effect of the accumulation of human capital on productive performance. Human capital reflects the level of education of individuals, and thus varies across countries. According to Lucas, comparing levels of education in different countries (using the estimates made by Krueger, 1968) gives a clearer understanding of the differences in the level of development between countries, and particularly the long-term divergences in their growth rates. Human capital accumulation generates economies of scale; for example, when an employee in an enterprise makes a technological innovation, the innovation also benefits all the other employees.

### ***Capital shortage and catch-up***

In steady-state equilibrium, the marginal rate of return on capital is determined by the rate of technical progress and labour productivity. These two

variables operate in opposite directions<sup>2</sup>. The more efficiently factors of production are used, the higher the rate of return on capital. On the other hand, the higher labour productivity is, the lower the rate of return on capital. This is so because, in the neo-classical model, the returns on factors are considered to be diminishing. Capital accumulation raises labour productivity but lowers the marginal return on capital.

The inverse relationship between labour productivity and the return on capital shows that, when differences in income levels do not reflect technological backwardness, autonomous forces exert powerful pressures towards catch-up. In this view, therefore, catch-up is a spontaneous process. These spontaneous forces result in investment flows to low-income countries – attracted by the high returns to be found there – or in labour migration. The more developed countries have imposed a wide range of immigration controls, which proves that part of the work force from the poorest countries is sufficiently skilled; hence, the backwardness of the poorest countries cannot be explained solely by technological factors.

As there are fewer impediments to capital movements than to migratory flows, investment, along with technology, is one of the main means of catching up. Investment and technology are basically quite complementary to one another. The diffusion of technical progress may indeed be autonomous, but it can also be embodied in the capital goods acquired from the most advanced countries, primarily via two channels: resident economic agents import technology, or foreign firms set up in the country, in turn importing or producing investment goods. However, these two forms of catch-up have different macroeconomic effects; when the catch-up is of a technological nature, it enhances total factor productivity, whereas when it is via capital accumulation it results rather (to the extent that technical progress is partially autonomous) in a narrowing of the gap between labour productivity levels.

Imperfections in factor and goods markets may make investment in low-income countries more uncertain, thereby reducing the expected rate of return on capital. Overall, the determinants for domestic and foreign investment, which are notoriously difficult to quantify, may be divided into three categories:

- i)* the effective marginal productivity of capital, which in an open economy is essentially a function of the cost of inputs and their productivity;
- ii)* the degree of uncertainty attaching to the profitability of an investment;
- iii)* institutional factors, and particularly impediments to the free domestic and foreign circulation of goods and factors of production.

### ***Opening up of markets and catch-up***

Accession to a customs union like the European Community boosts both the actual and expected rate of return on capital. To the extent that imports are used

as inputs in domestic production, the removal of customs barriers results in a reduction of average and marginal production costs. The greater the share of imported inputs in total inputs, the greater the resulting improvement in the rate of return on capital. This supply-side effect is accompanied by a demand stimulus, since the removal of import barriers and the resulting relative fall in import prices causes domestic real disposable income to rise.

According to the customs union theory (Bagwati, 1981), accession to the European Community can also have more indirect or gradual repercussions. As a result of increased competition, factors of production are reallocated to sectors that have a comparative advantage, with efficiency gains being achieved in all the sectors exposed to competition. The concentration of means of production in a smaller number of enterprises or sectors can also promote economies of scale. The size of the efficiency gains depends on the degree to which domestic and foreign products can be substituted for one another, and, as well, on the flexibility of factors of production, particularly labour and "public inputs" (infrastructure in the broad sense, including the training system).

From the macroeconomic standpoint, the dismantling of market barriers means that tradeable goods and services will have the same price in different countries. In contrast, the price levels of non-tradeables will be lower in the less developed countries: this is why there is an inverse relationship, identified by Balassa (1964), between per capita income and purchasing power parity. Relative wage levels also diverge in the long run across countries in line with the differences in marginal productivity between them. As southern European countries catch up with EC average productivity, real wages could rise at a higher rate than elsewhere. Consumer prices as a whole will rise more rapidly since price levels in the non-tradeables sector will move closer to those in the tradeables sector. During the catch-up phase, inflation rates in the less-advanced countries will thus diverge somewhat from those in the rest of the Community. The differential will be smaller if the nominal exchange rate in the less-advanced countries is allowed to appreciate.

All told, it takes a long time for the lower-income OECD countries to catch up with the higher-income OECD countries: the process is not continuous, with rates of convergence varying both in time and across countries. Neo-classical theory shows that countries can catch up through two main channels: technological progress and capital accumulation. But the existence of a favourable environment and sufficiently developed market mechanisms is also essential, though these are difficult to single out from other factors and to quantify. It thus seems useful to analyse the experience of three low-income countries with sociocultural features not too dissimilar from those of the "convergence club". It will be seen to what extent accession to the European Community has promoted the development of market mechanisms and a favourable environment for convergence.

## II. THREE SOUTHERN EUROPEAN COUNTRIES: STRUCTURAL FEATURES AND REFORMS<sup>3</sup>

The rapid growth of the 1960s and early 1970s masked the weaknesses of the southern European countries' economic and social structures. These weaknesses became more visible in the wake of the first oil shock. EC membership and the opening up of markets that it brought with it forced the pace of structural adjustment. This part of the report begins by considering these countries' initial situations as regards production structures, market operation, and social and economic infrastructures, and then reviews the reforms implemented to develop a more propitious environment.

