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Annual Economic Report 1990-91

The European Community in the 1990s: Towards economic and monetary union

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— Series A—'Economic trends' appears monthly except in August and describes with the aid of tables and graphs the most recent trends of industrial production, consumer prices, unemployment, the balance of trade, exchange rates, and other indicators. This supplement also presents the Commission staff's macroeconomic forecasts and Commission communications to the Council on economic policy.

— Series B—'Business and consumer survey results' gives the main results of opinion surveys of industrial chief executives (orders, stocks, production outlook, etc.) and of consumers (economic and financial situation and outlook, etc.) in the Community, and other business cycle indicators. It also appears monthly, with the exception of August.

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The European Community in the 1990s: Towards economic and monetary union

Annual Economic Report 1990-91[1]

The national economies

Analytical studies

Statistical annex

[1] The Commission's proposed 'Annual Economic Report' is to be adopted by the Council, after consulting the European Parliament and the Economic and Social Committee, in accordance with Council Decision 90/141/EEC on the attainment of progressive convergence in economic policies and performances during Stage I of economic and monetary union.

Abbreviations and symbols used

Countries

B	Belgium
DK	Denmark
D	Federal Republic of Germany
GR	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	The Netherlands
P	Portugal
UK	United Kingdom
EUR 9	European Community excluding Greece, Spain and Portugal
EUR 10	European Community excluding Spain and Portugal
EUR 12	European Community, 12 Member States

Currencies

ECU	European currency unit
BFR	Belgian franc
DKR	Danish krone
DM	Deutschmark
DR	Greek drachma
ESC	Portuguese escudo
FF	French franc
HFL	Dutch guilder
IRL	Irish pound (punt)
LFR	Luxembourg franc
LIT	Italian lira
PTA	Spanish peseta
UKL	Pound sterling
USD	US dollar
SFR	Swiss franc
YEN	Japanese yen
CAD	Canadian dollar
ÖS	Austrian schilling

Other abbreviations

ACP	African, Caribbean and Pacific countries having signed the Lomé Convention
ECSC	European Coal and Steel Community
EDF	European Development Fund
EIB	European Investment Bank
EMCF	European Monetary Cooperation Fund
EMS	European Monetary System
ERDF	European Regional Development Fund
Euratom	European Atomic Energy Community
Eurostat	Statistical Office of the European Communities
GDP (GNP)	Gross domestic (national) product
GFCF	Gross fixed capital formation
LDCs	Less-developed countries
Mio	Million
Mrd	1 000 million
NCI	New Community Instrument
OCTs	Overseas countries and territories
OECD	Organization for Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PPS	Purchasing power standard
SMEs	Small and medium-sized enterprises
SOEC	Statistical Office of the European Communities
toe	Tonne of oil equivalent
:	Not available

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Introduction

The Community embarked on Stage I of economic and monetary union on 1 July 1990. The success of Stage I will be crucial for the creation of EMU. To make Stage I a success with less favourable short-term prospects for the Community economy, requires a stronger coordination of policies to support sustainable growth and greater nominal and real convergence. Given the considerable adjustments needed to bring convergence at the best possible level, this process must already be reinforced now.

Facing the 1990s, the Community economy is in an ambiguous situation. On the one hand, the world economic climate is clearly deteriorating and the USA and the UK are even facing a recession. The Gulf crisis has added to uncertainties and inflation, and growth and investment are decelerating in many countries, particularly in those which were not able to control inflation sufficiently. World trade is slowing down, and the heavily falling dollar reduces the competitivity of EC-industry. Although the less favourable growth prospects may bring the fall in unemployment temporarily to a halt, the Community can, on the other hand, have much more confidence in the underlying strength of its economy. In spite of the imminent slow-down in growth, the medium-term perspectives remain promising. There has been significant improvement in fundamental determinants of economic growth, and the prospects opened up by the expectation of an early completion of the internal market have imparted additional dynamism.

On the competitive world stage, the Community is still constrained by the fragmentation of its markets. It is precisely in order to secure its economic future that the Community has embarked on a programme to create a market of continental dimensions. That programme is already adding substantially to EC growth prospects. Crowning the completed internal market with a common currency in the near future will further bolster the positive mood of management. Great expectations have been created; they must not be frustrated. Member States need to speed up the implementation of the proposals contained in the White Paper to keep the deadline of 1 January 1993. In particular, the narrowing of differentials in indirect taxes is important for the successful elimination of border controls.

The second factor adding to medium-term growth prospects is the acceleration of the catching-up process in the less-favoured countries and regions. Above-average growth in those countries and regions, apparent in recent years, notably in Spain, Ireland and Portugal, has significantly expanded the growth potential of the Community as a whole. In view of the existing gap, the catching-up process must be sustained by long-term efforts. The countries involved will, despite the recent improvement of structural policies, the doubling of the structural Funds and the simultaneous strengthening of the financial instruments, remain primarily responsible for their own development. To discharge this responsibility successfully, they must conduct their economic and social policies in a way that will provide the basis for strong and sustainable growth of real GDP, without inflationary pressure or unsustainable internal and external imbalances.

A vital macroeconomic condition for the success of the catching-up process and the internal market programme is the consolidation — and subsequent acceleration in a non-inflationary manner — of growth performances in the more advanced economies. In this respect, a solid consensus has emerged in the Community's economic policy: it centres on a supply-side-oriented further revitalization of EC growth performance in conditions of price stability. This is to be attained by way of stringency in monetary conditions, progressive consolidation of public finances, increased supply-side flexibility, real wage moderation and strengthened coordination of policies within the context of multilateral surveillance of Stage I.

Finally the recent East-West *détente* has important consequences for the medium-term growth climate. Given the intention to reincorporate the State-trading countries into the international division of labour, relations with them are now at a decisive turning-point. Although in the short run, the transformation of the Central and Eastern European command economies into market economies will add to the disruptive factors implying a short-term deterioration in trade prospects, it should not be forgotten that Central and Eastern Europe provides in the longer term a potential market of more than 400 million consumers, right on the Community's doorstep. This increases the Community's interest in helping these countries, but it also raises the world's need for savings.

German unification is the most important immediate effect of the liberalization of Central and Eastern Europe. It has come about very rapidly and is of major direct importance for the Community. It will be accompanied by a strengthening of Germany's growth performance, shrinking — perhaps even eliminating — the current account surplus and transforming East Germany into a market economy. This will accentuate the scarcity of capital in Europe, requiring a Community-wide effort to narrow the EC's savings gap. The most straightforward way to achieve this is to increase public saving.

With the Community economy in better order and the fundamentals for growth still in good shape, it is not very likely that the underlying growth performance in the Community will come to an abrupt stop. Admittedly, there are negative factors in the world environment: the performance of the USA is weak and the latest oil price hike, limited though it may be, will further reduce growth in activity. The falling US dollar mitigates oil-induced inflationary pressures in the Community and provided that policies respond to the oil price hike in a way which prevents the initial boost to prices becoming embedded in a wage/price spiral, it is also not to be expected that a deceleration of world trade going together with a US recession will unduly weaken the confidence of the private sector. Notwithstanding the slowing-down of the growth performance in quite a number of EC countries, the underlying health of the Community's economy and the tonic provided by German unification probably imply that the momentum of the EC growth process will carry through in the medium term. The same appears to be the case for Japan and the South Pacific Basin, where growth prospects remain largely satisfactory. A positive outcome of the Uruguay Round is essential for a resumption of world trade growth. As the world's largest trading block, the Community has a natural interest in its successful conclusion.

At first sight, there might seem to be a fear that the Gulf crisis could significantly alter the picture just presented and put further progress towards EMU at risk. The two previous oil price shocks did in fact result in serious damage to convergence in the Community. But this time more favourable economic circumstances prevail. In 1973 the price of oil quadrupled and in 1979 it trebled. In present conditions it can be hoped the extent of the price rise will be much smaller. Further, oil dependency in the productive sector has fallen by around a third since the end of the 1970s, although sizeable differences remain among member countries. The increase in the oil bill is particularly important for Portugal, Greece and Spain. Furthermore, the general state of our economies has greatly improved. Lastly, with Stage I, procedures for improved policy coordination are in place and should be fully used.

In the somewhat shorter run it will be crucial, in responding to the new oil price hike, to avoid the mistakes of the past. Then, oil price shocks met with very divergent, but in the aggregate, insufficiently restrictive policies and attitudes that facilitated the efforts to maintain high increases in real wages in spite of the oil-induced terms of trade loss. In the last instance that resulted in an intensified struggle over the distribution of income which was the main reason behind the weak EC growth performance and the increasing divergence of the 1970s. To avoid a repetition of such mistakes, monetary policy will have to maintain and, if needed, even reinforce its anti-inflationary stance: no doubt must be left as to the authorities' intentions not to accommodate inflation. Fiscal policy should remain on a path of medium-term budget consolidation; there should be no attempt to compensate for the unavoidable income loss related to the oil price shock. Such a policy stance is also important for a successful move into Stage II of EMU on 1 January 1994 and, ultimately, for making the attainment of economic and monetary union a realistic endeavour.

I — The short-term outlook clouded

After several years of strong expansion with growing levels of investment, rapid employment creation and improved convergence, the short-term outlook for the Community economy has become less favourable in 1990. This is partly the result of internal factors; their impact, however, has been strongly reinforced by external events such as the increase in the price of oil, the depreciation of the dollar, and the slow-down in growth in the USA and in world trade.

In 1991 the outlook for the Community is for a further deceleration of growth and employment and an acceleration of consumer price inflation. The extent and the duration of the slow-down in growth and of the acceleration in inflation will depend very much on the policies pursued. With appropriate policies, for which Stage I of EMU may provide the necessary disciplinary framework, the Community may already in 1992 resume more buoyant growth in a climate of decelerating inflation.

A — Community growth tapers off in 1990

Already before the Gulf crisis there was some cooling-off in the Community's growth performance. Real growth was expected to decline from 3,8 % in 1988 to 3,3 % in 1989 and to 2,9 % in 1990. This was notably due to weaker-than-expected growth in the United Kingdom but also to lower growth in France, Italy and Spain. This slow-down was only partly compensated by the stronger German expansion resulting from unification and the tax reform (see box on particular treatment of Germany), which had a positive spillover effect on the Benelux countries and Denmark.

Table 1

The EC economy at the turn of the decade

(annual % change)

	1982-85	1986-87	1988-90	1989	1990	1991[1]
Real GDP	+1,8	+2,7	+3,3	+3,3	+2,9	+2,2
Employment	−0,2	+1,0	+1,5	+1,6	+1,7	+0,6
Inflation[2]	+8,1	+3,6	+4,6	+4,9	+5,1	+5,3
Investment	+0,4	+4,6	+6,5	+6,5	+4,4	+2,9
of which: equipment	+3,2	+5,9	+8,9	+8,9	+5,1	+3,7
Real unit labour costs	−1,3	−0,6	−0,5	−0,8	+0,4	−0,2

[1] Forecast.
[2] Consumption price deflator.

Overall employment continued to grow at a strong pace, but inflation accelerated throughout the Community. This reflected rapidly rising per capita wages, which are expected to rise by 7,5 % in nominal terms and more than 2 % in real terms, one of the highest rates of growth since the late 1970s, ending the continuous improvement of profitability since 1981. In the second half of the year inflation was given a new boost by the oil price rise.

1. Growth slowing down in most countries

The slowing down in the larger Community countries (with the exception of Germany) was particularly due to exports and gross fixed capital formation, the former reflecting less buoyant world trade. At the same time, however, wage costs have been rising relatively quickly in these countries over the last two years. Buoyant demand has so far allowed rising costs to be reflected in higher prices, which may have undermined export performance and investment. The tightening of monetary policy and the resulting higher real interest rates have also had their effect on investment, particularly on construction activity.

Despite the weakening of activity and the appreciation of their currencies, inflation as measured by the private consumption deflator accelerated slightly in 1990. In France, Italy and Spain the rise was only modest (less than one-quarter of a percentage point), but in Italy and Spain the level of inflation was still almost double that of France, and prices rose much more in the United Kingdom (by three-quarters of a percentage point). Nevertheless in all those countries there is a need to further improve growth fundamentals, contain inflation and particularly to keep wage developments in check now that productivity increases are slowing down.

2. Strong German expansion continues

German unification is on the other hand leading to a strengthening of Germany's growth performance, accompanied by important changes in the budget position and balance of payments. In fact, while an expansionary swing of some 5 % of GNP is expected between 1989 and 1991 in the budget for Germany as a whole, the balance-of-payments surplus will nearly disappear over the same period. The considerable current and capital transfers from Western Germany to the five new *Länder* have partly been converted into new import demands from the latter which have in turn resulted in a strong growth of West German exports. This induced boost to Western Germany's final demand, has resulted in turn in sharply increased imports from the rest of the world.

Statistical problems for Germany

All the data presented in this year's Annual Economic Report relate to the Federal Republic of Germany prior to German unification. Due to major statistical problems it is not yet possible to present reliable data for the new German State.

These statistical problems are manifold. Basically they have their origin in the fact that the former GDR was a centrally planned economy. The statistical concepts used there, as in other centrally planned economies, were very different from the standard European national accounts. The concept of net material product (NMP), unlike the familiar gross domestic product (GDP), excludes all 'immaterial' services (health, education, financial services). In addition, the values indicated in the old GDR statistics carry little economic significance since the whole price structure was distorted. Thus, prices bore little relation to the relative scarcity of goods. Attributing proper prices to the physical quantities of goods produced is also difficult since most goods would not have met the standards of the western market thus making it almost impossible to estimate a realistic price.

Under the above circumstances it is very difficult and not very meaningful to presently estimate the level of GDP in East Germany before unification. New statistics comparable to those of the other Community economies are now in the process of being built up, but this will take time. In the mean time highly tentative estimates for the most important economic aggregates are all that can be used and these must be treated with the necessary caution.

It is expected that the East German economy will go through a drastic adjustment process. A strong reduction of industrial production has taken place, mainly in the second half of 1990, as the production of uncompetitive goods is halted. Gross domestic product in real terms could decline substantially. The fall in activity should bottom out in the first half of 1991, whereafter a recovery is expected. This recovery will continue into 1992 where GDP growth for the whole of Germany could be higher than that for the old Federal Republic. If one includes such tentative estimates for East Germany in the forecasts for the Community as a whole, Community GDP growth would be slightly lower in 1990 and 1991 and slightly higher in 1992.

Unemployment is expected to reach 1,5 million in 1991 and 1992 in East Germany. The figure for short-time work could reach 2 million in 1991 and about 1,5 million in 1992. The unemployment rate for the whole of Germany (number of unemployed as a percentage of the civilian labour force) could amount to 8,7 % in 1991 and 8,9 % in 1992, excluding 'short-term' workers. This compares with 6,3 % in 1991 and 6,5 % in 1992 expected in the old Federal Republic. Including East Germany in the Community unemployment figures increases the Community unemployment rate by around 1,5 percentage points in both 1991 and 1992.

At the same time, private consumption was boosted by tax cuts representing some 1 % of GDP, large scale immigration from the East and the growth of employment. These positive features in domestic demand supported a strong increase in investment, in particular in equipment. Capital outflows from Germany to the rest of the world are likely to be reduced as a result of the disappearance of the surplus on the current account of the balance of payments. This is compensated, however, by strongly increased imports from the partner countries, which stimulate demand in these countries.

Notably the Benelux countries have been benefiting from the expansion in Germany, and continue to record favourable growth rates supported by a strong investment performance. But also in these countries inflation has accelerated, mainly driven by wage developments.

B — An unfavourable international environment

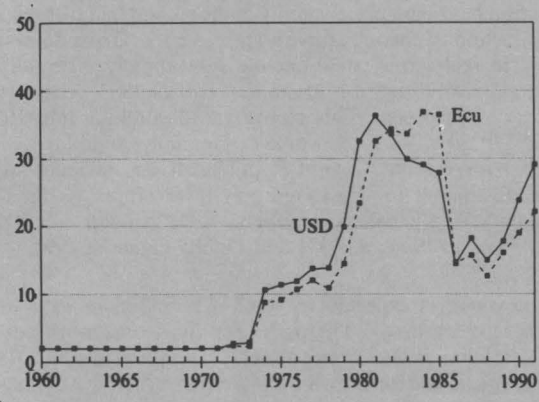
Since the middle of 1990 the Community outlook has been overshadowed by developments outside the Community: the Gulf crisis and the slowdown of growth in the United States and in world trade. Although these developments will not necessarily have a lasting influence on economic conditions in the Community, they harm the short-term stability and growth prospects.