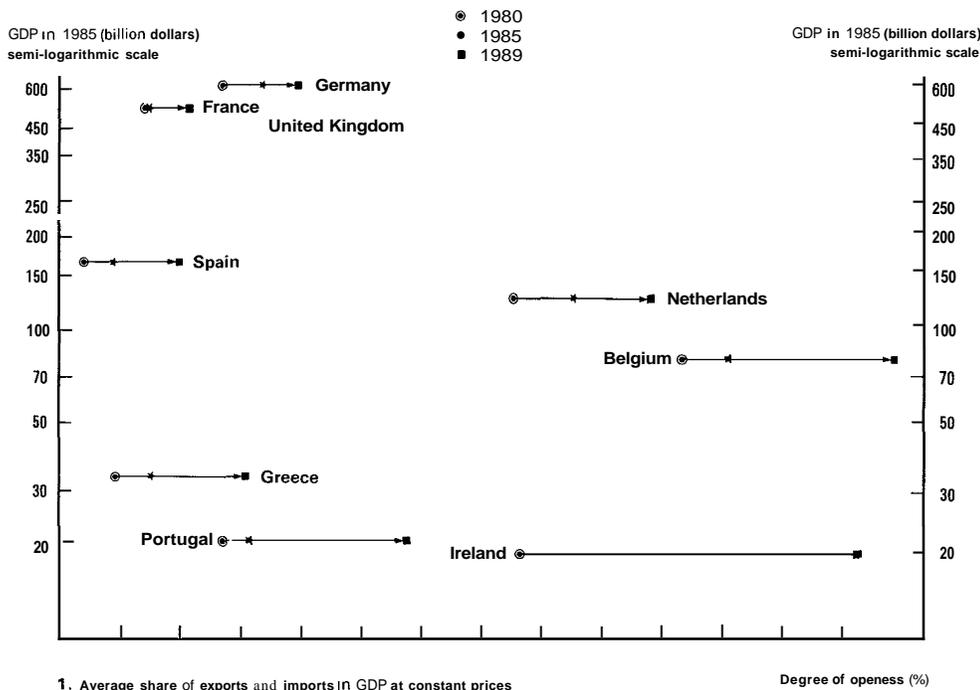
### A. Structural features

Despite Spain's 1970 trade agreements with the EC, and Greece becoming a Community member in 1981, these two economies were still relatively sheltered from foreign competition in the mid-1980s (Chart 3). In Spain, a traditionally protectionist country, unsymmetrical conditions prevailed after the 1970s: tariff barriers were maintained even though the other European countries had dismantled their quantitative restrictions on a wide range of exports from Spain. Greece was in the same situation. It obtained access to the Common Market in the early 1960s for many classes of exports, while maintaining its tariff barriers and levying special import taxes<sup>4</sup>. These barriers probably explain in some measure why Greece's production structures and trade specialisation have remained virtually unchanged since the end of the 1960s.

By contrast, in terms of the weight of foreign trade in GDP, the openness of the Portuguese economy in 1980 was already comparable to that of the major European countries. The explanation lies in its membership of EFTA and its long tradition of trading with the colonies and Brazil. At the time of joining the European Community, its tariff barriers were low (5 per cent, equivalent to EC rates, against 17 per cent in Spain). However, import licences and quotas were still in force.

By comparison with the other European countries, agriculture still accounted in all three countries for a large share of value added and employment (Table 1). The level of agricultural productivity was half the EC average (a quarter in the case of Portugal). Geographical factors apart, there are many reasons for the poor performance of the agricultural sector: heavily-subsidised prices, a rural population with too low a level of education to make proper use of modern production techniques, inadequate infrastructures (roads, electricity, irrigation, etc.) and inefficient distribution channels.

CHART 3  
**DEGREE OF OPENNESS OF THE ECONOMY (I)**  
 1980-1985-1989



1. Average share of exports and imports IN GDP at constant prices  
 Source: OECD, *National accounts*.

In Greece, the land reform of the 1950s resulted in a proliferation of small holdings. In Portugal, the misgivings dating from the 1974 expropriations deterred investors for many years; in 1985, investment accounted for only 3 per cent of agricultural value added, against an EC average of 20 per cent. The agricultural labour force constitutes a resource that can contribute to the catch-up, provided the skill level is improved.

As in other OECD countries, the weight of the public sector together with wide-ranging price controls has hampered the free play of market forces. Public enterprises, used to differing degrees for short-term regulatory purposes (to boost activity), and often not managed in accordance with economic criteria, have accumulated substantial losses constituting a heavy drain on savings (Table 2). Central government subsidies and capital transfers have helped to keep loss-making enterprises afloat and have been detrimental to efficient resource allocation.

Table 1. Sectoral distribution of output and employment

	Per cent					
	Share in GDP			Share in total employment		
	1960	1980	1988	1960	1980	1988
<b>Agriculture</b>						
Spain	22.0	7.1	5.3	38.7	19.2	14.4
Greece	20.2	15.8	13.6	57.1	30.3	26.6
Portugal	23.5	10.3	8.3	43.9	27.3	20.7
OECD Europe	9.8	4.8	3.8	25.7	14.3	11.7
<b>Manufacturing industries</b>						
Spain'	26.7	28.2	29.0	23.0	25.6	22.4
Greece	14.5	17.4	15.4	11.6	19.7	19.3
Portugal'	27.9	31.0	29.2	22.6	26.0	25.1
OECD Europe	31.4	26.0	24.1	27.3	25.8	22.3
<b>Services</b>						
Spain	45.2	54.3	55.6	31.0	44.7	53.1
Greece	56.9	56.5	61.9	25.5	39.5	46.2
Portugal	42.1	49.5	58.5	24.8	36.1	44.2
OECD Europe	47.8	58.1	62.5	36.9	50.5	57.0

1. Including mining and quarrying.

Sources; Central department of planning, Portugal; OECD, *National Accounts* and *Labour Force Statistics*.

In the mid-1980s, financial markets were still in their infancy, with some distinctive features: little or no competition between banks and financial institutions, a large proportion of public corporations serving non-financial objectives set by government; narrow capital markets; a limited range of savings instruments and a preponderance of public debt securities; credit controls (Greece and Portugal) and administratively fixed interest rates; compulsory portfolio requirements for banks; a high proportion of subsidised credit. The variety of regulations made for poor resource allocation and transaction costs were generally higher than elsewhere.

The three countries still had both social (education and health) and economic infrastructures (communications) that lagged far behind those of the other European countries, all of this creating an environment that made it difficult for these countries to catch up. Thus, in Spain, at the end of the 1970s, over two-thirds of

Table 2. Public enterprises

Per cent

	Spain		Greece		Portugal	
	1980	1985	1980	1985	1980	1985
<b>Size of the public enterprises sector<sup>1</sup></b>						
Share in value added	9.0*	14.0			13.0	17.6
Share in investment	22.0 <sup>1</sup>	21.0	12.7	19.0	18.3	17.0
Share in employment	5.0 <sup>1</sup>	6.0	3.5	4.5	5.2	4.7
<b>Sorrowing requirement/GDP<sup>2</sup></b>	-0.7	-1.2	-1.9	-2.7	-9.3	-6.2
State subsidies to public enterprises (per cent of GDP)	2.1	2.4	2.4	3.0	4.8	4.3
<hr/>						
	Spain		Greece		Portugal	4 major European countries
<hr/>						
Productivity (1985) <sup>3</sup>						
Telecommunications	35.2		15.8		12.6	22 to 30
Railways	11.7		4.2		4.6	22 to 25
Electricity supply	180.1		48.0		43.5	96 to 198

\* 1982.

1. For Spain, the size of the public enterprises sector is measured with respect to the non-agricultural sector. For Portugal, data refer to non-financial enterprises.

2. For Spain, refers to the operating deficit of the main non-financial public-sector groups.

3. Productivity is measured as the ratio of total sales (in dollar terms) to employment.

Source: Direct submission by the national authorities; Centre Européen de l'Entreprise Publique: "L'Entreprise publique dans la Communauté Economique Européenne", Brussels, 1987.

the male population in the middle age-group (25-44 years) had completed no more than the compulsory period of primary schooling (over 80 per cent in the case of Portugal), whereas in most of the other European countries the proportion was under 50 per cent<sup>5</sup>. Technical and vocational training was also inadequate, especially in Portugal where only 5 per cent of young people were receiving any such instruction in the mid-1980s. In 1985, while infant mortality in Spain was close to the European average, in Portugal and Greece it was considerably higher (Table 3). In addition, poor roads, transport systems and telecommunications in the three countries undoubtedly hampered development and were a cost for the productive system.

Table 3. Socio-economic indicators

	Europe	Spain	Greece	Portugal
Consumption per capita (1984)	100	80	61	45
Infant mortality rate, per 1 000 live births (1984)	11	7	14	18
Telephones per 1 000 inhabitants (1983)	502	362	336	166
Passenger cars per 1 000 inhabitants (1982)	340	228	102	135
Cumulated investment for road infrastructures (1975-84)	100	43	69	21
Enrollment in secondary education Per cent of relevant age group (1980)	82	87	81	55
Persons with elementary schooling or less (1987) <sup>1</sup>				
men from 45 to 54 years old (per cent)		83		89
men from 35 to 44 years old (per cent)		69		85
men from 25 to 34 years old (per cent)		44		81

1. Persons having completed compulsory primary education but not secondary education or with no schooling.

Source: Eurostat; ECMT; OECD, *Employment Outlook*.

## B. Creating a propitious environment: market reforms

The trade liberalisation that the southern European countries' membership of the European Community brought with it has been gradual. Well before the formal date of membership, trade agreements had been signed with Member States and a transitional period was subsequently provided for, varying in duration according to the country and products concerned. At the same time, over the past ten years or so, as in several other OECD countries, microeconomic reforms have been implemented on several fronts to promote structural adjustment. The process varied in scale and timing across the three countries. In the early 1980s, even before joining the EC, Spain had begun to reorganise its hardest hit industries, while labour market reforms brought some wage restraint. A little later, in 1984, Portugal embarked on a gradual process of market reform, beginning with the financial markets, a process that gathered momentum with the coming into office of a new government in 1985. In Greece, the dismantling of import barriers following EC entry has been slow, and the government has only very recently begun to introduce structural adjustment policies.

### **Trade liberalisation**

In **1986** – when Spain and Portugal formally became members of the European Community – several important changes occurred:

- In Spain, half the difference between Spanish tariffs and the common external tariff was wiped out in three years and virtually all quotas abolished.
- In Portugal, import licences and all import surcharges were abolished. Several quotas were lifted in the first year and further in subsequent years (in December **1987** in the case of automobiles), with all quotas set to be lifted within seven years.
- Greece, though it joined the EC before Spain and Portugal, did not fully dismantle its tariff barriers any earlier. Tariffs were brought into line with EC rates only in **1986** and the import tax was not abolished until **1989**.

The introduction of VAT in **1986**, replacing the former cascade taxes, automatically reduced the implicit export subsidies and import barriers in the case of Spain and Portugal. In Greece, VAT was introduced in **1987**, with the export subsidies and preferential interest rates granted to Greek exporters being gradually phased down. But exporting enterprises still enjoy significant tax advantages; they can deduct from their taxable income **5** per cent of their export earnings and, in some cases, part of their labour and raw materials costs.

The European Community continued to lower quotas in the early **1980s** on a number of products exported by its three southern European members. The lifting of trade barriers has produced quite a significant change in trade flows. Import growth (excluding energy imports) has outstripped demand growth in all three countries, especially Spain and Portugal, where trade-creation effects have exceeded trade-diversion effects. In Portugal, the share of export volumes in GDP also increased after a certain time-lag. In Spain and Greece, by contrast, this share has remained fairly stable over the past three years. Some of the factors behind these divergent trends are discussed below.

The restrictions on capital inflows – traditionally few in Spain – were almost entirely removed in **1985** in preparation for EC membership. Restrictions on capital outflows, which by contrast were quite stringent, were eased and foreign stock exchange transactions liberalised. In Portugal, on the other hand, foreign direct investment was tightly controlled up to July **1986**<sup>6</sup>. Capital outflows and foreign stock exchange transactions were also subject to quite stringent regulations which were subsequently eased. Remaining restrictions are due to disappear in **1991**. Differences in the timing of measures to liberalise foreign investment explain why the latter began to expand much earlier in Spain than in Portugal. By accentuating the opening up of economies, EC membership made the external constraint more acute, which is why it was essential to pursue microeconomic reforms in parallel so as to improve supply conditions.

### ***Enhanced labour market flexibility***

Far-reaching labour market reforms were needed in the three southern European countries, both to ease the legislation in force and to improve the quality of labour supply. In Spain, the flexibility of the labour market was enhanced by the introduction of fixed-term employment programmes, which also opened the way for part-time work and employment-training contracts. As a result of these measures, the new jobs could be adapted to changes in supply and demand conditions. But flexibility was in fact confined to new jobs, and regulations with respect to permanent employment remained virtually unchanged. In Portugal too, fixed-term contracts were used to enhance the responsiveness of the labour market. Real wages were also remarkably flexible. The labour legislation reforms of February 1989 eased the restrictions on individual or collective layoffs and improved unemployment insurance; some provisions were also introduced to regulate the application of fixed-term contracts. In Greece, on the other hand, the regulations on part-time work, overtime and fixed-term contracts have not been eased and the system of wage formation is fairly rigid.