1. Economic consequences of the oil price rise

The Gulf crisis resulted in an immediate reduction in world supply of oil by about 7 % that has been compensated since by increased supplies from other countries. Uncertainties about future supplies led to a sharp increase in oil prices from USD 21 per barrel at the end of July to around USD 35 per barrel at the end of October. Over that period prices have been very volatile, exceeding at one stage USD 40 per barrel.

For the oil-importing countries the price increases have so far been less important in relative terms than in the previous oil price shocks of 1973 and 1979 (Graph 1). If the average price for the period September-October is taken, the price increase in dollar terms is about 60 % compared to around 300 % in 1973 and 200 % in 1979-80.

GRAPH 1: **Oil import prices, EUR 12**



The increase in oil prices involves a significant transfer of revenue from oil importing to oil exporting countries. Higher oil prices will raise domestic prices and lower domestic demand and output. With unchanged monetary policies they would also involve a rise in nominal interest rates. Moreover, the volatility in oil prices is injecting considerable uncertainty into the economy, which may negatively affect expectations.

Simulations based on a working assumption of an oil price of USD 25 per barrel on average in 1991, suggest the following effects (Table 2): the growth rate of real GDP would be 0,5 percentage points lower in 1991 in the industrial countries and in the Community than the baseline forecast, which assumed an oil price of USD 17,8 per barrel and a real growth of around 3 %.

Oil importing LDCs would, however, be harder hit: the growth rate of exporters of primary products would be 0,9 percentage points lower than the baseline, while that of exporters of manufactures would be about 0,4 percentage points lower. Inflation would be higher by 0,5 percentage points in the industrial countries and in the Community.

If, however, oil prices were to remain at the average level of September and October 1990 (around USD 35 per barrel) throughout the year 1991, the abovementioned impacts could be twice as high. The technical assumption in the Community forecast takes an intermediate assumption: the oil price would stay at about this level during the first half of 1991, but would drop to about USD 25 per barrel on average in the second half of the year.

The countries of Eastern and Central Europe are subjected to a triple shock. The preferential arrangements that existed with the Soviet Union and provided them with petroleum products at below market prices will lapse at the end of 1990. The price adjustment in these countries will be sizeable as the loss of preferential agreements is compounded by the Gulf crisis. These elements and the loss of the former GDR as a trading partner will add to the economic dislocation stemming from the unwinding of central planning.

For the Community, the consequences of the Gulf crisis will be less important than after the first and second oil price shock.

First, movements in exchange rates between the dollar and the ecu have in fact resulted in a spreading of the assumed price increase over a 3-year period (Table 3).

Second, the energy dependency of the Community has been greatly reduced since the previous oil price shocks: in 1989 the volume of energy requirements per unit of GDP was

Table 2

Effects of a rise in the world price of oil to USD 25 per barrel

(deviations from baseline, in %)

	1990	1991
Industrial countries		
real GDP	−0,2	−0,5
inflation	+0,3	+0,5
Community		
real GDP	−0,2	−0,5
inflation	+0,3	+0,5
Non-oil LDC's		
real GDP		
Exporters of primary products	−0,4	−0,9
Exporters of manufactures	−0,2	−0,4
Fuel exporters	+2,0	+4,5

Table 3

Oil price in ecus

	1988	1989		1990		1991[1]	
	level	level	variation	level	variation	level	variation
USD per barrel	14,9	17,7	+18,8%	23,7	+33,9%	29,0	+22,4%
USD/ECU	0,847	0,907	+7,1%	0,796	−12,2%	0,755	−5,2%[2]
Ecu per barrel	12,6	16,0	+27,0%	18,9	+18,1%	22,0	+16,4%

[1] Assumptions of the economic forecast.
[2] The US dollar is supposed to remain at its value of mid-October 1990.

about 25 % lower than in 1970, as a result of energy conservation measures (Graph 2). The oil intensity of production has dropped even more, by 45 %, as a result of diversification to other sources of energy. Imports of oil are more than 55 % lower due to increased domestic production in the Community.

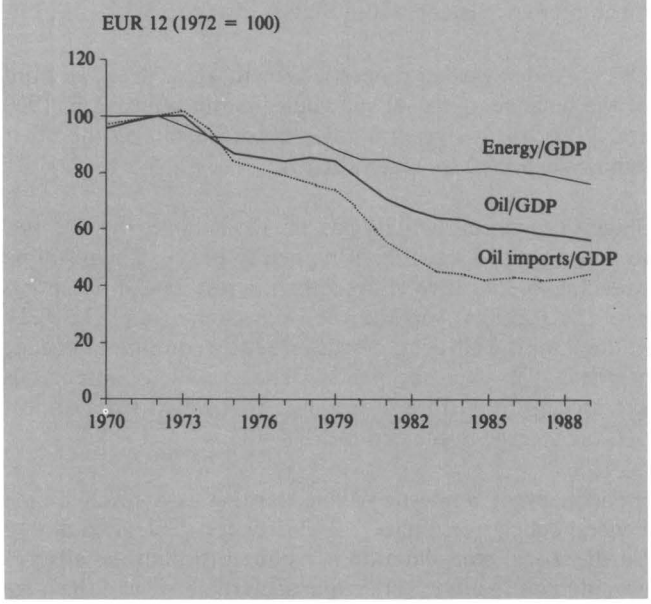
The overall pattern described above must, however, be qualified for individual countries. While overall energy intensity has been reduced to a similar degree in nine Community countries since 1973 (by an average of some −30 %), it increased in Spain (+10 %) and particularly in Greece (+23,7 %) and Portugal (+26 %) owing to the transition in those countries to a productive structure with a greater industrial content.

Third, the economic situation and particularly investment profitability in the Community is also much better than at the time of the previous shocks, when the economy was overheating and inflation was soaring.

Fourth, the Community now has the benefit of hindsight. The previous two oil price shocks have provided valuable lessons on how to deal with such situations.

Nevertheless, if the actual oil price increase were to remain within the limits of the above assumptions, this will require policy adjustments so as not to accommodate and perpetuate the inflationary impulse. If these policies are appropriately carried out, the Gulf crisis should not necessarily result in a durable deterioration of the growth and stability fundamentals in the Community.

GRAPH 2: **Energy intensity per unit of real GDP**



2. Slow growth in the United States and strong but decelerating growth in Japan

Already before the outbreak of the Gulf crisis it became evident that the United States was experiencing a pronounced slow-down of growth. It is now anticipated that

Table 4

United States, main economic indicators

(in %, or as % of GDP)

	1988	1989	1990	1991[1]
Real GNP	+4,6	+3,0	+1,0	+0,3
Investment	+5,4	+1,6	−0,4	−1,0
Consumer prices	+4,1	+4,4	+5,1	+6,3
Fiscal balance	−2,0	−2,0	−2,3	−2,3
Current account	−2,4	−1,8	−1,7	−1,8

[1] Forecast.

real GNP would grow less than 1,0 % in 1990 and barely a quarter of a point in 1991 (Table 4). In particular private consumption and investment will be much weaker than expected. At the same time inflationary pressures will be much more persistent, with inflation rising to 6,3 % in 1991.

Despite much weaker domestic growth, the current account of the balance of payments would hardly improve in 1990 and 1991, but the general government deficit, on the other hand, is expected to widen slightly.

Sluggish economic activity has already led over the last year to a significant loosening of monetary policy. The resulting widening of negative short-term interest rate differentials with the Japanese yen and the Deutschmark and the weak outlook for the US economy have led to a continuous decline of the dollar over the period. The growth of imports is expected to decelerate to about 2,5 %, down from almost 6 % on average in the period 1980–89.

Inadequacy of domestic saving, largely as a result of the Federal deficit, remains a crucial issue for the United States. Further fiscal consolidation is required to limit the absorption of investment resources, particularly in view of the huge demand for investment in Central and Eastern Europe. More determined action to improve the budget outlook might also contribute to the international adjustment process.

In Japan, real GDP growth is expected to decelerate from 6 % in 1990 to about 4 % in 1991, mainly as a result of monetary tightening. The continuous robust rate of growth and the more unfavourable international environment contribute to a further reduction in the surplus on the current balance. Inflation is expected to remain modest.

3. A slow-down in world trade

The external environment will also be marked by the necessary transformation of Central and Eastern Europe from a planned to a market economy. The integration of Central and Eastern Europe in the international division of labour will increase significantly the demand for capital, adding to the existing sizeable needs of developing countries. Without increased saving, real interest rates will remain at high levels.

The slow-down of growth in the United States, the increase in the price of oil and its impact on LDCs together with the inevitable transformation in Central and Eastern Europe will create a more subdued international environment. In 1991, real GDP outside the Community should increase by less than one percentage point. As a result, world trade excluding the Community is expected to expand in 1991 by less than 4,5 % in real terms, down from 6,0 % in 1990 and 7,4 % in 1989. Furthermore, Community exports to the rest of the world could be negatively affected by a further appreciation of Community currencies. By end-November 1990, the dollar value of the ecu was already more than 25 % above its average 1989 level. A successful outcome of the Uruguay Round is essential for a resumption of world trade growth.

C — The outlook for 1991 and 1992

The rise in oil prices, slower growth in world trade, US recession and the strong appreciation of Community currencies against the US dollar, will contribute to dampen growth in 1991 to around 2 ¼ %, down from 3,3 % in 1989 and 2,9 % in 1990. Again the general slow-down is marked by significant divergences within the Community: growth would be around 3 % in West Germany, Luxembourg and Portugal, but at 1 %, or less, in Denmark, Greece and the United Kingdom. In the other countries the growth rate would be close to the average. All components of domestic demand are expected to weaken, in particular investment.

Employment growth would slow down from 1,5 % on average over the period 1987–90 to 0,6 % in 1991 so that the steady decline in the unemployment rate, seen in most countries in the last few years, would be halted. The budget positions in the Community would slightly deteriorate, mainly as a result of the widening of the budget deficit in Germany to close to 5 % of GDP.

In 1992, with investment profitability basically unaffected, the prospects are for growth to pick up again: domestic demand would expand by 3 %, up from 2,3 % in 1991, mainly as a result of a revival in investment.

The outlook for 1991 and 1992 is subject to considerable uncertainties in the international environment, mainly related to the evolution of the oil price and of the dollar. The oil price evolution will be significantly affected by the outcome of the Gulf conflict.

The second source of uncertainty relates to developments in the United States. On balance the depreciation of the dollar has so far had largely benign effects for the Community, because it has mainly offset the inflationary impact of higher oil prices, while the negative impact on the already buoyant activity has been less a source of concern. A further, important and abrupt decline of the dollar, however, may have, along with its beneficial effects on inflation, a more significant impact on exports and investment and could test the stability of the EMS.

II — Economic policy tasks during Stage I of EMU

To sustain economic growth and employment in the present unfavourable external environment, the Community will have to rely on its own potential. A climate of stability is an essential prerequisite for its development. Therefore the Community will have to maintain restrictive monetary and fiscal policies. These policies will at the same time help to preserve the favourable growth fundamentals. The completion of the internal market and other structural policies, further improvements in economic and social cohesion and the environment will in turn strengthen the Community's potential.

Furthermore, Stage I of economic and monetary union will tighten convergence requirements in the fields of prices and costs, budgetary and external positions. The amount of adjustment is in some cases still important. Some Member States should already now present medium-term adjustment programmes so as to ensure that all Member States would join the final stage of EMU.

The deterioration in short-term growth prospects in the Community does not necessarily alter the fundamental positive assessment of the underlying potential of the Community economy. As a result of adverse, internal and external factors, a certain deceleration in growth was inevitable. But provided appropriate policies are followed, profitability should remain favourable and investment activity could resume its strong growth leading to renewed significant job creation.

To meet the challenges it is all the more important that policy coordination is strengthened in accordance with the decision on multilateral surveillance for Stage I.

A — Maintain stability and growth climate

Despite a significant appreciation of the ecu and a slowdown of growth, inflation remains high. The most immediate policy concern in the present situation is therefore inflation. The oil price increase adds new impetus to an already accelerating cost and price trend. The relaxation of the moderate wage behaviour of the 1980s may be understandable after a long period of economic recovery, but it puts the medium-term growth prospects at risk: unemployment is still very high and many more years of strong investment and robust growth are needed, especially in the less prosperous countries and regions, to recover an acceptable employment situation.

To preserve the continuation of a satisfactory growth climate in the Community, the inflationary threat posed by rising wage costs and the latest oil price hike must be immediately addressed, while at the same time divergent developments must be avoided. The lessons from the previous oil shocks should therefore be adequately drawn. This also includes the strengthening of measures of vocational training to support the required adjustments.

1. Avoid an inflation spiral

The previous two oil price shocks were characterized by a sharp acceleration of inflation and an increase in the divergences between Member States' inflation rates. This was especially marked in the reactions to the 1973 oil price shock.

With the benefit of hindsight, the adoption of inappropriately loose and even conflicting policies between Member States appears as one of the main reasons behind the very weak convergence of the EC during the second half of the 1970s (Graph 3).

The response to the second oil price shock of 1979-80 showed some improvement in policy coordination, due notably to the existence of the EMS. But since the effects of the 1973 price shock were not yet fully absorbed, dispersion remained high. The improvement of Community internal cohesion required long and painful efforts throughout the 1980s.

Since the 1979 oil price shock, the consensus on economic policy and the coordination of monetary policy improved significantly, making a coordinated approach easier to carry out.

The experience of the previous oil price shocks argues for an economic policy stance that does not try to compensate for the loss of real demand and income resulting mechanically from the oil price increase, but that remains oriented towards overall price stability.

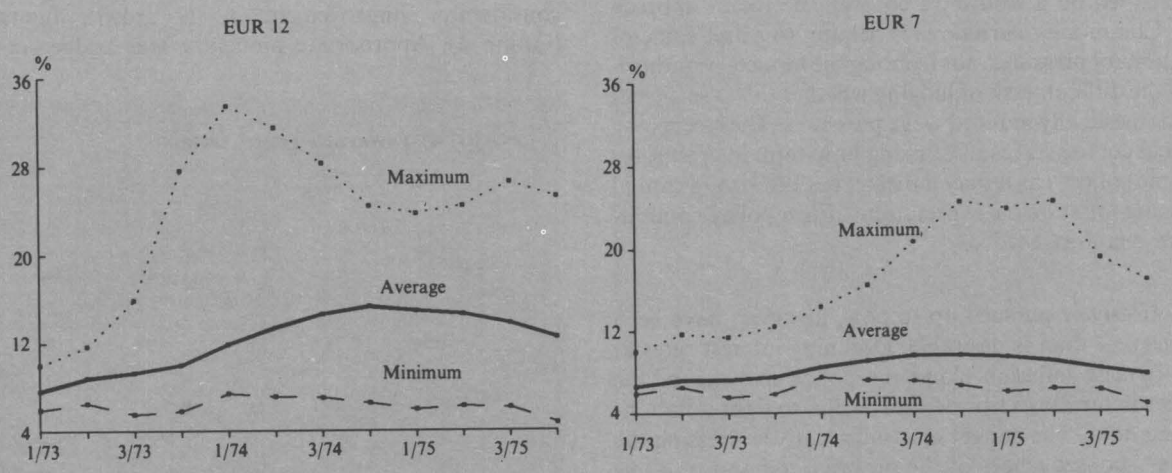
In general terms therefore:

(i) governments should allow the full and complete pass-through of higher oil import prices to oil products on the domestic market; in addition energy conservation policies will need to be reinforced to further reduce energy dependency;

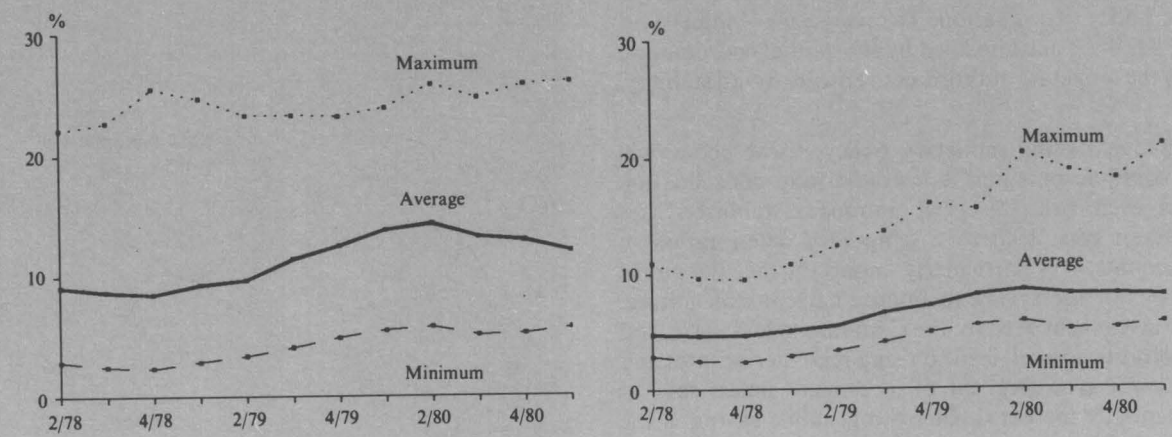
(ii) monetary policy would have to pursue and, if needed, even reinforce its anti-inflationary stance. It must above all prevent the development of a wage/price spiral, by leaving no doubt as to the intention of the authorities not to accommodate inflationary developments;

GRAPH 3: **Price variability after the two oil price shocks**

First oil price shock



Second oil price shock



(iii) fiscal policy should remain on the path of medium-term budget consolidation. It should not try to compensate for the unavoidable loss of private demand and income that any oil price shock implies;

(iv) policy coordination should be strengthened within the context of Stage I of EMU.