### ***Financial market deregulation***

As in most other OECD countries, the financial markets of the three southern European countries have undergone major changes, though these have varied in pace and extent. Savings instruments and private sector financing sources have become more diversified. Securities markets have expanded – mainly in Spain (where they were completely overhauled in 1989), but also in Portugal where bank credit, for long the predominant source of corporate financing, saw its share decline. Deposit and lending rates were deregulated in the three countries: in Spain, totally in 1987; more slowly in Portugal, where the process lasted from 1984 to 1989; and only partially in Greece where the process did not begin until 1988. In Portugal, again, the banking and insurance sectors were opened up to private and foreign initiative in 1984, resulting in keener competition among financial institutions.

### ***Reform of the public sector***

A number of steps have been taken in recent years to consolidate the public sector and, in particular, to redress the financial position of public enterprises. In Spain, improved management in the 1980s, combining staff cut-backs with more selective investment policies, boosted the performance of the ailing major enterprises. In Portugal, the government paid, as from 1985, arrears to public enterprises, at the same time allowing them a freer hand in setting public utility rates. From 8 per cent of GDP in 1984, their borrowing requirement was down to 1½ per cent by 1990. In Greece, on the other hand, little progress has been

made. Public utility rates are kept artificially low and public enterprises continue to receive large subsidies.

The privatisation of public enterprises may also enhance their operating efficiency. In Spain, recent years have seen partial privatisation in the form of private holdings in public enterprises. Portugal, where the Constitution has recently been amended to allow for full privatisation, has launched a large-scale programme. In Greece, the financial position of most public enterprises is still weak and this has held up action on this front.

### ***Developing social and economic infrastructures***

Like most other OECD countries, the southern European countries allocate substantial resources to manpower training. In Portugal and Greece, transfers equivalent to  $\frac{1}{2}$  per cent of GDP – half the government support provided to the labour market – are earmarked for active measures: vocational training, direct job creation and recruitment incentives (Table 4). Portugal also receives transfers from the European Social Fund totalling 1 per cent of GDP; these are assigned to

Table 4. The labour market: indicators and active policies

	Spain		Greece		Portugal	
	1986	1989	1986	1989	1986	1989
Standardised unemployment rate	<b>21.0</b>	<b>16.9</b>	<b>5.7</b>	<b>7.5</b>	<b>8.1</b>	<b>5.0</b>
Numbers of unemployed <sup>1</sup>	<b>2 972</b>	<b>2 564</b>	<b>287</b>	<b>300</b>	<b>360</b>	<b>233</b>
Unfilled vacancies <sup>1</sup>	<b>147</b>	<b>190</b>	<b>..</b>		<b>4</b>	<b>11</b>
Long-term unemployment <sup>2</sup>	<b>57.6</b>	<b>61.5*</b>	<b>44.5</b>	<b>48.1*</b>	<b>56.0</b>	<b>51.2</b>
Unemployment at age 15-24 <sup>2</sup>	<b>47.8</b>	<b>41.6</b>		<b>..</b>	<b>51.7</b>	<b>47.6</b>
Public expenditure on active measures (1988) <sup>3</sup>	<b>0.8</b>		<b>0.5</b>		<b>0.6</b>	
of which: occupational training	<b>0.1</b>		<b>0.1</b>		<b>0.2</b>	
programmes for the young	<b>0.2</b>		<b>0.04</b>		<b>0.1</b>	
employment incentives	<b>0.4</b>		<b>0.2</b>		<b>0.1</b>	
Participants: occupational training <sup>1</sup>	<b>200</b>		<b>24</b>		<b>75</b>	
programmes for the young <sup>1</sup>	<b>250</b>		<b>11</b>		<b>23</b>	

• 1988.

1. Thousand persons.

2. Per cent of total unemployment.

3. Per cent of GDP. For Portugal, the table refers exclusively to programmes administered by public bodies.

Source: OECD.

training programmes managed by private enterprises. In Spain, virtually all training schemes are designed and supervised by the National Employment Institute; total expenditure on active measures amounted to 0.8 per cent of GDP, a small proportion by comparison with unemployment compensation (2.5 per cent of GDP).

The impact of the schemes varies according to the country. At the beginning of 1988, 830 000 people or 5% per cent of the labour force were concerned by active measures in Spain, with almost half benefiting from job-creation programmes and employment incentives. In Greece, some 100 000 people or 2% per cent of the labour force were involved, with two-thirds benefiting from the employment incentives. In Portugal, priority has been given to training, especially youth training: 75 000 people participated in government training programmes in 1988 and 240 000 in private schemes – in all, 6% per cent of the labour force – including 160 000 young people (very close to the number of jobless in this age group).

Since becoming members of the EC, the three southern European countries have received substantial financial transfers that have helped them in their efforts to modernise their economies and will continue to play a major role provided they are used in accordance with economic criteria. Transfers from the structural funds, which make up the major share, were equivalent in 1988 to  $\frac{1}{2}$  per cent of GDP in Spain and between  $1\frac{1}{2}$  and 2 per cent in Greece and Portugal. Transfers from the European Regional Development Fund (ERDF), over half the total, are intended to develop national infrastructures; those from the European Social Fund (EFS) are to promote vocational training and employment, while transfers from the European Agricultural Guidance and Guarantee Fund (EAGGF) are for structural adjustment of agriculture. Special assistance is provided in some circumstances in addition to transfers from the structural funds; in Portugal, for example, EC resources have been allocated to industrial and agricultural development programmes (0.2 per cent of GDP in 1989). The three countries are required to contribute to all EC-financed projects, which will place a considerable burden on their budgets now and in the years to come. The European Investment Bank, for its part, grants substantial loans to finance investment projects.

### III. STRUCTURAL REFORMS AND ECONOMIC PERFORMANCE

It is difficult to quantify the direct links between the measures a country takes and its macroeconomic performance because structural reforms operate on a number of fronts; also, they are spread out over time and interact in a variety of ways. In addition, it takes some time for economic agents to react to new

conditions, and the general thrust of macroeconomic policy also plays a part. However, it is possible to link economic performance to the reform process in the three countries. The pattern of market reforms partly explains why these countries have not all caught up to the same degree in the last few years.

## **A. Role of market reforms in the catch-up process**

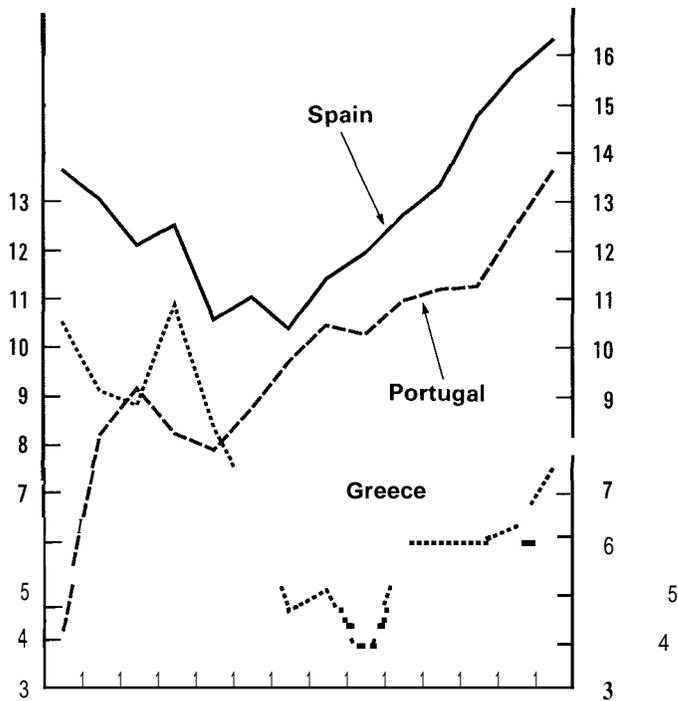
### ***Impact of structural policies on investment***

The volume of gross fixed capital formation in Spain and Portugal has doubled since these countries joined the EC, whereas it has declined in Greece. The policies aimed at putting the public sector on a sound footing have had the effect of increasing national savings in Spain and Portugal, thereby partly financing the growth of investment. Conversely, the fall in the investment ratio in Greece has been accompanied by a lower propensity to save, due to the worsening public sector accounts. Apart from national savings, long-term capital inflows have helped to finance investment in Spain and Portugal, whereas Greece has had to borrow in order to offset a sharp fall in inflows of stable capital. All in all, the three countries' current balances have deteriorated; but, whereas inflows of stable capital have more than offset this phenomenon in Spain and Portugal, foreign borrowing has increased in Greece.

Direct investment is the biggest single component of inflows of stable capital. Spain has long attracted foreign investment, totalling US\$8 billion in the first half of the 1980s. During 1985-89, the figure has been five times higher. In Portugal, the surge in foreign investment came later, but has also been spectacular in recent years. As will be seen, the trend in domestic and foreign investment is consistent with the predictions deriving from the theory outlined above.

The actual rate of return on capital, which is a prime factor governing investment, has picked up sharply in Spain and Portugal (Chart 4). Supply conditions had largely been restored prior to EC membership in Spain and, to a lesser extent, Portugal. In Greece, on the other hand, the stimulative effect of the lifting of customs barriers has been cancelled out by supply-side deficiencies. The rate of return has remained low.

Financial market liberalisation, combined with the improvement in gross operating surpluses, have contributed to the upturn in investment. As a result of easier stock-market access, the financial debt ratio of Spanish industry has thus fallen by half since 1983. Reduced indebtedness and greater competition between financial institutions have substantially cut the average cost of Spanish industry's liabilities. Sectoral analysis reveals a fairly close correlation between the structure of debt and investment (Mato, 1990). The partial data available on the financial structure of Portuguese industry lead to the same findings. The debt ratio



of Greek firms is still very high, on the other hand, and financial costs are continuing to weigh on investment.

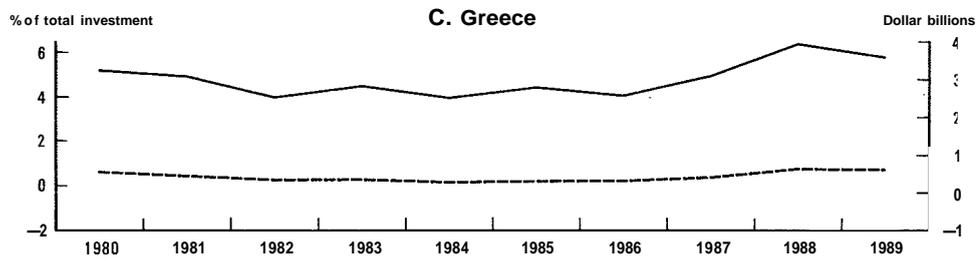
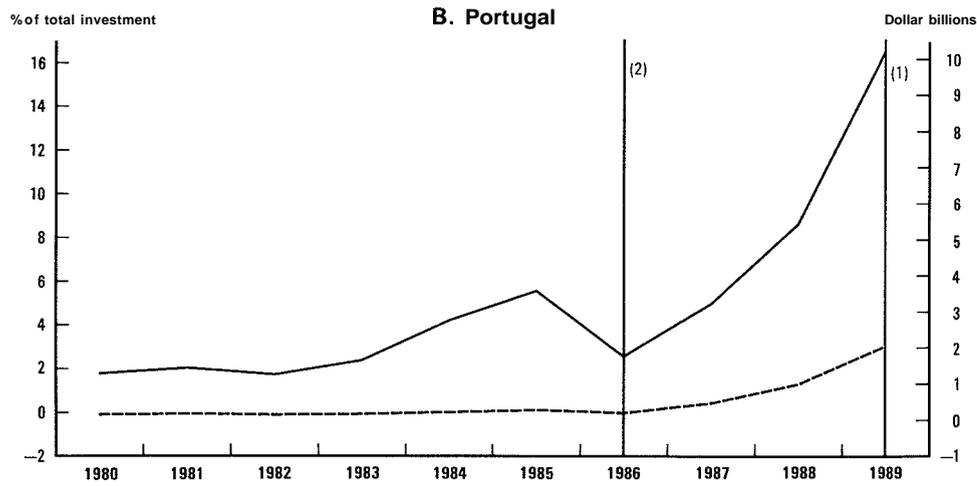
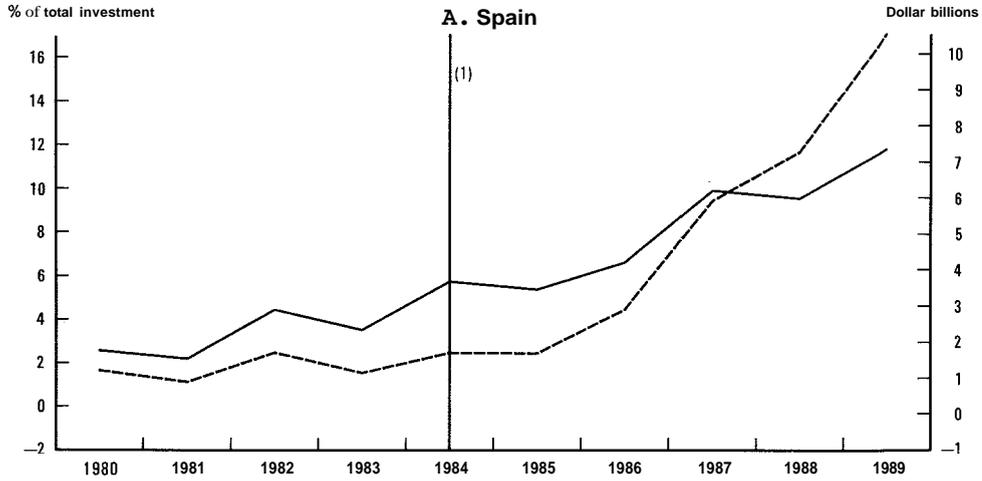
The spectacular pick-up in investment in Spain and Portugal cannot, however, be attributed solely to the high rate of return of capital. The confidence of investors has also been boosted by the adoption of reforms aimed at ensuring that the volume of employment adjusts more efficiently to demand. As Chart 5 shows, domestic and foreign investment gathered momentum following the introduction of measures to make employment more flexible.