So far, monetary policies in the Community have by and large remained on a restrictive course. The recent appreciation of Community currencies is helping to offset some of the inflationary pressures, confronting the monetary authorities with the difficult task of judging whether this is sufficient to stem domestically induced wage pressures. The steepening of the yield curve as a result of rising long-term interest rates raises some concern as it may indicate, besides strong capital needs, rising inflationary expectations. Firm policy commitments are therefore needed.

Policies effectively pursued up to now, however, have been less convergent than is desirable. Declining interest rates at a time of rising inflation cloud the policy message of the authorities in terms of their determination to fight inflationary expectations. The danger of insufficiently addressing the inflationary consequences of the oil price rise and of domestic wage developments, right from the beginning, is that policy will have to be tightened anyway at a later stage to quell inflationary pressure, but at a greater cost.

The liberalization of capital movements and the increased exchange-rate stability in the EMS have as a consequence that restrictive monetary policies are less effective. The interest rate lever can be used less and less without overloading monetary policy. Hence there is a need for stronger economic policy coordination. The increasing symmetry of the EMS has to be accompanied by substantial coordination efforts by the monetary authorities to ensure overall stability.

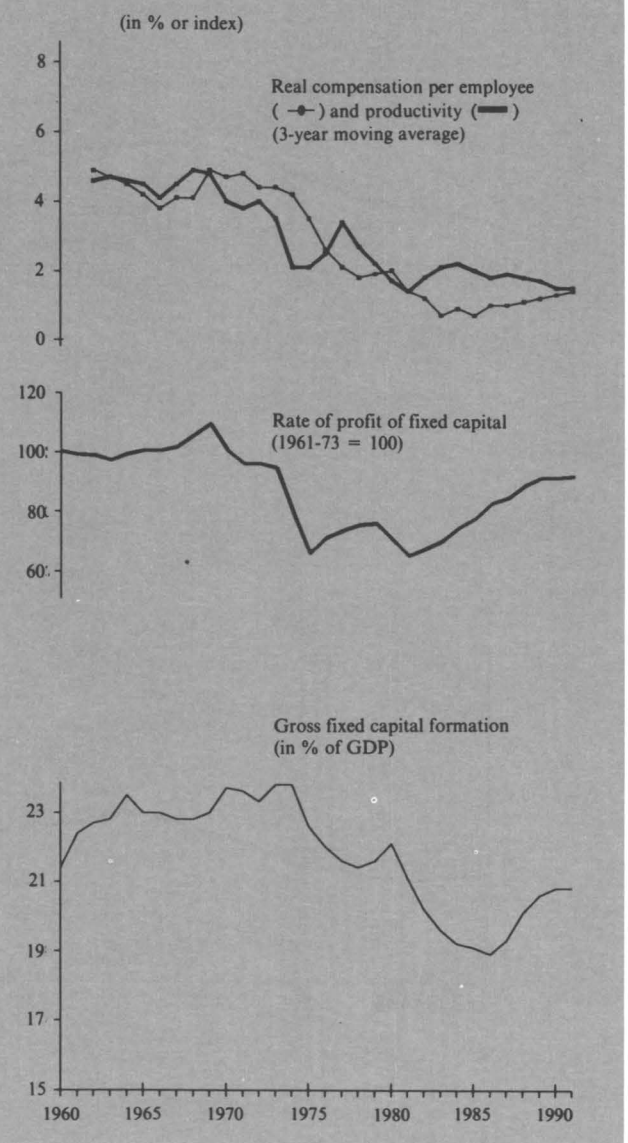
To avoid overloading monetary policy, fiscal policy will have to continue pursuing its medium-term consolidation objectives, even if the effects of 'automatic stabilizers' and rising interest rates lead to a temporary deterioration in public accounts. It is particularly important that the public sector does not use saving to finance current expenditure. The huge investment needs in the Community and in Central and Eastern Europe will lead to rising real interest rates and an unwelcome crowding out of investment unless savings are substantially increased. Increasing public saving is the most straightforward way to increase national saving. In Greece and Italy in particular, but also in Belgium, Portugal, the Netherlands and Ireland, public dissaving is still significant. The public sector should improve its contribution to national saving in these countries.

The sharp increases in the German fiscal deficit resulting from unification is also a reason for concern because it risks placing an undue burden on monetary policy and on capital markets, and may sustain and reinforce inflationary expectations stemming from the oil price rise.

2. Safeguard the fundamental conditions for sustained and employment-generating growth

During the 1980s the Community has brought about a considerable improvement in its growth fundamentals (Graph 4). Appropriate monetary and budgetary policies

GRAPH 4: **Favourable growth factors**



should ensure that the loss of income entailed by the oil price rise is appropriately split between wages and profits, in order to minimize the negative impact on investment profitability. Economic policy cannot avoid a temporary slackening of growth, but by preventing secondary inflationary repercussions it should be possible to maintain the fundamental medium-term conditions for healthy growth.

As the experience of the previous two oil price shocks has shown, the behaviour of wages will be crucial in preserving the growth potential of the Community.

The specific distribution of the burden of the income loss between the State, households and enterprises, will depend on the particular situation in each Member State, but it must be kept in mind that the less investment profitability is affected, the sooner economic growth will resume its upward trend. Divergences in the pattern of burden sharing between countries could also endanger the necessary convergence of Member States' economies. The existence in some countries of formal or informal wage indexation mechanisms may make wage behaviour unnecessarily rigid. The commitment to monetary stability in Stage I implies that the effects of wage rigidity should no longer be absorbed by an increase in the general price level or by exchange-rate adjustments. Wage developments need, therefore, to be more flexible in adjusting to developments in competing countries.

A strong commitment to competition and to open markets will provide a consistent and effective framework for positive adjustment in reply to market forces, as put forward in the Commission's communication on industrial policy in a global environment.

B — The development of Community potential

The general policies which must be implemented to curb the re-emergence of inflationary pressures and inflation divergences are also those needed to create the conditions for the realization of the great Community projects: economic and monetary union, completion of the internal market, and economic and social cohesion. At the same time, these projects complement the policies being implemented at the national level.

1. Complete the internal market

To secure its economic future, Europe has embarked on a programme for creating a market of continental dimensions. One of the main constraints the Community still faces on the competitive world stage is the fragmented nature of its markets, which makes it difficult to produce at optimum levels, holds back technological progress and impedes development of the services sector, where growth is particularly strong. The opening of the Community frontiers will enhance competition. Increased specialization and efficiency of production will greatly improve consumer choice.

The internal market programme is the decisive driving force in adding to Community growth prospects and prosperity. Economic operators are increasingly anticipating the highly competitive environment which will prevail and the new operating conditions and opportunities which will exist by 1992. An increasing number of firms have begun to operate on greatly enlarged market horizons and are actively changing their strategies. In addition to the positive growth effects stemming from the abolition of internal border controls, and the removal of technical barriers to the free movement of goods and services, particularly as regards the latter in the financial services sector, growth will also be attributable to the positive effects arising from the necessary restructuring in industrial and services sectors and from positive changes in marketing strategies.

In the single market, an effective Community competition policy is essential since measures and practices aimed at reducing or avoiding competition (such as increased subsidies or market sharing agreements) would reduce these positive effects. To crown the achievement of the internal market with a common currency in the near future would — as recent business surveys show — further bolster the positive mood of management.

The high expectations that have been created must not be disappointed. Therefore the deadline of 1 January 1993 for completing the internal market must be respected. Hence, it is essential that the remaining decisions in respect of the proposals contained in the 1985 White Paper must be taken as soon as possible. Significant progress has already been achieved and decisions have been taken in all areas of economic activity. The Commission has already tabled all the proposals contained in the White Paper, and over two-thirds have been approved by the Council. The Commission is turning its attention to the problems of implementation (so far some 72 % of the required national implementing measures have been taken) and to the proper functioning of the single market. Decisions have still to be taken in important fields relating to the complete removal of internal border controls. The Council must give priority to these areas (which include the approximation of indirect taxation rates) and monitor the situation on a regular basis to ensure that decisions are taken such that progress towards completely removing the internal borders becomes irreversible, as is the

case for the rest of the programme. Member States ought to accelerate the rate of implementation of decisions and to eliminate all delays by the end of 1991.

2. Improve economic and social cohesion

The improvement of economic and social cohesion will also strengthen growth prospects. Above-average growth in the less favoured countries would contribute to expanding the growth potential of the Community economy as a whole.

The strengthening of economic and social cohesion and the objective of a harmonious development across European regions have been reaffirmed in Article 130 of the EEC Treaty, as amended by the Single European Act. Above-average growth in those countries and regions, as has been the case in recent years in Spain, Portugal and Ireland, but not in Greece, has started to reduce the income gap (Table 5) and has expanded the growth potential in the Community as a whole. The gap remains sizeable though, and will require a long-term effort of catching-up.

Table 5

The catching-up process in the Community GDP[1] at current market prices and purchasing parities per head of population

(EUR 12 = 100)

	Greece	Spain	Ireland	Portugal
1985	56,8	71,8	65,2	52,1
1986	55,8	72,2	63,5	52,7
1987	54,2	73,9	64,9	53,8
1988	54,3	74,7	65,2	54,0
1989	54,1	75,9	67,2	55,2
1990	53,4	76,7	68,8	56,2
1990-85	−3,4	+4,9	+3,6	+4,1

[1] Reference to GDP may overstate progress to the extent that income transfers to abroad may have outpaced nominal GDP growth.

The economically stronger countries could contribute to this process by the maintenance of a dynamic growth pattern and the opening of markets to trade. The doubling of the structural Funds and the simultaneous strengthening of the financial instruments will make resources available to Greece, Portugal and Ireland equivalent to between 3 and 5 % of GDP in 1993. They support the considerable improvement in structural policies achieved so far. Economic and social policies on the national and Community level have to provide the basis for a continuous relative growth of real GDP, without inflationary pressure and unsustainable internal and external imbalances. The catching-up countries will, however, remain primarily responsible for their own development.

3. Structural adjustment and labour market flexibility

Structural policies improve the capacity of Member States' economies to adjust. They enhance flexibility in goods and factor markets and should lead to an improvement in the extent and speed of response of prices in those markets to changes in market conditions. Structural policies thereby reduce the potential size and duration of adjustment costs associated with disturbances.

Beyond the internal market programme, member countries have engaged in a number of structural improvements to be able to cope with increased competition on the unified market. So far the major initiatives fell within the liberalization of financial markets and the restructuring of personal and corporate taxation.

Governments have taken initiatives to improve the capacity of labour markets to cope with change, and policies for education and vocational training are being given high priority in many Member States. They are an important instrument for the absorption of the long-term unemployed.

Structural policy initiatives for the labour market will need further emphasis. The freeing-up of trade in goods and services in the completed market will certainly put additional strains upon labour markets and particularly upon systems of wage determination. In order to avoid as much as possible negative employment effects, present systems of wage determination within Member States should be made sufficiently flexible (for industries, occupations, regions or firms) to enable a rapid and efficient adjustment to new market circumstances.

Also in the public sector, structural reform has to be carried further so as to improve the efficiency of the public sector.

Higher economic efficiency and improved resource allocation should not only be sought within the Community, but also in the world. The Uruguay Round is a cooperative effort to promote trade and economic growth. As the world's largest trading block, the Community has a natural interest in a successful conclusion of the Round. It is at the same time an instrument to provide a better platform for its weaker trading partners, in particular the Central and Eastern European and the developing countries.

4. The environmental challenge

Just as the previous oil price shocks helped to break the parallelism that was perceived in the 1950s and 1960s between economic growth and energy use, there is presently a growing awareness, that was given added impetus through the Gulf crisis, that the link between economic growth and pollution needs to be broken. Experience in Eastern European countries, which have a much higher level of pollution than the richer Community countries, shows, however, that the link is not straightforward. The Community's better performance is no reason for complacency and needs to be substantially improved. There does exist, though, a clearer link between the price mechanism and pollution. Often market prices do not reflect the full environmental cost to society of their production or use. Moreover, private economic agents are not inclined to take into account the environmental effect of their activities, when taking consumption or investment decisions.

At the centre of any comprehensive policy to address the pollution problem (beyond the inevitable need for regulatory instruments), is therefore the need to internalize these external environmental effects in order to give the right signals to market participants.

The aim is to transform the patterns of economic growth in such a way as to reach a sustainable development path. A reinforced policy of environmental protection would not necessarily represent a constraint on private business, but could offer significant market opportunities for those pioneering environmentally friendly products and production processes.

There is now a broad consensus that more use of economic and fiscal instruments should be made in environmental policy, but that the optimal policy would still consist of a balanced mix of market-based and traditional regulatory instruments. The main examples of economic and fiscal instruments have been identified as taxes, charges or fiscal incentives, deposit refund systems, tradable emission permits and financial aid or subsidies. In the case of taxes and charges, the impact on the competitive position of the Community and the priorities of the internal market ought to be given due consideration.

In view of the importance of the international dimension of pollution, close international coordination is called for. Within the Community there is a need for a minimum of harmonization in order to avoid policy instruments being in potential conflict with other Community objectives and to ensure compatibility of instruments among Member States when the issue is transnational.

C — Policies for improved convergence

While the Community has significantly improved its economic convergence performance since the beginning of the decade, serious problems remain in some countries and in some areas. Furthermore Stage I of EMU will tighten convergence requirements. The significant progress already realized is testimony to the positive effects of the discipline imposed by the exchange-rate mechanism of the EMS. In fact, the present convergence positions of Member States are closely correlated with their degree of exposure to this discipline.

1. Price and cost convergence

The degree of price convergence is most marked among those countries which have respected the narrow band of fluctuation from the outset. The average rate of inflation (private consumption deflator) in this group of countries has been close to, or below, the 3 % mark since 1986 (Graph 5). The dispersion in the individual rates of inflation is lower than in the 1960s and the gap between the highest (3,6 % in Belgium) and the lowest (2,4 % in the Netherlands) rates of inflation for 1990 is just over one point (Table 6). The acceleration of inflation in 1990 and 1991 in these countries cannot be considered satisfactory from the point of view of stability and needs therefore to be rolled back as soon as possible.

The price convergence in these countries already broadly corresponds to what might be required for the transition to the final stage of EMU. This convergence in the rate of inflation has been accompanied by a clear deceleration in the rates of increase in nominal and real unit labour costs thereby improving investment profitability. Further improvements in profitability could be required, however, in those countries where unemployment levels are particularly high or where, as in Denmark, economic growth had to be slowed down to fight inflation and reduce the external deficit.