Likewise, the announcement in 1985 of a single European market to be completed by 1992 has played a key role in bolstering the confidence of foreign investors. The share of foreign investment in Spain and Portugal originating from the EC countries has virtually doubled since 1985, as investment was redistributed within the EC. The political stability and good labour relations enjoyed by

CHART 5

### INSTITUTIONAL CHANGES AND FOREIGN DIRECT INVESTMENT

— As a per cent of total fixed investment (left scale)  
 ..... Dollar billions (right scale)



1. Labour market reform, 2. New investment code.  
 Source: OECD Secretariat.

Spain and Portugal, which contrast with the situation in Greece, have also had a favourable impact on both realised and expected profits. In Greece, private investment has been largely crowded out by the sizeable public deficit.

### ***Trends in production structures and trade***

In Spain and Portugal, structural reforms have stimulated investment, prompting, in addition, a shift towards production and international trade structures which are more advantageous for those countries. This outcome lends support to the theoretical proposition outlined above whereby catch-up is partly endogenous. Thus, the lifting of customs barriers was accompanied in Spain by industrial adjustment tailored in accordance with "real" comparative advantages (Chart 6). Prior to 1986, industrial specialisation in the Spanish and Portuguese economies depended more on the pattern of rates of tariff protection than on relative advantages. The dismantling of customs barriers was accompanied in Spain and Portugal by the restructuring of the productive sector. The stability of structures in Greece is indicative of persisting import barriers.

As export performances show, changes in supply conditions are very closely related to structural reforms. The fact that Spain and Portugal have gained export market shares is mainly because: *i)* they adjusted their production structures in such a way as to sell products for which world demand was growing fastest; *ii)* the geographical distribution of exports has changed to their advantage; and/or *iii)* the competitiveness, quality and marketing of exports has improved. Greece, on the other hand, has lost market shares, mainly because protectionist barriers were maintained until recently and financial and real resources were poorly allocated, to the detriment of the productive sector.

### ***The catch-up***

Per capita income, measured in a common currency, is often used as a standard-of-living indicator. However this indicator has to be adjusted on the basis of purchasing power parities, as observed exchange rates do not necessarily reflect the relative level of prices of goods and services in the different economies. The growth of per capita income adjusted in this way may usefully be broken down into three components:

- i)* the growth of total factor productivity (TFP), which measures the gains in the productive-sector's efficiency;
- ii)* the change in the ratio of inputs (employment and capital stock) to the number of inhabitants. This ratio reflects various factors, including demographic variables, participation rate of the population of working age and unemployment;



average over the period. Value added in industry grew by more than 10 per cent per year. The level of industrialisation, which was still relatively low in all three countries at the start of the period, meant that there was considerable potential for rapid growth. Real GDP grew at an annual rate of some 7 per cent between 1960 and 1973, compared with an average of 5 per cent for Europe as a whole, leading to a narrowing of income differentials. All in all, this development mainly reflects the catch-up in TFP levels, while the change in factor intensity contributed only negligibly to growth (Chart 5).

A number of conditions in these countries were relatively conducive to the catch-up:

- On the labour market, the mobility of labour supply was enhanced by massive migration within the countries concerned to the industrial regions and also to other countries; at the same time, labour costs were rising slowly, workers' rights being limited. On the other hand, the low level of school enrolment no doubt retarded the spread of technological progress and influenced industrial specialisation.
- Foreign direct investment was substantial in all three countries, attracted as it was by low labour costs, industrial incentives and the apparently stable political climate.
- Increasing openness to foreign trade and expansion in the rest of Europe resulted in exports growing at an annual rate of almost 10 per cent.
- Investment could be financed thanks to abundant domestic savings and migrants' remittances.
- These forces shaped the adjustment of production structures. A dual productive system prevailed: an export sector made up of small and medium-sized enterprises which were labour intensive, exposed to foreign competition and open to foreign investment coexisted with a sector – basic industry, etc. – bound by government directives, closed to foreign investment and sheltered from competition.

In the aftermath of the first oil shock, relative levels of per capita income fell in all three countries (Table 5). The steep increase in investment gave way to a pronounced decline caused partly by the fall in exports; furthermore, the political uncertainties of 1974-75 in the three countries meant that the climate was not conducive to either domestic or foreign investment. Lastly, the worsening public finance situation may also have had a crowding-out effect.

Since 1985, the catch-up has been fairly brisk in Spain and Portugal, where incomes are virtually back to the levels of the early 1970s, but not in Greece where the income differential widened compared with the other OECD countries. A breakdown of relative per capita incomes shows that the increase in the employment/population ratio has been the main factor behind income growth in Spain; since the mid-1980s, labour productivity has not increased much faster

**Table 5. The catch-up process**

Annual growth rates, per cent

	1966-73	1973-79	1979-85	1985-89
<b>Spain</b>				
<b>GDP/head</b>	<b>5.8</b>	<b>1.4</b>	<b>-0.1</b>	<b>5.4</b>
TFP	3.3	1.3	2.4	1.9
Inputs/head	1.9	-0.1	-1.6	2.5
Terms of trade	0.6	0.2	-0.9	<b>1.0</b>
<b>Greece</b>				
<b>GDP/head</b>	<b>8.3</b>	2.9	<b>0.8</b>	<b>0.4</b>
TFP	6.7	2.5	-0.2	0.9
Inputs/head	0.4	0	1.0	0.7
Terms of trade	1.2	0.4	<b>0</b>	-1.2
<b>Portugal</b>				
<b>GDP/head</b>	<b>10.3</b>	<b>0.8</b>	0	<b>6.6</b>
TFP	5.2	-1.9	-0.7	2.9
Inputs/head	2.8	4.4	1.5	1.4
Terms of trade	2.3	-1.7	-0.8	2.3
<b>OECD Europe</b>				
<b>GDP/head</b>	<b>4.6</b>	<b>2.3</b>	<b>1.0</b>	<b>3.8</b>
TFP	3.1	1.4	1.1	1.6
Inputs/head	0.9	0.8	0.3	1.3
Terms of trade	0.6	0.1	-0.4	0.9

*Note:* GDP is deflated using the private consumption deflator. TFP is total factor productivity. Relative contributions of TFP and inputs per head are those estimated for the business sector.

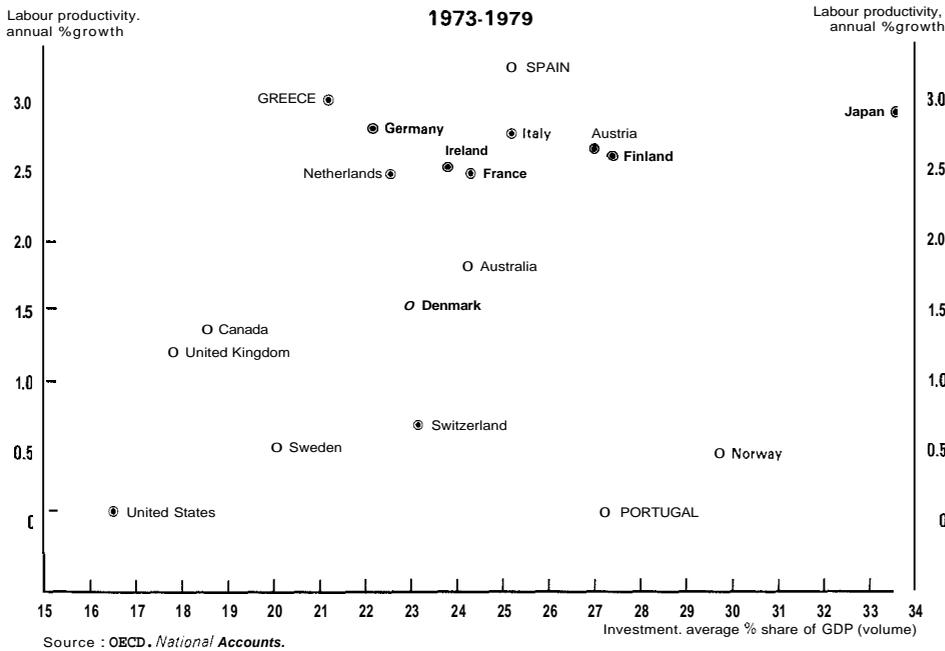
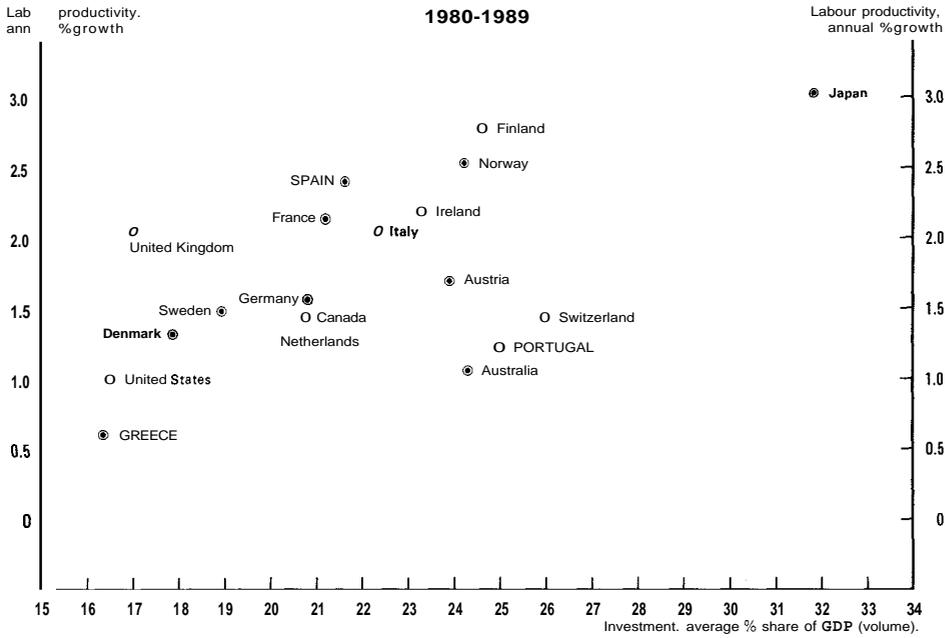
*Sources:* OECD, *National Accounts*; own estimates.

than in the other OECD countries. By contrast, in Portugal TFP gains have been the main engine of income growth. In Greece, all the factors referred to have contributed to a relative decline in per capita income.

The intensity of investment in Spain and Portugal has had a positive impact on productivity and the employment/population ratio, two components of relative incomes. In Spain, productivity in those sectors which have been the target of foreign investment has risen twice as fast as the national average. In aggregate terms, growth of labour productivity undoubtedly slackened in the second half of the 1980s, but this was due to the slowdown in the process of capital/labour substitution caused by wage restraint. Total factor productivity, which is adjusted for the substitution effect, has in fact accelerated since 1983-84. As Chart 7

CHART 7

LABOUR PRODUCTIVITY AND INVESTMENT SHARE



Source : OECD, National Accounts.

shows, there is a link between productivity and investment. All in all, investment has resulted in Spain and Portugal in both substantial job creation and more efficient economic systems. In Greece, on the other hand, the persisting sluggishness of investment has caused both productivity and the volume of employment to level off.