A second group of countries has in 1990 an inflation rate which is still double that of the first group. Italy, which has recently joined the narrow band, and Spain, which joined the wider band last year, have also made significant progress since the beginning of the 1980s, but they still show a much less favourable convergence position. Both countries face strong wage pressures with nominal unit labour costs rising by 7 % or more in 1990 against less than 4 % for the original participants in the narrow band. These countries should gradually improve their inflation performance over the next two to three years to the level of the narrow band countries. This will require that the claims on resources of the different sectors of the economy be made more compatible with each

GRAPH 5: **Convergence of private consumption deflators**

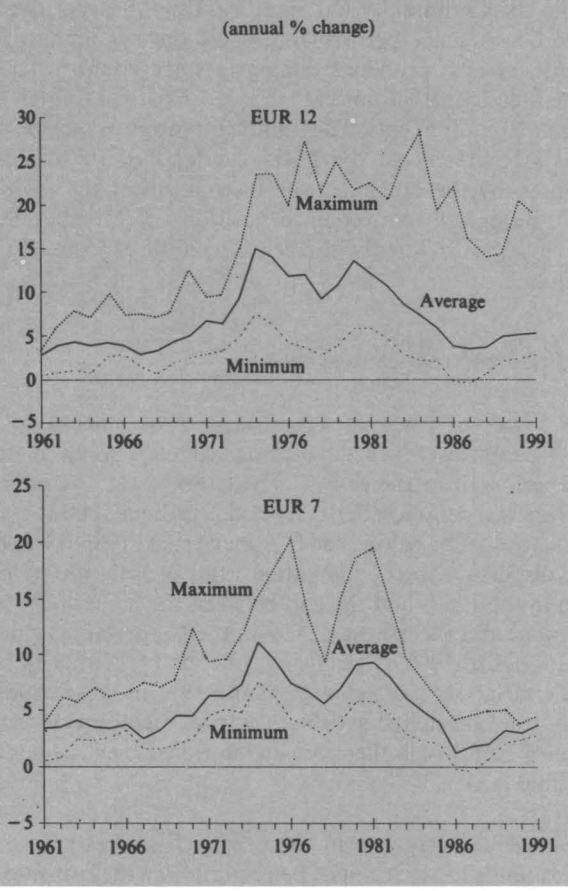


Table 6

Inflation convergence in the Community in the second half of the 1980s[1]

	1981	1986	1989	1990	1991[2]
Countries with low and converging inflation[3]					
EUR 7	9,3	1,2	3,2	3,0	3,8
Belgium	8,1	0,3	3,4	3,6	4,5
Denmark	12,0	3,5	5,0	2,8	3,3
Germany	6,0	−0,2	3,2	2,8	3,9
France	13,0	2,9	3,3	3,4	3,6
Ireland	19,6	4,0	3,9	2,8	3,5
Luxembourg	8,7	1,2	4,0	3,5	4,0
Netherlands	6,3	0,2	2,1	2,4	2,8
Countries with high inflation					
Italy	18,2	5,7	6,0	6,1	6,3
Spain	14,3	8,7	6,6	6,8	6,6
United Kingdom	11,2	4,4	6,1	7,0	6,3
Countries with double-digit inflation					
Portugal	20,2	13,8	12,8	13,2	12,6
Greece	22,7	22,0	14,4	20,5	18,5

[1] Private consumption deflator.
[2] Forecast.
[3] Countries which registered low and converging inflation rates in the second half of the 1980s; they are the countries which participated from the outset in the narrow band of the EMS.

other. Setting more ambitious but realistic inflation targets and pursuing them by stability oriented monetary and fiscal policies may help to create a stable environment and may contribute to providing a reference framework for wage developments.

The United Kingdom, which has recently joined the wider band of the exchange-rate mechanism, is experiencing a high rate of inflation (about 7 % in 1990 for the deflator of private consumption adjusted for the impact of local government taxation changes) and a large current account deficit (about 3 % of GDP in 1990). The current slow-down of the economy will bring some improvement on both fronts. The main problem for the United Kingdom's economy is the excessive increase in wage costs. What is even more worrying is that wage settlements are still running at a high rate and are not yet showing signs of reacting to the slowdown in the economy. The composition of the retail price index may also partly explain this development. After entry of the pound sterling into the ERM, expectations may be favourably affected creating a better prospect for the United Kingdom to reduce inflation.

Portugal still has a very high rate of inflation (about 13 % in 1990). Nominal unit labour costs are still growing too rapidly. A persistent effort will be needed to reduce inflation progressively to the level of the narrow band countries. Such an endeavour remains possible as experience in other countries has shown. In 1982 and 1983, when exchange-rate policy in the EMS became tighter, Ireland had rates of inflation comparable to that now experienced by Portugal. Therefore participation in the ERM should be sought as soon as possible.

The Greek economy is characterized by serious imbalances in many areas, which call for radical measures. The rate of inflation exceeds 20 % in 1990, and the budget deficit has reached unprecedented levels in the Community, leading to a rapidly rising public debt to GDP ratio. A serious adjustment effort is essential, and should be sustained over the medium term. The recent Greek Government's medium term programme is a step in the right direction.

2. Convergence of budgetary policies

Convergence must not only be fostered from the cost and price side, but public authorities also have to reduce their claims on resources, so as to avoid unsustainable imbalances, to improve the supply-side of the economy and to create room for manoeuvre when adverse developments have to be addressed.

In the budgetary area, progress in convergence has been distinctly less marked than for prices and costs. Its impact on monetary and exchange-rate stability is only felt in an indirect way and after a prolonged period of accumulated imbalances. Such progress is none the less essential because unsustainable fiscal positions undermine over the medium and longer term the credibility of the commitment to monetary stability and impair the conduct of economic policy.

Greece and Italy still have excessive budget deficits. In Greece the budget deficit, at more than 18 % of GDP in 1990, has reached levels never experienced in the Community. Gross public debt has rapidly increased, from less than 30 % of GDP in 1980 to about 90 % in 1990 (Table 7). A wide-ranging adjustment effort extending over several years is needed, as reflected in the recent medium-term adjustment programme.

Italy also faces a high budget deficit (10 % of GDP in 1990), which leads to a rising level of public debt as a percentage of GDP (about 100 % of GDP in 1990 against 66 % in 1982). The necessary reduction in the rate of inflation will have to go in tandem with significant reductions in budget deficits that allow first a stabilization, and then a reduction in the level of debt as a percentage of GDP. A disinflation process not accompanied by an appropriate budgetary adjustment would result in an even faster rise in the public debt ratio, as was the case in Belgium in the early and middle 1980s. The adjustment efforts required would then have to be even greater.

Belgium, Portugal, Ireland and, to a lesser extent, the Netherlands are still experiencing budgetary problems due to the level of public debt. A decline in the level of debt as a percentage of GDP is needed in these countries to reduce debt servicing costs and vulnerability to interest rate increases. In Belgium the public debt ratio is still excessively high (128 % of GDP in 1990). The budget deficit is still too large to put the public debt ratio on a downward path, if growth slows or interest rates rise. The double government norm aiming at freezing in real terms non-interest expenditure and at keeping constant the deficit in nominal terms, should be applied to all levels of government. Only its strict and global application will ensure that the public debt ratio will be progressively reduced, which is essential to guarantee long-term stability. Ireland has already reduced its budget deficit substantially, so that the public debt ratio is on a

Table 7

Gross public debt in the Community countries

(as % of GDP)

	1980	1986	1989	1990	1991[1]
Belgium	76,9	123,7	129,9	129,4	129,4
Denmark	39,3	67,2	63,3	62,8	63,3
Germany	32,7	42,7	43,6	43,7	45,2
Greece	28,8	65,3	85,1	89,5	94,3
Spain	18,1	48,5	45,2	44,7	42,6
France	24,6	34,2	36,0	36,1	36,1
Ireland	76,8	115,7	104,7	101,4	99,4
Italy	59,0	88,5	98,9	100,9	102,9
Luxembourg	13,8	13,8	8,8	7,8	6,8
Netherlands	45,9	71,7	77,6	77,8	78,5
Portugal	37,1	68,4	71,5	67,8	64,7
United Kingdom	54,3	58,1	45,7	43,0	41,8
EUR 12	41,0	58,5	59,0	58,9	59,2

[1] Forecast.

Table 8

General government net lending (+) or borrowing (−)

(as % of GDP)

	1983	1985	1987	1989	1990	1991[1]
EUR 12	−5,3	−5,2	−4,2	−3,0	−3,9	−4,1
High-deficit countries						
Greece	−8,3	−13,8	−12,0	−18,4	−18,6	−17,1
Italy	−11,8	−12,5	−11,2	−10,2	−10,0	−9,4
High-debt countries						
Belgium	−11,2	−8,5	−7,1	−6,6	−5,6	−5,9
Ireland	−11,8	−11,3	−9,1	−3,2	−3,3	−3,5
Netherlands	−6,4	−4,8	−6,5	−5,3	−5,4	−4,7
Portugal	−9,0	−10,1	−6,8	−3,8	−6,0	−5,6
Other countries						
Denmark	−7,2	−2,2	+2,2	−0,8	−1,4	−1,6
Germany	−2,5	−1,1	−1,9	+0,2	−3,2	−4,8
Spain	−4,8	−7,0	−3,2	−2,7	−3,0	−1,8
France	−3,2	−2,9	−2,0	−1,5	−1,2	−1,1
Luxembourg	+2,0	+5,3	+1,3	+3,4	+3,3	+1,1
United Kingdom	−3,3	−2,7	−1,3	+0,9	−0,2	−0,7

[1] Forecast.

clearly declining trend. This trend should now be continued. In the Netherlands, the public debt ratio, though not as high as in the case of Belgium and Ireland, is still not fully stabilized. The budget position therefore warrants close scrutiny. The budgetary situation in Portugal also needs to be improved in parallel with the disinflation process so as to maintain the progress in stabilizing the public debt ratio.

In unified Germany, the fiscal stance is also a matter for concern, because of the strong expansionary effect of the budgetary costs of unification. Though a higher public deficit to finance investment during the transition is economically justified, the size of the present borrowing exerts undue pressure on interest rates. Furthermore, the strong demand from the former GDR may strain production capacity in Western Germany, putting pressure on inflation and appreciating the exchange rate in real terms. To guard against these dangers and to avoid an overburdening of monetary policy, a tightening of the fiscal stance would be expedient. To the extent that the strong demand is met by increased imports from other Member States, this will diminish the strains on German production capacity and stimulate activity in the other countries.

In a last group of countries — including Denmark, Spain, France, Luxembourg and the United Kingdom — the budgetary position in terms of net lending or borrowing and public debt seems to be under control and does not present the Community with a convergence problem. The increase in budget deficits in Denmark and in the United Kingdom calls nevertheless for attention. The general assessment does not detract, however, from the need, also valid for the other countries, to improve the structural features of their public finance to benefit the supply-side of the economy, to prepare for the single market of 1992 and to increase budgetary flexibility as required by a better policy-mix. This will particularly involve improving the structure of expenditure and receipts, winding down in some cases the share of expenditure in GDP and lessening the tax burden.

Moreover, a few of these countries continue to suffer from strong inflationary pressures and large external deficits, such as the United Kingdom and Spain, or from high foreign debt, such as Denmark. Hence, there is a need to maintain a cautious budgetary policy in these countries.

3. Convergence of external positions

In an integrating economy with fully liberalized capital movements and increasing exchange-rate fixity, convergence of current account balances is to be judged in a different context and the appropriateness of current account imbalances has to be individually assessed.

Spain is confronted with a high and rising current account deficit (more than three and a half points of GDP in 1990). A current account deficit *per se* would not be worrying in the Spanish case as long as it corresponded to capital imports financing rapid growth in productive investment. What gives cause for concern, however, especially if high oil prices were to persist in the months to come, is the rapidity of the deterioration of the current account position which was still in equilibrium in 1987. However, the deficit is expected to stabilize in 1991. If exchange-rate stability is to be maintained, the rate of growth of unit labour costs in Spain must soon be brought below that of its main trading partners so as to improve its competitive position. This would also create the conditions for the continued strong growth needed both to reduce the persistently high levels of unemployment and to allow the catching-up process to continue. These considerations also apply to Greece where the external position has deteriorated sharply in recent years.

In Italy the external position, while not yet giving cause for concern, nevertheless calls for a critical look at external competitiveness. In the United Kingdom some improvement is expected in the external position, although cost developments will need to be monitored carefully.

The current account positions of the initial narrow band countries appear broadly sustainable. The German surplus, which had given cause for concern in the recent past, is being greatly reduced as a consequence of the redirection of trade resulting from the unification process. Considerable progress has been made in Denmark, where for the first time since the early 1960s the current account would turn into a surplus. This has been achieved, however, at a considerable cost in terms of growth. A further improvement in the competitive position, might help to consolidate this improvement, at higher levels of activity and employment.

*

With appropriate monetary, budgetary and structural policies, the impact of the oil price hike and internal inflationary pressures can be absorbed, thus preserving the positive fundamental growth conditions of the Community. The development of the Community potential will improve the supply side of the economy and contribute to resuming its medium-term growth trend. Such a policy mix fulfils at the same time the requirements for a successful move towards economic and monetary union.

Main economic indicators 1988-92

Community, USA and Japan

(a) GDP at constant prices (% change on previous year[1])

	1988	1989	1990[2]	1991[2]	1992[2]
B	4,3	4,0	3,5	2¼	2¾
DK	−0,4	1,3	0,9	1	1¾
D	3,7	3,3	4,3	3¼	2
GR	4,0	2,6	1,2	1	1½
E	5,0	4,9	3,5	2½	3¼
F	3,3	3,6	2,5	2½	2¾
IRL	3,7	5,9	4,5	2¼	3¾
I	3,9	3,2	2,6	2¼	2¾
L	4,3	6,1	3,2	3	3¼
NL	2,7	4,0	3,4	2	2½
P	3,9	5,4	4,2	3¼	3¾
UK	4,1	2,2	1,5	¾	2½
EC	3,8	3,3	2,9	2¼	2½
USA	4,6	2,5	1,1	¼	1¼
JAP	5,7	4,9	6,0	4¼	4

(b) Domestic demand at constant prices (% change on previous year)

	1988	1989	1990[2]	1991[2]	1992[2]
B	4,3	5,0	4,0	2¾	2¾
DK	−2,2	0,8	−0,8	− ¼	1
D	3,8	2,7	3,7	3¼	2¾
GR	5,6	4,2	2,1	1	1½
E	7,3	7,7	5,3	3	3¾
F	3,5	3,1	2,9	2¾	3
IRL	0,2	6,1	6,4	¾	4¼
I	4,6	3,3	2,9	2¾	3¼
L	2,7	5,3	5,2	4½	4
NL	2,0	4,3	3,9	1¾	2
P	7,4	4,1	5,0	3½	4¼
UK	7,3	3,1	0,9	½	2¾
EC	4,8	3,6	3,0	2¼	3
USA	3,2	1,9	0,6	− ¼	¾
JAP	7,5	5,9	6,0	4¼	4¼

(c) Deflator of private consumption (% change on previous year)

	1988	1989	1990[2]	1991[2]	1992[2]
B	1,8	3,4	3,6	4½	3½
DK	4,9	5,0	2,8	3¼	2
D	1,3	3,2	2,8	4	3½
GR	14,0	14,4	20,5	18½	15
E	5,1	6,6	6,8	6¾	5½
F	3	3,3	3,4	3½	3
IRL	2,5	3,9	2,8	3½	2½
I	4,8	6,0	6,1	6¼	5½
L	2,6	4	3,5	4	3½
NL	0,7	2,1	2,4	2¾	2½
P	10,0	12,8	13,2	12½	11
UK	5,0	6,1	7,0	6¼	4¾
EC	3,7	4,9	5,1	5¼	4½
USA	4,1	4,4	5,1	6¼	5½
JAP	0,0	1,7	2,5	2¼	2¼

(d) Balance on current transactions (as % of GDP[1])

	1988	1989	1990[2]	1991[2]	1992[2]
B	1,0	1,0	0,3	− ¼	0
DK	−1,8	−1,3	0,0	¼	1¼
D	4,1	4,7	2,6	¾	¾
GR	−1,7	−4,8	−5,1	−5	−4½
E	−1,1	−2,9	−3,8	−4	−4
F	−0,4	−0,2	−0,3	− ½	− ¼
IRL	1,8	1,6	1,2	½	− ¼
I	−0,6	−1,3	−1,3	−1¾	−1¾
L	34,3	31,5	27,3	24	22½
NL	2,4	3,6	3,3	3½	3½
P	−4,4	−1,2	−1,2	−1¾	−1¾
UK	−4,1	−3,7	−2,8	−2	−2
EC	0,2	0,2	−0,3	− ¾	− ¾
USA	−2,4	−1,9	−1,7	−1¾	−1½
JAP	2,8	2,2	1,6	1½	1¾

[1] GNP for USA and Japan from 1989 onwards.
[2] Provisional forecasts October 1990.
[3] Deflated by the deflator of private consumption.

Source: Commission services.

(e) Number of unemployed as % of the civilian labour force

	1988	1989	1990[2]	1991[2]	1992[2]
B	10,0	8,5	7,8	7¾	7½
DK	6,5	7,7	8,2	8¾	8¾
D	6,1	5,5	6,0	6¼	6½
GR	7,7	7,8	8,1	9¼	9½
E	19,3	17,0	15,8	15½	15
F	9,9	9,4	8,9	8¾	8½
IRL	17,6	17,0	16,5	16½	16½
I	10,8	10,8	10,2	10¼	10¼
L	2,1	1,8	1,7	1½	1½
NL	9,3	8,7	7,4	7¼	7
P	5,6	5,0	4,4	5	5
UK	8,5	7,0	6,4	7¼	8
EC	9,7	8,9	8,5	8¾	8¾
USA	5,5	5,3	5,4	6	6¾
JAP	2,5	2,3	2,2	2¼	2¼

(f) General government lending and borrowing (as % of GDP)

	1988	1989	1990[2]	1991[2]	1992[2]
B	−6,6	−6,6	−5,8	−6	−5½
DK	0,2	−0,7	−1,4	−1½	−1
D	−2,1	0,2	−3,2	−4¾	−3½
GR	−15,6	−18,4	−18,4	−17	−14¾
E	−3,2	−2,7	−3,1	−1¾	−1
F	−1,7	−1,5	−1,2	−1	−1
IRL	−5,2	−3,4	−3,4	−3½	−3½
I	−10,9	−10,2	−10,1	−9½	−9¼
L	2,1	3,2	3,3	1¼	1
NL	−5,2	−5,2	−5,4	−4¾	−4½
P	−5,4	−3,8	−6,0	−5½	−4¾
UK	1,1	0,9	−0,2	−¾	−½
EC	−3,7	−3	−4,0	−4	−3½
USA	−3,6	−2,0	−2,3	−2¼	−2
JAP	2,1	1,8	2,7	2½	2¼

(g) Total employment (annual % change)

	1988	1989	1990[2]	1991[2]	1992[2]
B	1,5	1,3	0,9	¼	¼
DK	−0,6	−0,5	−0,2	0	½
D	0,6	1,4	2,4	1½	1
GR	1,6	0,4	0,7	−½	0
E	2,9	4,1	2,7	1½	1¾
F	0,6	1,2	1,2	¾	¾
IRL	0,4	1,1	1,6	¾	¾
I	1,4	0,2	0,9	¼	½
L	3,1	3,7	2,4	1¾	1½
NL	1,3	1,6	1,7	¾	1
P	0,1	1,8	0,7	¼	¼
UK	3,2	2,8	2,0	−½	0
EC	1,5	1,6	1,7	½	¾
USA	2,9	2,0	0,9	¾	¾
JAP	1,6	1,9	1,6	1¼	1

(h) Real compensation of employees per head (annual % change[3])

	1988	1989	1990[2]	1991[2]	1992[2]
B	−0,1	0,5	2,6	2½	2½
DK	−0,4	−1,3	0,4	−¼	1
D	1,9	−0,3	1,9	1¼	¾
GR	2,8	−3,9	−2,1	−1½	−1½
E	1,3	−0,8	1,3	¾	1
F	1,0	1,5	2,0	1	1½
IRL	1,6	−1,5	1,5	1¾	1¾
I	3,8	3,0	2,6	2½	2¼
L	0,5	−0,2	2,6	1¼	2¼
NL	0,7	−1,5	2,2	1½	1½
P	3,1	0,2	3,3	2¾	2½
UK	2,1	2,5	3,2	2¼	1¾
EC	1,8	1,1	2,2	1½	1½
USA	0,9	−0,7	0	¼	¾
JAP	3,7	2,2	3,0	3	2¾

[1] GNP for USA and Japan from 1989 onwards.
[2] Provisional forecasts October 1990.
[3] Deflated by the deflator of private consumption.

Source: Commission services.

(i) Investment in construction at constant prices (% change on previous year)

	1988	1989	1990[2]	1991[2]	1992[2]
B	15	9,6	4,7	− ¼	3¼
DK	−3,1	−4,2	−6,1	−2¼	− ¼
D	4,7	5,1	5,2	2	2¼
GR	7,6	2	2,0	2	3½
E	12,6	13,3	11,5	6	7
F	6,2	4,5	3,0	2	3½
IRL	−0,7	9,8	10,6	6¾	6¾
I	3,7	3,6	2,5	2½	2½
L	9,9	8,8	8,2	5	4½
NL	11,8	2,6	0,8	−1½	2½
P	10,1	7,5	7,0	4½	5½
UK	6,1	−0,4	−2,2	− ¾	1¾
EC	6,4	4,7	3,6	2	3¼

(j) Investment in equipment at constant prices (% change on previous year)

	1988	1989	1990[2]	1991[2]	1992[2]
B	17,7	19,0	10,0	8	8¼
DK	−7,5	5,5	1,8	2½	3½
D	7,7	9,7	11,4	7	6
GR	10,8	17,3	4,0	4	6
E	16,5	14,1	5,4	4	5¼
F	8,9	6,9	4,5	4	5¼
IRL	5,6	14,1	9,8	6¼	6½
I	6,4	6,3	3,4	4	5¼
L	−5,4	14,9	12,0	6¼	5¾
NL	6,8	5,5	5,5	3½	2¾
P	23,2	9,0	11,0	8	8½
UK	17,7	10,0	−0,3	−2¼	3¼
EC	10,4	9,1	5,3	3¾	5¼

(k) Total investment at constant prices (% change on previous year)

	1988	1989	1990[2]	1991[2]	1992[2]
B	16,0	13,6	7,0	3½	5½
DK	−6,5	−0,1	−2,6	0	1½
D	5,9	7,1	8,0	4½	4
GR	9,0	8,6	2,9	3	4¾
E	14,0	13,6	8,9	5¼	6¼
F	7,5	5,9	3,8	3¼	4½
IRL	0,3	12,1	10,2	6½	6¾
I	4,9	5,1	3,0	3¼	4
L	3,2	11,5	10,0	5¾	5¼
NL	9,8	3,9	2,9	¾	2½
P	15,0	8,3	9,1	6¼	7
UK	13,1	4,8	−1,2	−1½	2½
EC	8,4	6,8	4,4	3	4¼
USA	5,4	1,8	0,6	− ¾	3
JAP	13,4	10,9	9,9	5	6

(l) GDP per head (EC = 100) at current prices and current PPS

	1960	1973	1986	1991[2]	1992[2]
B	95,4	101,3	101,0	103,3	104
DK	118,4	113,2	116,7	104,2	103,9
D	118	111,3	114,3	112,5	110,9
GR	38,7	56,9	55,8	52,8	52,4
E	59,6	78,1	72,2	77,1	77,8
F	105,6	110,6	110,1	108,9	109,3
IRL	60,8	59,0	63,5	69,2	70,4
I	86,6	93,4	103,2	104,4	104,9
L	158,4	142,3	124,2	125,4	127,4
NL	118,7	113,2	106,3	103,6	103,6
P	38,8	56,4	52,7	56,9	57,7
UK	128,7	108,5	105,1	104,0	104,1
EC	100,0	100,0	100,0	100,0	100,0
USA	190	162	155,8	147,4	144,9
JAP	55,9	96,4	111,0	122,5	125,4

[1] GNP for USA and Japan from 1989 onwards.
[2] Provisional forecasts October 1990.
[3] Deflated by the deflator of private consumption.

Source: Commission services.

The national economies

Evaluation by the Commission services

Tables

Graphs

Introduction

After a period of several years during which almost all the national economies in the Community shared in buoyant output growth, with strong investment and rapid employment creation, in 1990 there has been a slowing in activity evident in several, but not all, member countries. Whereas the impact of unification has boosted demand and output growth in Germany and expansion has also continued among Germany's immediate Benelux neighbours, activity has been rising more slowly in the other Community countries, often under the influence of a tightening of policies to deal with inflationary pressures.

In 1991 all the national economies are expected to grow more slowly than in 1990, affected by the rise in oil prices induced by the Gulf crisis, by a general deceleration in the growth of world trade and a weak output picture in the USA, and by the appreciation of Community currencies against the US dollar. Despite the general slowdown, growth rates in 1991 are forecast to vary substantially between countries — 3,0 % or more in Germany (former FRG) and Portugal, but 1,0 % or less in Denmark, Greece and the United Kingdom. In 1992, assuming that oil markets will have returned to more normal conditions during 1991, some general recovery is to be expected, but growth in most countries appears unlikely to be as strong as was achieved in 1988-89.

Employment has continued to rise strongly in most countries in 1990 but, with a lagged response to output, will be less buoyant in 1991, leading to a break in the steady decline in the unemployment rate enjoyed in most countries in the last few years. The unemployment rate in 1990 remained especially high (above 10 % of the civilian labour force) in Spain, Ireland and Italy.

There remain considerable uncertainties about the scale and the duration of the shock to oil prices. Most Community countries have made substantial savings in energy use since the early 1970s and are less dependent on imported oil than at the time of the two previous oil price shocks, but Greece, Spain and Portugal have been less successful in achieving energy and oil savings, no doubt in part because their economies are at a less advanced stage of development. The higher than average net oil import bills of Greece and Portugal (respectively 2,9 % and 3,5 % of GDP in 1989) leave these countries potentially more vulnerable to a sustained oil price rise, but much will depend on the stance of domestic fiscal and monetary policies.

The other major event of 1990, the unification of Germany, is also having a differential impact on the national economies. The former GDR is undergoing a massive transformation — legal, economic and social — from a command economy to a social market economy. While prospects in the years ahead are favourable, in the short term East Germany is going through an abrupt adjustment in which output is falling sharply and unemployment climbing. Consumers in the new German *Länder* have shifted a large part of their expenditure from locally produced goods to West German and other imported supplies and this gives a substantial stimulus to West German demand where growth is continuing at full capacity. The substantial transfers from West to East Germany are resulting in a sharp reduction in Germany's current account surplus, while the general government accounts are moving from near balance in 1989 into sizeable deficit. The German saving which in recent years has flowed to other countries as capital finance is now being absorbed within the unified Germany. While most of the demand from East Germany is immediately being felt in West Germany, progressively this will spill over to other EC countries, taking advantage of opportunities to supply East Germany directly or to satisfy increased demand for imports from West Germany.

Apart from the special circumstances in Germany, fiscal policy in all the Member States continues to place the emphasis on gradual consolidation of budgetary positions. Greece and Italy, in particular, still face large budgetary imbalances and unsustainable trend increases in the already high public debt/GDP ratios; a determined implementation of the governments' budgetary adjustment programmes in these countries is urgent and essential. Further progress in reducing budget deficits and/or controlling the debt service burden is also an aim in Belgium, Ireland, the Netherlands and Portugal, and in all countries fiscal policy will need to hold to a tight stance to resist inflationary pressures.

Among the original seven members of the narrow band of the exchange-rate mechanism of the EMS, the convergence of inflation performance has been highly satisfactory, but even these countries are currently faced with risks to inflation from the oil price shock and emerging wage cost pressures. Italy, Spain and the United Kingdom still have inflation rates (private consumption deflator) in the 6 to 7 % range and have further to go in a satisfactory adjustment of wage formation behaviour to the discipline of the ERM. Greece and Portugal have rapid double-digit inflation rates, and priority is to be given in these countries as part of wide-ranging adjustment programmes to controlling inflation as a prerequisite for full participation in the ERM and the moves towards economic and monetary union.

A fuller assessment of developments and important policy issues in each of the national economies of the Community is given in the sections that follow.

Belgium

Belgium's economic performance remains favourable

Belgium's economic performance has remained favourable in 1990, with real GDP growing by about 3,5 %, after the strong expansion of 1988 and 1989 averaging over 4 % per year, nearly one percentage point above the EC average. In the last few years both economic expansion and real wage moderation have contributed to the continuing reduction in the unemployment rate, which by 1990 was below the EC average.

Table 1

Belgium: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	1,1	2,6	4,0	3,5	2,2	2,7
Total domestic demand (% change)	0,1	3,6	5,0	4,0	2,6	2,8
Employment (% change)	−0,2	0,9	1,3	0,9	0,2	0,3
Unemployment rate (%)	12,2	11,0	8,5	7,8	7,7	7,6
Inflation (%)	6,3	1,3	3,4	3,6	4,5	3,5
Balance of current account (% of GDP)	−0,4	1,4	1,0	0,3	−0,3	0,0

The deceleration of output growth in 1990 partly reflected the weakening of residential construction expenditure, as both non-residential investment and consumption remained fairly dynamic. Exports grew less rapidly in 1990 due mainly to the slowdown in market growth as market shares have deteriorated only slightly. Business profitability was reduced because of wage and energy cost increases, and the effective nominal appreciation of the Belgian franc.

Inflation remained relatively stable throughout most of 1990, slightly over 3 %, after having increased in 1989 following international price developments and increases in excise taxes. From August 1990 onwards, however, oil market developments have led to a deterioration in price performance.

Notwithstanding the substantial increase in potential output and the restructuring of the Belgian economy in the last few years, the rise in inflation — when unemployment is practically at its structural level — calls for the careful surveillance of Belgium's competitive position within the framework of the competition law passed in January 1989. There is a danger that, in 1991, the strong wage indexation mechanisms present in the Belgian economy may affect inflation dynamics beyond any direct impact of a rise in energy prices and hence further reduce price competitiveness and export performance.

Table 2

Belgium: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	15,9	16,5	19,5	19,8	20,1	20,5
• % change	−0,7	8,4	13,6	7,0	3,5	5,6
of which:						
Equipment (% change)	4,2	9,3	19,0	10,0	8,0	8,3
Construction (% change)	−4,4	7,0	9,6	4,7	−0,2	3,2

Table 3

Belgium: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	6,7	9,1	9,0	7,7	6,5	6,8
Short-term interest rate	10,5	7,3	8,8	9,7	10,0	10,0
Long-term interest rate	11,5	7,9	8,7	10,1	10,2	10,1
Competitiveness[1]	71,8	75,6	72,3	75,3	75,7	76,4
Budget balance (% of GDP)	−9,6	−7,5	−6,4	−5,6	−5,9	−5,4
Gross public debt (% of GDP)	112,9	129,1	129,9	129,4	129,4	128,5
Nominal wages per head (% change)	5,8	2,8	3,9	6,2	7,1	6,2
Real wages per head (% change)	−0,5	1,5	0,5	2,6	2,5	2,6

[1] BLEU, 1980 = 100.

Unemployment rate: harmonized Eurostat definition.
Inflation: private consumption deflator.
Money growth: broad money (M2/M3).
Competitiveness: Nominal unit wage costs in manufacturing relative to 19 industrial countries, double weighting of exports; 1980 = 100.
Budget balance: net lending/borrowing of general government.
Gross public debt: general government.
Nominal wages: compensation of employees per head.
Real wages: compensation per head deflated by private consumption prices.
Figures for 1990-92 are November 1990 forecasts made by Commission services.

The need for further progress on fiscal consolidation

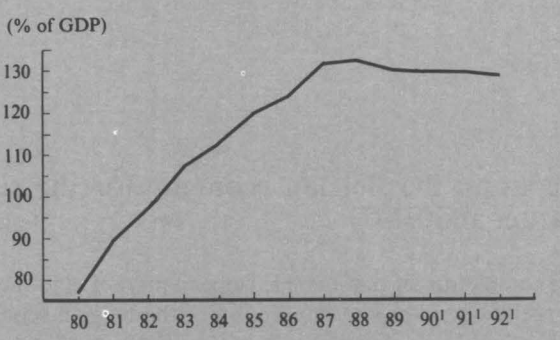
The Belgian authorities announced in 1988 a strategy of fiscal consolidation, based on the following double norm for the national government budget: (i) the freezing of non-interest expenditure in real terms, and (ii) no increase in the nominal deficit.

The rise in interest rates in 1990 and consequently of debt service expenditure required a substantial improvement in the public sector primary deficit in order to comply with the announced strategy for fiscal consolidation for the period 1990-92.

In 1990 public finance imbalances were stabilized both in flow and in stock terms. Notwithstanding the stabilization of the public debt ratio (at around 130 % of GDP) and, presently, the absence of significant financial constraints, the need to strengthen the process of fiscal adjustment remains.

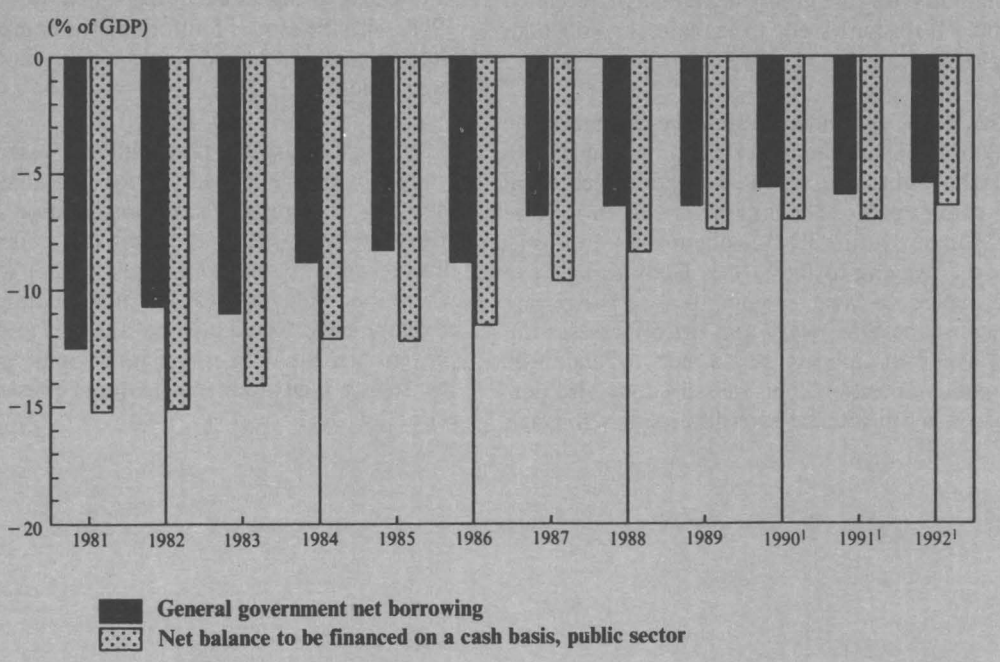
In the medium and long term, national saving must increase to improve income and wealth trends. Also, a rapidly ageing population calls for a rise in national saving if future generations are not to be excessively burdened with the costs of the social security system.