That living standards have evolved differently in the three countries is due partly to the fact that Spain and Portugal were quick to lift import barriers and export subsidies. In Greece, on the contrary, the impediments to free trade were removed slowly. The result was that Spain and Portugal enjoyed a sharp improvement in their terms of trade immediately after joining the EC, the positive impact being all the greater in that tariff barriers and import quotas had been high prior to membership. The "trade creation" effects easily outweighed the "diversion" effects. The only exception was agricultural products, on which Community tariffs were on average higher than those applied by the countries of southern Europe prior to their joining. In Greece the improvement in the terms of trade in 1981-82 was small. Supply-side restructuring increased the terms-of-trade gains in Spain and Portugal, the concentration of production in the most efficient sectors generating economies of scale.

## **B. A slow improvement in socio-economic infrastructures**

The lessons learnt by other countries both inside and outside the OECD area (Italy in the 1950s, Japan, and more recently Malaysia) show that maximising the benefits accruing from domestic and foreign investment depends on how adaptable production factors are to changing technological requirements. From that point of view, the countries of southern Europe are still suffering from inadequate infrastructure. These shortcomings partly explain why foreign investment has been concentrated around the two or three biggest towns in Spain and Portugal, the result being a measure of saturation in these towns, while at the same time regional imbalances have become more marked.

A more serious problem is posed by insufficient manpower flexibility. As was seen above, labour market deregulation has helped to attract foreign investment. The lack of skills of part of the labour force continues to hamper labour adaptability to changing requirements of the economy and, despite actions financed jointly with the EC, the growing need for highly skilled labour has not yet been adequately met. This is clear from the fact that the number of unfilled job vacancies in Spain and Portugal has been rising steadily since 1985.

Public spending in these areas is thus bound to increase, and the problem for these economies is therefore to contend with these challenges without raising government deficits. Stricter rules concerning budgetary controls could improve the efficiency of public spending.

## CONCLUSIONS

The analysis of the experience of economies of southern Europe suggests the following:

- i)* The good economic performance of Spain and Portugal is attributable largely to foreign investment and the existence in the early **1980s** of substantial unexploited resources – mainly an abundant supply of cheap labour.
- ii)* Structural reforms have given a considerable boost to investment, the most effective measures in this regard being the deregulation of the labour market, in particular with the introduction of more flexible methods of recruitment and the lifting of restrictions on imported goods following EC membership. However, the inadequacy of socio-economic infrastructures has slowed the catch-up process.
- iii)* The example of Greece shows that the increased welfare to be gained from the opening up of markets is all the more limited when supply conditions are not restored. By helping to make economies more flexible and adjusting production structures, structural reforms permit rapid growth while at the same time avoiding unsustainable disequilibria.
- iv)* Catch-up is not therefore a spontaneous process, but depends very much on the degree of development of market mechanisms and the quality of social and economic infrastructures.

Confidence, too, plays a role in the success of structural reform. Important in this respect was the introduction in Spain (in **1982**) and Portugal (in **1987**) of medium-term adjustment measures comprising both efforts to correct the macroeconomic imbalances (with a reduction in government deficits and inflation in particular) and also structural reforms. Likewise, **EC** membership generated favourable expectations both within and outside the two countries. Although results have in some case fallen short of objectives, considerable progress has been made on structural reform and in the reduction of macroeconomic imbalances.

The continuation of the catch-up will depend on the response to two new factors: the completion of the Single European Market and the transition of eastern European countries to the market economy system. At the start of the **1990s**, Spain and Portugal have taken up almost all their idle production capacity, and the interest shown in these markets by international investors may wane as new profitable investment opportunities open up in the eastern European countries. The catch-up process in the two countries will therefore rely increasingly on domestic savings and on efficiency gains. Of particular importance in this context

are improved manpower training and the development of communications infrastructures. Clearly these measures will have budgetary repercussions, which is why the other categories of expenditure must be better controlled. In these southern countries of Europe, more than in the other OECD countries, fiscal consolidation and improved public sector efficiency are of crucial importance.

## NOTES

1. When technology is represented by a constant-elasticity of substitution production function with Harrod neutral technical progress, labour productivity can be written as follows:

$$y/L = b * (t ** s') + c * ((k/L) ** s') ** (1/s') \quad [1]$$

where  $y/L$  represents labour productivity,  $t$  the rate of technical progress,  $k/L$  capital intensity,  $s'$  an elasticity of substitution function and  $b$  and  $c$  scale parameters.

The marginal rate of return on capital is obtained by taking the derivative of the production function with respect to capital, which gives the following equation:

$$r = c * (b * (t ** s') * ((k/L) ** s') + c) ** s'' \quad [2]$$

where  $r$  represents the marginal productivity of capital and  $s''$  a function of the elasticity of substitution.

Equation [2] can be simplified as follows:

$$r = \phi(t, k/L) \quad [3]$$

with  $\phi_1$ ,  $\phi_2$  and  $\phi_{12}$  positive and a function of the elasticity of substitution.

2. It is important to distinguish temporary equilibria, characterised by marginal rates of return on capital which differ from country to country, from long-term equilibrium where the marginal rate of return (and hence potential output growth and per capita income) is the same in all countries. By definition, during the catch-up phase there can only be temporary equilibria.
3. Various structural questions and the main microeconomic policy changes introduced in recent years in Spain, Greece and Portugal have been examined in the *OECD Economic Surveys* of these countries published since **1985-86**.
4. Whereas tariff barriers were gradually lowered to the level of the common external tariff in **1986**, the special duties on imports were increased. All told, total taxes on imports are estimated to have remained stable at approximately **10** per cent of aggregate imports between **1975** and **1985**.
5. There are big discrepancies among the European countries, and also across the different age groups; for more details concerning **1988**, see the *OECD Employment Outlook, 1989*, Table 2.1.
6. An investment code more liberal than the previous one was introduced in **1986**. Until then, foreign direct investment was authorised only under certain strict conditions: increases in the capital of companies in which non-residents already held equity, provided this did not alter the overall share thereof; joint investment with Portuguese public enterprises in certain sectors; lastly, investment in sectors deemed by the Portuguese authorities to be of prime importance.

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