GRAPH 1: **Belgium: Total public debt**



[1] Commission forecasts (November 1990).

GRAPH 2: **Belgium: Budget deficits**



[1] Commission forecasts (November 1990).

In a small and highly integrated economy with a fixed exchange-rate policy and monetary policy optimally targeted to that objective, fiscal policy should remain a fairly flexible instrument to allow for stabilization needs. Debt reduction would improve the scope for discretionary action, helping to face asymmetric real shocks at the Community level (e.g. oil price shocks), and making room for increasing the level of public investment (in percentage of GDP), which, in recent years, has fallen below the EC average.

Preparing the Belgian economy for the single market and EMU

The completion of the single European market, and the high degree of openness and integration of the Belgian economy, all ask for the implementation of a wide array of structural policies aimed at enhancing competitiveness as European integration proceeds.

The relative persistence of high unemployment rates (compared to the early 1970s), particularly among women, after several years of uninterrupted growth points plausibly to its predominantly structural nature. Both a mismatch between the demand for and supply of labour calling for an increase in vocational training programmes, and the relatively liberal rules about eligibility for unemployment benefit (coupled with its unlimited duration) seem to explain the still high rates of unemployment.

The Belgian Government decided to link the Belgian franc (BFR) formally to the Deutschmark (DM) on 15 June 1990, which implied the tightening of the bilateral fluctuation margins and a commitment to maintaining the central rate *vis-à-vis* the DM in any future EMS realignments. In a very open economy the pegging to the DM is likely to improve inflation performance. In fact, by ruling out exchange-rate adjustments against the DM, wage and price increases are likely to be further disciplined so as not to endanger Belgium's competitive position. This measure may also permit further narrowing in interest-rate differentials through a reduction in the risk premium, and consequently may help to alleviate the interest charge on public debt.

The dual exchange-rate market for the BFR was abolished on 5 March 1990, ahead of the deadline set by the third Community Directive on capital movements (1 July 1990). The strengthening of the BFR inside the ERM in recent years had largely removed the economic rationale for the dual exchange rate market arrangement.

The withholding tax on interest income was reduced from 25 to 10% on 5 March 1990, but only for new issues of financial assets so as to limit tax revenue losses. This measure was aimed at reinforcing the proportion of private savings placed in BFR denominated instruments and thus strengthen, in a broad sense, the Belgian financial sector.

A comprehensive reform of the monetary markets is also envisaged basically to facilitate the process of adapting Belgian monetary practices in line with those of other countries in the EC. In fact the reforms under consideration are not expected to change the effective degree of monetary control, or the objective of the stability of the BFR in the ERM. Among the main components of this reform will be the opening up of the Treasury bill market to foreign and non-bank investors and a comprehensive reform of money market practices of the Central Bank.

The Brussels stock exchange has been undergoing an important restructuring since 1989 which will be pursued until 1992, with the aim of reinforcing the competitive position of Belgian markets in the single market and their prudential supervision.

Belgium has already taken all the essential measures to comply with the objectives for the first stage of EMU. However, the present fiscal consolidation strategy should be stringently pursued to allow for the reduction of budgetary divergences (in flow and stock terms) with EC countries where the public finances are more healthy. Wage and price developments should also be carefully surveyed in order to prevent the building up of inflationary pressures through the strong indexation mechanisms present in the Belgian economy.

Denmark

Continued low growth but some improvement in wage and price performance

After more than two years of recession led by a fall in private consumption and investment, the Danish economy started to recover slowly in 1989 as the fall in private consumption bottomed out. A slowdown in the growth of exports late in 1989 and at the beginning of 1990, however, prevented the recovery from gathering momentum. The higher oil prices due to the Gulf crisis will probably further delay the recovery. Nevertheless, provided that pay rises continue to moderate, prospects are for some acceleration of growth in the second half of 1991 and in 1992.

Table 1

Denmark: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	3,7	1,1	1,3	0,9	0,9	1,8
Total domestic demand (% change)	4,0	0,3	0,5	−0,8	−0,1	1,0
Employment (% change)	1,5	0,8	−0,5	−0,2	0,0	0,4
Unemployment rate (%)	8,4	5,9	7,7	8,2	8,8	8,7
Inflation (%)	5,8	3,9	5,0	2,8	3,3	2,0
Balance of current account (% of GDP)	−3,5	−3,3	−1,3	0,0	0,3	1,2

A strong rise in wage claims in 1987 was a major factor behind the economic downturn. Competitiveness was deeply eroded and export market shares were lost. More recently pay rises have slowed to a level slightly below the ERM average and international competitiveness has now improved. Given the weaker growth of export markets at present, further competitive gains will be needed to ensure a return to balanced and employment-creating growth. Consumer price inflation has been significantly reduced and is now among the lowest in the Community, due to the combination of wage moderation and a hard currency stance, and helped by some reductions in excise duties in the first half of 1990.

Current account moves into surplus

The current account balance has shown a significant deficit for more than a quarter of a century resulting in a mounting external debt. This persistence of current account deficits has to a significant degree been caused by low private saving induced by public sector expenditure and tax rules. In particular, as pensions in Denmark have little insurance element and are to a very large extent tax-financed, public saving should be high in order to cope with the demands of the ageing population.

Also, tax rules have added indirectly to the current account imbalance through the behaviour of private agents. The unlimited tax relief on interest payments was potentially the single most important distortionary element of the fiscal system, depressing private saving and boosting residential investment. Notably the high positive correlation between inflation and nominal interest rates has led to substantial indirect subsidization of housing in inflationary times. However, the tax reform of 1987 symmetrically reduced the tax rate on capital income and the value of the tax relief for interest payments. Together with lower inflation this has led to a significant increase in the real costs of borrowing after tax and thus contributed to higher private net saving.

Table 2

Denmark: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	18,0	19,1	18,6	17,4	17,2	17,3
• % change	9,1	1,6	−0,1	−2,6	0,0	1,6
of which:						
Construction (% change)	6,5	4,7	−4,2	−6,1	−2,2	−0,2
Equipment (% change)	12,2	−1,9	5,5	1,8	2,5	3,5

During the 1980s, private and public sector saving have shown swift changes in opposite directions. In the period of strong fiscal consolidation, during 1982 and 1986, private saving fell sharply, while public saving showed an offsetting jump. Whereas the former to a large extent reflected a steep rise in anticipated future incomes, the latter was a result of increased tax rates, higher economic activity and expenditure cuts. In the subsequent period, private saving has recovered substantially, partly due to the tax reform implemented in 1987, but undoubtedly also due to a downward correction of anticipated incomes in the light of the economic stagnation. This strong turn-around in expectations implies most likely that the prevailing debt to income ratio is considered to be too high. Therefore, private saving may be expected to increase steadily during the forecast period. The higher oil prices due to the Gulf crisis could temporarily affect private saving negatively. But due to the high debt to income ratio this negative effect is likely to be very moderate.

Although the current account has shown a promising improvement since 1986 a shadow is cast by the fact that the main factor behind this improvement has been a fall in investment. A more careful inspection of the investment figures, however, reveals that almost half of this fall is accounted for by lower residential investment, reflecting *inter alia* the abovementioned rise in the after-tax real costs of borrowing. Non-residential investment, on the other hand, has stabilized at a level of some 14 % of GDP, after a fall from about 16 % of GDP in 1986. This is somewhat higher than during previous periods of economic stagnation. It is unlikely that a relatively weak recovery, as forecast for 1992, will trigger a surge in investment. Meanwhile, as private saving is expected to increase steadily, the current account balance should remain on an improving trend moving into a significant surplus during the forecast period. This, however, should not cause too much ground for complacency and a return to a more lax fiscal stance. A solid return to employment-creating growth without negative consequences for the current account balance would require a further rise in public saving and therefore a continued tight fiscal stance.

Need for tax harmonization

The internal market programme implies for Denmark a major challenge in terms of harmonizing the tax structure

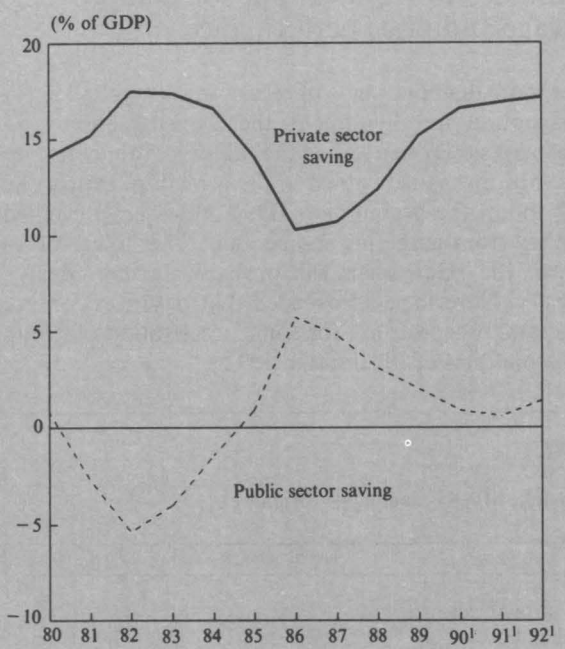
Table 3

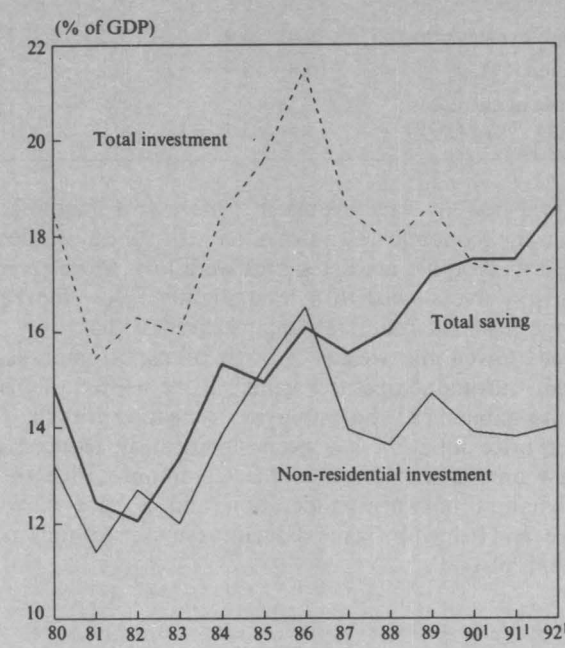
Denmark: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	19,7	5,3	−3,5	9,0	4,8	4,1
Short-term interest rate	11,2	9,1	9,4	10,8	10,3	9,8
Long-term interest rate	13,3	11,0	10,2	10,9	10,7	10,2
Competitiveness (1980 = 100)	92,2	110,9	109,1	115,3	112,6	110,9
Budget balance (% of GDP)	−4,4	2,0	−0,7	−1,4	−1,6	−1,1
Gross public debt (% of GDP)	75,6	65,0	63,3	62,8	63,3	62,8
Nominal wages per head (% change)	6,1	5,7	3,5	3,3	3,0	3,0
Real wages per head (% change)	0,3	1,7	−1,4	0,5	−0,3	1,0

For definitions, see Table 3 for Belgium, p. 36.

GRAPH 1: **Denmark: Saving and investment**





[1] Commission forecasts (November 1990).

to Community standards. Indirect taxes are much higher than elsewhere in the Community and should be substantially reduced before border controls are abolished if massive tax-induced cross-border shopping is to be avoided. As improving the current account balance by fiscal restraint remains the prime goal of economic policy, expenditure cuts will have to be introduced or other taxes will have to be increased in order to contain the increase in consumption initiated by indirect tax cuts. Social security contributions are much lower in Denmark than in any other member country. It might, therefore, be natural to consider a change in the tax structure from indirect taxes to higher social security contributions. However, if such a change is carried out over a short time period, there is a distinct risk that it may lead to a deterioration in international competitiveness, as unit labour costs could increase substantially. In order to preserve competitiveness, it is essential that the indirect tax cuts should be fully reflected in lower wage claims.

Germany

The growth momentum is largely supported by institutional changes

The unbroken growth enjoyed by the German economy since 1983 is continuing at a steady pace. After going above 3 % in 1989, GDP growth on the Federal Republic's former territory should reach 4 to 4½ % in 1990 and again be close to 3 % in 1991. Economic growth in 1990 is being dominated by domestic factors which have strengthened from a year ago. Business investment in equipment, in particular, has performed very favourably and is now benefiting from the prospects for domestic demand. Private consumption has been boosted by tax cuts representing some 1 % of GDP, large-scale immigration from the East and the growth of employment (+2,4 %). A significant increase in disposable income has made it possible to combine the growth of consumption with an increase in the saving ratio.

Table 1

Germany: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,1	2,6	3,3	4,3	3,1	2,0
Total domestic demand (% change)	1,7	3,3	2,7	3,7	3,3	2,8
Employment (% change)	−0,2	1,0	1,4	2,4	1,6	1,0
Unemployment rate (%)	7,0	6,2	5,5	6,0	6,3	6,5
Inflation (%)	2,3	1,9	3,2	2,8	3,9	3,5
Balance of current account (% of GDP)	1,5	4,2	4,7	2,6	0,7	0,8

The strong acceleration of growth in 1990 has also to be seen against the background of German economic and monetary union established on 1 July and completed by political unification on 3 October. The collapse of East German production and the shift of East German demand to Western products added to the domestic components of growth. At the same time, during the adjustment period, massive public transfers to the former GDR are underpinning demand. From the second half of 1990, the growth of the former FRG seems to be mainly stimulated by this strong additional demand supported in the last analysis by an expansionary budgetary policy. This momentum will continue at least until 1991.

In reality, unified Germany will be reallocating resources to the domestic market. Without the direct effect of unification, the growth of the former FRG would be much lower. In the short term, this can be explained by the slackening of world demand, in particular investment goods, combined with the real appreciation of the German mark and by the adverse effect of high interest rates on the construction industry.

Table 2

Germany: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	5,7	6,0	5,6	n.a.	n.a.	n.a.
Short-term interest rate	5,7	4,3	7,1	8,4	9,4	9,4
Long-term interest rate	7,5	5,9	7,0	8,9	9,7	10,0
Competitiveness (1980 = 100)	91,2	108,9	107,0	111,5	111,0	111,8
Nominal wages per head (% change)	3,3	3,2	2,8	4,7	5,1	4,3
Real wages per head (% change)	1,0	1,2	−0,4	1,9	1,2	0,8

For definitions, see Table 3 for Belgium, p. 36.

Inflationary pressures should be brought under control

The outlook for inflation is somewhat uncertain. The additional demand from the former GDR is making itself felt at a time when levels of capacity utilization are high. In addition, after several years of wage moderation, the renewal of industry agreements has produced pay demands which make up for lost ground in some branches, leading to a wage increase by about 5 % on average in 1990. Price rises in some sectors of the economy, such as construction and housing, motor vehicles and energy, are substantial and this could feed a price/wage spiral in the short run.

However, the relative appreciation of the DM should have price-dampening effects offsetting much of the higher cost of petroleum products. Import prices were on a clearly declining trend until the oil price hike. Domestically, producer prices for agricultural products have been declining too.

It is also likely that the medium-term outlook on the German labour market will have a moderating influence on wage

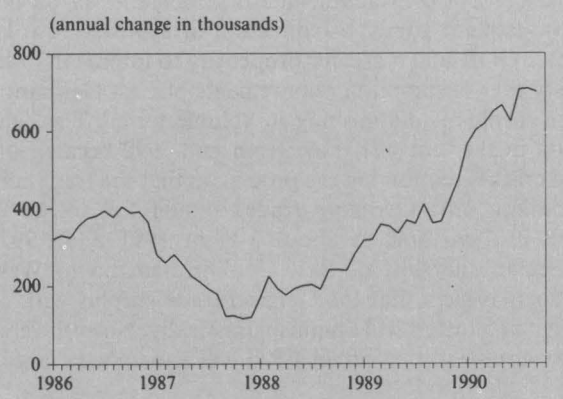
formation in the years ahead. The increase in unit labour costs should once again be contained and peak in 1991 with a further contraction of real unit labour costs.

Table 3

Germany: Public finance data
(% of GDP)

	1970	1980	1985	1989	1990	1991	1992
Current receipts	38,9	45,4	46,4	45,4	43,5	43,9	43,9
Current expenditure	32,6	43,0	43,7	41,6	43,5	45,3	44,1
Gross fixed capital formation	4,6	3,6	2,4	2,3	2,4	2,4	2,4
Budget balance	−0,2	−2,9	−1,1	0,2	−3,2	−4,8	−3,6
• Federal Government	−0,7	−1,7	−0,9	−0,5	—	—	—
Gross public debt	18,4	32,7	42,5	43,6	43,7	45,2	45,9
• Federal Government	8,0	15,7	21,4	21,9	—	—	—

GRAPH 1: **Germany: Employment performance**



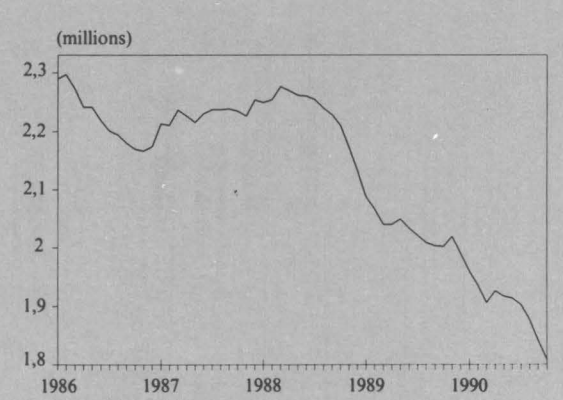
Source: Bundesanstalt für Arbeit.

The employment outlook remains favourable in West Germany but is deteriorating in the East in the course of the adjustment process

The labour market has demonstrated astonishing absorptive capacity, in particular since mid-1989, when the labour force expanded sharply as a result of large-scale migration from East Germany and other East European countries. This improvement in employment has clearly contributed to the vigour of growth. Potential immigrants, in particular those from the former GDR, have shown an adaptability which can be put down to their language, their age and their level of skills. The new source of labour has made it possible to reduce bottlenecks in certain industries. The steady growth of the West German economy has had a high job content: this can also be partly explained by a slowdown in productivity gains due to the maturing of the cycle.

On the other hand, in the current phase of adjustment, the employment situation in East Germany is deteriorating rapidly. Because of the continuing wage gap with the West and the need for skilled labour in West Germany, the merging of the two labour markets could reinforce the tendency for wages to converge and could encourage the resumption of migration.

GRAPH 2: **Germany: Unemployment performance**



Source: Bundesanstalt fur Arbeit.

External surpluses are rapidly being scaled down

The trade surplus of West Germany reached a peak in 1989, when net exports represented some 6 % of GDP. Under the influence of a contraction in world demand, in particular for investment goods, a redirection of exports towards the former GDR and a greater propensity to import in order to satisfy the consumption requirements of East Germany, the trade surplus is diminishing in volume terms. The deterioration in the terms of trade from mid-1990 because of the Gulf crisis is reinforcing the process so that the trade surplus (excluding intra-Germany trade) should fall to 4,5 % of GDP in 1990 and to about 3 % in 1991 and 1992. In particular, the shift of East German demand to Western products is such that the German trade surplus with other Western countries will diminish drastically. Nevertheless, the trade surplus of the former FRG will remain very large.

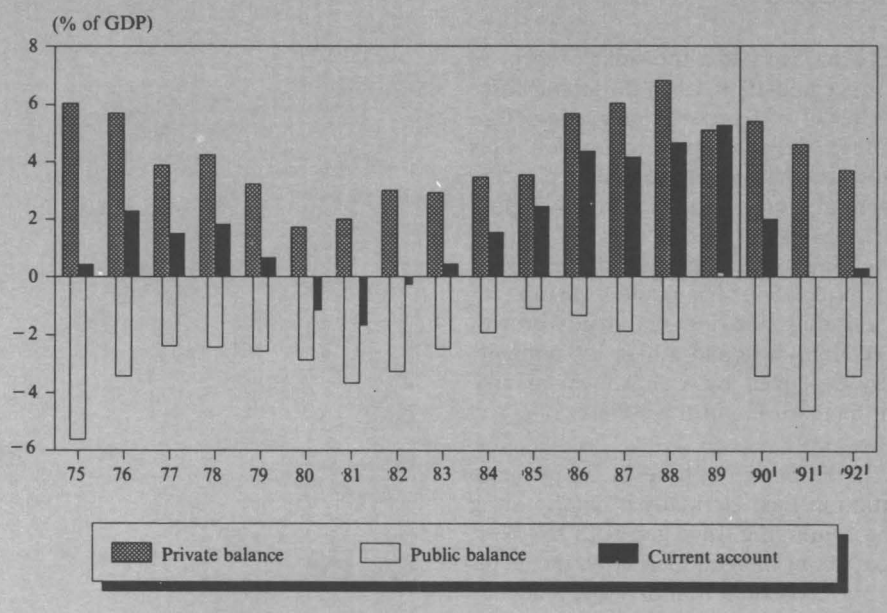
The changes are even more spectacular for the current account of the balance of payments. The surplus was in the region of 5 % of GDP in 1989 in West Germany. As a result of massive public transfers to the GDR, it should fall to 2,5 % in 1990 and in 1991 it should drop below 1 %.

The unification process is crucial for the rapid reduction of the German external surplus since, with no change in structures, the current account surplus would probably have fallen much less.

A considerable expansionary swing in budgetary policy

The extreme relaxation of budgetary policy can be explained by the scale of the adjustment necessary in the former GDR. Adjustment will probably take some time. The various categories of public transfers to East Germany include social transfer payments to enable the launch of a full social security system based on the rules in force in the Federal Republic, subsidies designed to keep part of East German agriculture and industry afloat during the period of rationalization, structural investment in housing, infrastructure and the environment and, lastly, transfers to be used to service the East German debt. Some categories of expenditure should decline as East Germany sees its economy recover and its own contributive capacity increase. For 1990, the general government deficit will reach some 3,5 % of GDP and is put at some 4,5 % and 3,5 % in 1991 and 1992 respectively. Consequently, the cost of debt servicing is bound to become very rapidly the most buoyant element of public expenditure.

GRAPH 3: **Germany: Saving and investment balance**



¹ Commission forecasts (November 1990).

The scale of the spending involved in integrating the former GDR economy pushes the public deficit to unaccustomed levels for Germany. This contrasts with earlier forecasts according to which tax reform, especially for the enterprise sector, could be pursued while strict budget equilibrium would be maintained. In the longer term, part of this spending will be, in a way, 'self-financed' by the additional growth brought about by the unification process. The Federal Government, anxious not to break this momentum, has ruled out tax increases. Admittedly, financing by borrowing poses no technical problems in the short term: the initial public finance situation is sound, the stock of domestic saving is plentiful, German savers show a marked preference for bonds, and the signature of the German State is sought after by foreign investors. On the other hand, the existence of such a large public deficit in the Community's largest country is bound to have a macroeconomic impact. So it could become necessary to adjust the European fiscal and monetary policy mix. Furthermore, reduced savings in Germany translate into less financial resources for investment. Also, private operators investing in East Germany are in competition with the public sector on the capital market. The partly autonomous rise in German interest rates at the long end of the market largely reflects these uncertainties. Japan will now be the only major country which is a net exporter of capital.

Table 4

Germany: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	23,0	24,0	20,5	21,4	21,9	22,3
• % change	3,3	4,9	7,1	7,5	4,4	4,0
of which:						
Construction (% change)	0,9	3,8	5,1	4,7	2,1	2,2
Equipment (% change)	7,3	6,3	9,7	10,9	7,1	6,1

Monetary policy must face up to growing challenges

German monetary union has altered the monetary policy situation. For although the Bundesbank's commitment to pursuing a policy of stability cannot be doubted, the extension of the German mark's monetary area to the territory of the former GDR raises uncertainties. The first relates to determining the degree of tightness of monetary policy. The evolution of the monetary aggregates seems to be under control and the monetary conditions have already been tightened as a result of the German mark's appreciation against the dollar and a significant rise in real interest rates. However, the problem is, in particular, to know the extent to which growing domestic demand will automatically lead to more imports and to a reduction in the current account surplus. Furthermore, not much is known about the behaviour of East German economic agents, in terms of consumption and saving, and the liquidity requirements of East German enterprises are difficult to gauge. The medium-term impact on the cost of living index of completely recasting the price system cannot be clearly anticipated. In the face of uncertainties on this scale, a money supply indicator loses part of its operational value, the more so since the volatility of velocity is expected to increase.

Although the more technical difficulties of steering monetary policy in the future should not be neglected, it is correct that, at present, other problems are at the centre of the stability-policy discussion: the high financial needs of the public bodies over the coming years, and the unpredictable developments in the Gulf region and their implications for the price and investment climate in general. Finally, in the short term there are domestic risks associated with the forthcoming wage rounds in the current very buoyant conjunctural situation.

Greece

Poor economic performance in the 1980s, new start in 1990

The combination of a weak growth performance and large disequilibria in the economy suggests that economic policy in the 1980s was not able to create the conditions necessary for sustained growth on a sound basis. The stabilization programme of 1986/87 — although it helped to improve temporarily the performance of the Greek economy — did not succeed in producing a permanent improvement, partly because it was abandoned too soon and partly because political developments provided an additional factor of uncertainty, leading to a gradual deterioration in the economic situation in 1988 which became more pronounced in 1989 and in the early months of 1990.

Table 1

Greece: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,1	1,6	2,8	1,2	1,0	1,5
Total domestic demand (% change)	2,1	1,4	4,2	2,1	1,1	1,5
Employment (% change)	0,8	0,4	0,4	0,7	−0,4	−0,1
Unemployment rate (%)	9,0	8,2	7,8	8,1	9,2	9,6
Inflation (%)	18,1	17,1	14,4	20,5	18,5	15,0
Balance of current account (% of GDP)	−5,7	−3,1	−4,8	−5,1	−5,1	−4,5

Table 2

Greece: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross fixed capital formation						
• % of GDP	19,3	17,5	18,6	17,9	17,9	18,1
• % change	−0,7	−2,3	8,6	2,9	2,9	4,7
of which:						
Construction (% change)	0,4	−0,2	2,1	2,0	2,0	3,5
Equipment (% change)	−1,9	4,8	17,3	4,0	4,0	6,0

Confronted with these circumstances, the new Greek Government designed and began implementing in May 1990 an economic policy programme aimed at correcting the large fiscal imbalances and laying the foundations for a more medium-term-oriented restructuring of the economy with particular emphasis on a reduction in State intervention. The main elements of the new government's programme include: increases in public tariffs; a restrictive budgetary policy; cuts in real wages; increases in interest rates; a not fully accommodating exchange-rate policy; privatization of over-indebted industries; reform of the public pension system; abolition of restrictions on the operation of State-owned banks; measures to increase flexibility in the labour market; a new scheme of investment incentives.

While the effects of the structural reforms can only be felt in the medium to long run, the immediate impact of the new economic policy was a further aggravation of the most recent trends (slowdown in output, acceleration in inflation) combined with a confidence-related improvement in the balance of payments. Although inevitable, such negative side-effects lead, in the short term, to an increase in the real and nominal divergence of Greece from the rest of the Community.

The Gulf crisis is expected to aggravate further the macroeconomic situation on all fronts (output, prices, balance of payments). Since Greece is more vulnerable to a new oil price shock than most other Community countries because of its high energy and oil dependence, convergence with the rest of the Community will become even more difficult to attain.

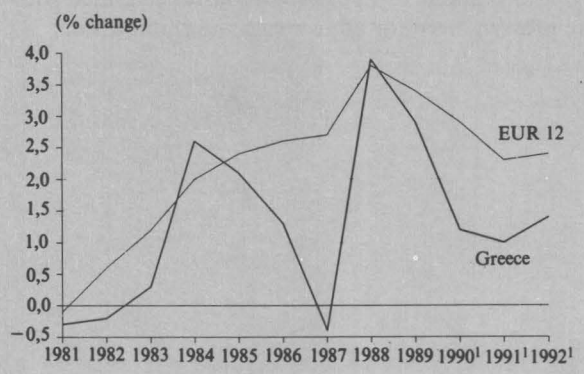
Fiscal adjustment and structural reform are the key medium-term policy objectives

Although the correction of the fiscal imbalances is the primary policy priority in Greece, not least because of their repercussions on the real economy, the measures taken (increases in VAT and excise duties, extraordinary levy on income and profits, increases in public tariffs, cuts in subsidies) are likely to lead to an outcome for 1990 not very different from the record deficits of 1989. This is due not only to the fact that more than one third of the year was over before budgetary policy for 1990 was decided upon but also to the dynamics of the debt and interest burden. This outcome implies that a major effort will have to be made in the 1991 and subsequent budgets.[1]

Given the large scale of the budgetary deficits it is inevitable that measures are taken on both the revenue and the expenditure sides. On the revenue side more emphasis needs to be

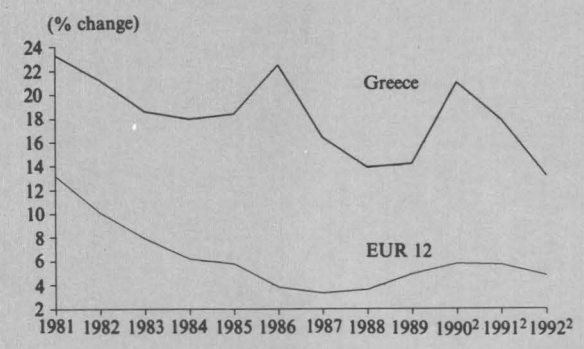
[1] This text was finalized before the presentation by the Greek Government at the end of November of its draft budget for 1991.

GRAPH 1: **Greece: Real GDP growth compared with Community average**



Commission forecasts (November 1990).

GRAPH 2: **Greece: Inflation compared with Community average[1]**



[1] Deflator of private consumption.
[2] Commission forecasts (November 1990).

put on efforts to curb tax evasion and achieve a broadening of the tax base. The rate of growth of public expenditure will have to be kept as low as possible. Given the rapid rise in interest payments, this implies a substantial cut in other current expenditure (notably the wage bill) if capital spending is not to bear the brunt of the correction.

Fiscal adjustment is closely interrelated with structural reform through privatization, deregulation and market liberalization. This will help to improve the overall business environment and by strengthening private sector activity will contribute to higher productivity and potential growth. The stronger these supply-side effects are the less will be the adjustment cost in terms of output and employment losses implied by the reduction in aggregate demand as a result of the fiscal correction. At the same time, stronger investment activity and a more modern production base are essential preconditions for regaining competitiveness in the market for tradable goods and would contribute on both the export and the import sides to reducing the external constraint to a more sustainable level.

Table 3

Greece: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	25,5	22,2	24,1	18,5	16,0	13,0
Short-term interest rate	16,4	16,9	18,7	20,0	20,5	18,0
Long-term interest rate	17,5	16,6	20,6	23,5	23,0	21,2
Competitiveness (1980 = 100)	118,5	102,4	116,4	122,9	126,5	127,3
Budget deficit (% of GDP)	−10,7	−15,8	−18,5	−18,6	−17,1	−14,9
Gross public debt (% of GDP)[1]	53,3	72,2	85,1	89,5	94,3	97,4
Nominal wages per head (% change)	22,3	14,4	18,8	18,0	16,7	13,2
Real wages per head (% change)	3,6	−2,3	3,8	−2,1	−1,5	1,6

[1] Central government.
For definitions, see Table 3 for Belgium, p. 36.

Community developments both require and facilitate a rapid restructuring of the economy

Stabilization and restructuring are not only a prerequisite for a sustainable development of the Greek economy but would also enable Greece to participate more fully in the EMU process. In addition, the liberalization of the domestic financial system — under way during recent years — would have to be completed and the existing restrictions on capital movements removed.

The Community objective of promoting the economic and social development of the peripheral regions is mainly being implemented through the financing by the structural Funds of infrastructure projects and the upgrading of human capital. Although these interventions are essential for the modernization and the development of the Greek economy, special attention should be devoted to the question of how these interventions can be harmoniously integrated with the more pressing need for adjustment and stabilization.

Spain

The Gulf crisis increases imbalances which have not yet been brought under control

The high growth rate achieved from 1986 to 1989 (an average of 4,7 %), as a result of a sharp expansion in domestic demand, led to substantial job creation, but has finally ended in an increase in inflationary pressures and in the external deficit.

The restrictive measures adopted in the autumn of 1988 and more particularly in July 1989 have not sufficiently reduced the domestic and external imbalances, although the economy has started to decelerate significantly since the closing months of 1989. The growth rate will probably slow down to 3,5 % in 1990 and to around 2,5 % in 1991. This will be the result of a more rigorous economic adjustment, made even more unavoidable by the Gulf crisis.

Table 1

Spain: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,0	4,7	4,9	3,5	2,5	3,2
Total domestic demand (% change)	0,7	7,1	7,7	5,3	3,1	3,8
Employment (% change)	−1,4	2,6	4,1	2,7	1,5	1,8
Unemployment rate (%)	20,1	20,4	17,0	15,8	15,6	15,0
Inflation (%)	10,5	6,4	6,6	6,8	6,6	5,5
Balance of current account (% of GDP)	0,5	0,2	−2,9	−3,8	−4,0	−3,9

The persistence of a favourable economic climate until the summer of 1990 and the implementation of a major public works programme have meant that investment in plant and machinery, and investment in construction, despite the slowdown observed in residential construction, were still able to turn in a good performance. Deteriorating expectations and a further tightening of economic policy are likely to lead to a sharper slowing of gross capital formation.

The surge in investment and the liberalization of the labour market have been reflected in a sharp increase in employment

Table 2

Spain: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	19,4	21,0	24,0	25,0	25,5	26,0
• % change	−1,5	12,9	13,6	8,9	5,2	6,2
of which:						
Equipment (% change)	−1,0	18,1	14,1	5,4	4,0	5,2
Construction (% change)	−1,8	9,5	13,3	11,5	6,0	7,0

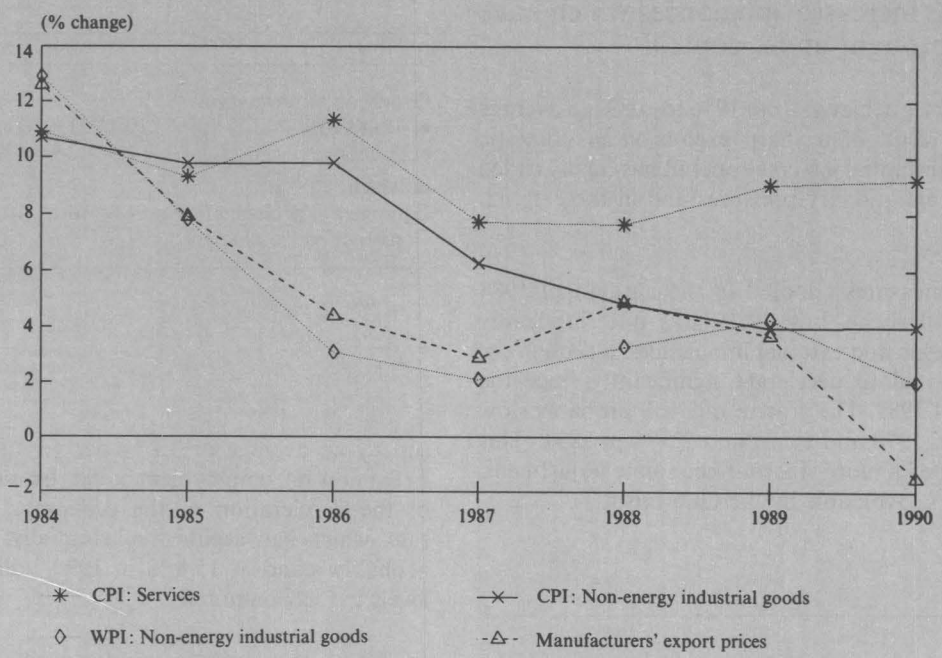
(up by an average of 3,1 % per year from 1986 to 1989). From now on, employment could rise more slowly as a result of the deceleration of the economy. The unemployment rate, which had declined substantially in recent years, will probably stand at 15,8 % in 1990, still one of the highest levels in the Community.

In 1990, the growth of disposable income has been maintained as a result of the distortions of the tax and budgetary timetable in 1989-90, the surge in nominal wages and the growth of employment. The expansion of consumption has continued to exert pressure on consumer prices, in particular on prices for services (up by over 9 %), where competition is weakest. By contrast, the rise in retail prices for non-energy industrial goods has stabilized at around 4 %, and the rise in wholesale prices at around 2 %.

The priority objective to reduce inflationary expectations could be jeopardized by the oil crisis. The existence of indexation clauses in many sectors of the economy increases the risk that an upward spiral of prices and wages will be triggered. This would imply a delay in the necessary process of narrowing price differentials in relation to the average of the other EMS countries.

The foreign trade deficit remains very high (6,2 % of GDP in 1990). This outturn is the result of a loss of competitiveness in relation to other countries, due to the strong appreciation of the peseta and the deterioration of relative prices, a shift in domestic demand to imported goods and the recent increase in oil prices. Spain is more heavily dependent on oil imports than the Community as a whole and will therefore be hit harder by the crisis. In addition, the sharp fall in the volume of tourism receipts has increased the current account deficit (3,8 % of GDP in 1990) which could stand at around 4 % in 1991.

GRAPH 1: **Spain: Inflation by sector**



Profound structural changes are necessary in order to achieve balanced growth

The Spanish economy must chart a course for growth which does not allow it to be repeatedly interrupted as a result of domestic and external imbalances. Maintaining the pace of investment and employment should not lead to an excessive rise in consumption which in the end would put pressure on prices and on the external deficit.

The current account deficit, which up to now has been widely financed by capital inflows, will remain a weak point in the years ahead. If it is to be corrected, the competitiveness of goods and services must be increased.

It will therefore be necessary to devote greater efforts to improving supply, and in particular to increasing the flexibility of factors, signalling a better allocation of resources. At the same time, the economic agents will have to ensure that they are able to measure up to the challenges which will face the Spanish economy in the medium and the long term.

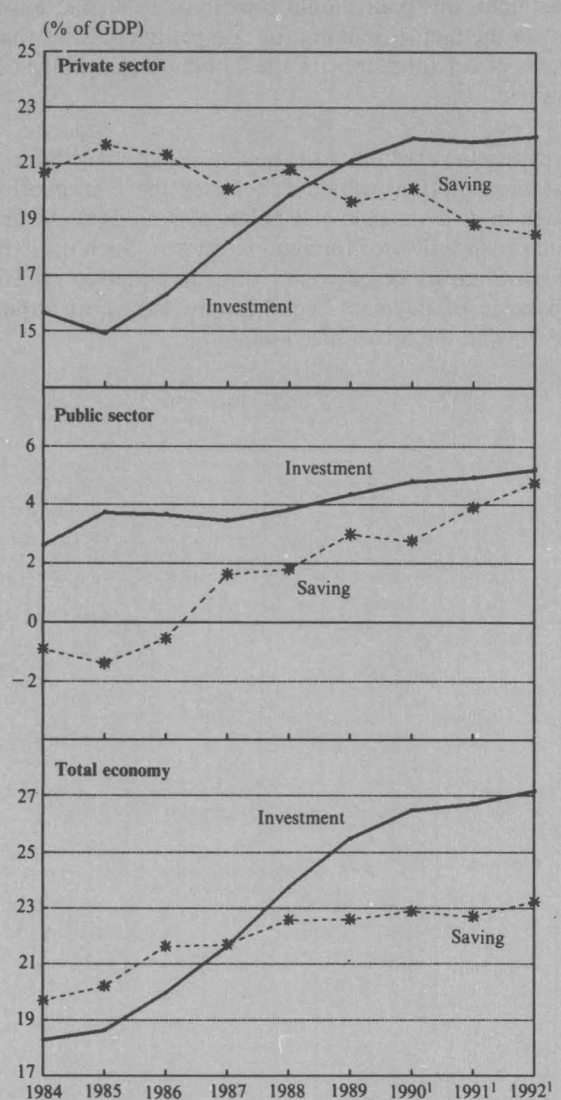
It is essential to increase the competitiveness of the productive system by moderating costs, introducing technological innovation, modernizing management and adapting the size of firms. The policy of deregulating the sectors which are still protected, and the increase in competition, in particular in services (distribution, marketing, finance, etc.), should help to increase market transparency and efficiency.

The labour market still has to contend with problems of labour mobility (spatial and sectoral), and the relatively high costs of redundancy and the fact that instruction (in vocational training in particular) does not match the demand of enterprises. These rigidities partly explain the high unemployment rate. They are also reflected in wage formation mechanisms. The high proportion of temporary jobs created in recent years could point to greater fragility in the Spanish economy. The wish for more stability in this area should not, however, result in the appearance of new rigidities on the labour market.

On the capital markets, the recent reduction in the compulsory reserve ratio for the banking system should permit an

improvement in the mechanisms by which interest rates are transmitted. Nevertheless, additional efforts will be needed to further improve the flexibility of the financial system and the costs of channelling savings into productive investment are to be brought down even more. The Spanish economy needs a high rate of investment in equipment and in infrastructure. This implies an increase in the private sector's saving ratio as well as an additional effort by the public sector in this same area.

GRAPH 2: **Spain: Saving and investment**



¹ Commission forecasts (November 1990).

The general government deficit has fallen in recent years as a result of the large reduction in the central government deficit. It should be stressed that this reduction is due to increases in revenue generally higher than forecast, rather than to the more recommendable course of cutting expenditure. Emphasis should also be laid on controlling the regional and local authority deficit, which increased considerably in 1989 to stand at 0,7 % of GDP (2,7 % for general government).

Table 3

Spain: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change) (ALP)	14,6	13,0	11,3	8,7	8,6	8,6
Short-term interest rate	15,7	13,0	15,0	15,2	15,0	14,5
Long-term interest rate	15,6	12,0	13,8	14,8	15,0	14,5
Competitiveness (1980 = 100)	78,1	83,2	96,5	105,5	108,7	110,8
Budget balance (% of GDP)	−5,8	−4,2	−2,7	−3,0	−1,8	−1,1
Gross public debt (% of GDP)	42,2	47,2	45,2	44,7	42,6	40,6
Nominal wages per head (% change)	11,3	7,2	5,8	8,2	7,4	6,6
Real wages per head (% change)	0,7	0,8	−0,8	1,3	0,7	1,0
Productivity (% change)	3,4	2,0	0,7	0,8	1,0	1,4
Real unit labour cost (% change)	−2,5	−2,2	−1,8	0,0	−0,4	−0,9

For definitions, see Table 3 for Belgium, p. 36.

A tight budgetary policy and a 'competitiveness pact' are necessary to respond to the challenges of 1992 and EMU

In response to the challenges of the internal market and EMU, Spain will have to boost its competitiveness, increase domestic saving and remain attractive to foreign capital.

The conclusion of a 'pact' between employers and unions with the aim of increasing competitiveness, reducing inflation and continuing the process of job creation, is more necessary than ever. The uncertainties which exist about prospects for oil prices should not lead to any wavering from

the objective for the Spanish economy of an accelerated convergence of inflation towards the average of the countries in the narrow band of the exchange-rate mechanism of the EMS (about 3,9 % in 1990). This will only be possible, however, through making an effort to moderate income trends.

In the absence of an effective policy for moderating incomes, the peseta's entry in June 1989 into the EMS exchange-rate mechanism (moving within a wide band) and the constraints which this has imposed on monetary policy mean that budgetary policy has to bear the brunt of the adjustment. Nevertheless, it is experiencing difficulties in coping with this new situation.

Monetary policy had to pursue a twin objective: internal demand restraint in conditions of exchange-rate stability. High interest rates, combined with confidence in the Spanish economy and market perception that a depreciation within the ERM is unlikely, have brought about large capital inflows strengthening the peseta. Room for manoeuvre has been limited in so far as the peseta has remained at a high level, even though monetary policy has had to rely on upper limits on domestic credit and on partial restrictions on the freedom of capital movements with other countries, which will no longer be sustainable in the short term. This situation has been reinforced each time that measures to liberalize exchange controls have been adopted. Furthermore, the effect of the major process of innovation throughout the Spanish financial system has been that recourse to monetary policy instruments is becoming less effective.

In the wake of the Gulf crisis, an economic adjustment plan has been announced with a more restrictive budgetary policy in 1991. Despite the significant progress made in controlling public expenditure and the Treasury's direct access to the Bank of Spain, further efforts are necessary in these areas. The proposed tax reform should encourage saving and prepare the ground more thoroughly for tax harmonization in the Community context. Going beyond a conjunctural adjustment, this plan should contribute to a solid improvement in the factors making for competitiveness, so that the process of catching up with the Community average can be sustained.

Increasing the credibility of the anti-inflationary policy and creating conditions which will foster the continuation of growth in a favourable and balanced situation will help to maintain an inflow of foreign investment. Such investments will continue to be necessary both in order to contribute to balance of payments equilibrium and as an input for modernizing the Spanish economy.

France

Decelerating growth mainly due to a less favourable external environment

For some years, France has been experiencing a healthy, non-inflationary strong growth performance. While GDP grew by more than 3,5 % a year in 1988 and 1989, inflation rates have stabilized at around 3 % since 1986. A stability-oriented policy, structural reforms towards a market framework and external factors contributed to these satisfactory achievements. Although the main lines of economic policy have not changed in 1990, a less favourable external environment is contributing to a deceleration of the GDP growth rate to 2,5 % in 1990 and 1991 as well as to an upturn in inflation. For 1992 it is expected that both GDP growth and inflation will come closer to the medium-term underlying trend of about 3 %. Four external factors account for the negative growth effect in 1990 and 1991: slowing external demand, the rise in oil prices, the real appreciation of the French franc *vis-à-vis* non-EMS currencies and higher real interest rates. Therefore, whereas in 1988 and 1989 growth was led by exports, in 1990 it is led by domestic demand, notwithstanding a marked deceleration in investment growth.

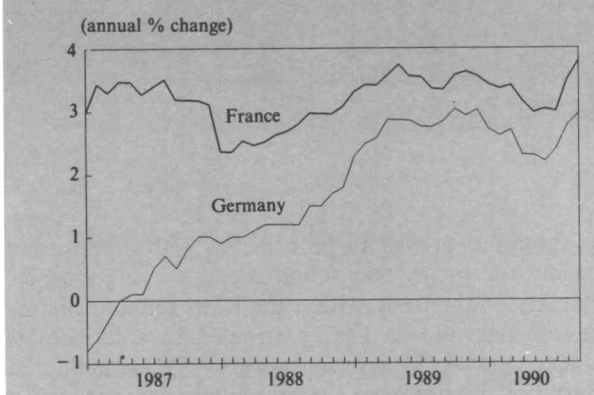
Table 1

France: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	1,3	2,9	3,6	2,5	2,5	2,8
Total domestic demand (% change)	0,7	3,9	3,1	2,9	2,6	3,1
Employment (% change)	−0,5	0,4	1,2	1,0	0,8	0,8
Unemployment rate (%)	9,4	10,2	9,7	9,2	9,0	8,8
Inflation (%)	7,7	2,8	3,3	3,4	3,6	3,0
Balance of current account (% of GDP)	−0,4	−0	−0,2	−0,3	−0,4	−0,4

Despite relatively high output growth, the unemployment rate has not declined significantly and remains above the Community average. Both a growing labour force and a relatively high increase in labour productivity prevented unemployment from declining more. For some years the slight, but persistent, deficit in the current account balance was the counterpart of strong private investment, while the favourable development of unit labour costs contributed to improve price competitiveness compared with Community partner countries. However, this picture changed somewhat in the more recent period. First, strong wage increases, coupled with a marked decrease in productivity growth in 1990, pushed up unit labour costs in 1989 and 1990. Second, a relatively buoyant internal demand in 1990 has added to a deterioration in the French external accounts. So a more moderate growth of wages and of internal demand will be required to prevent a deterioration of French competitiveness and the current account deficit. Nevertheless, the French economy has to strengthen its export capacities by further improving its adaptability and flexibility with regard to external markets.

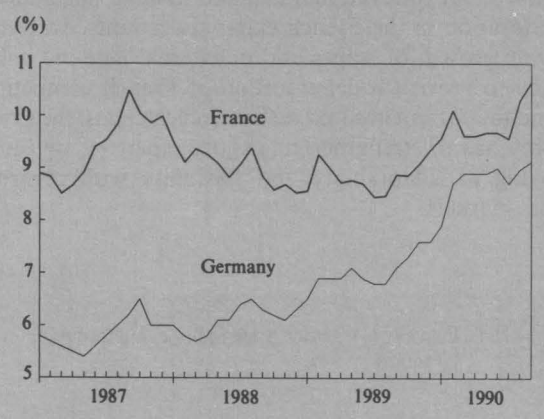
GRAPH 1: **France: Consumer price index compared with Germany**



A strong currency as an important discipline device

The development of the French economy towards more stability and less vulnerability to external or internal shocks is due not least to the changing role of the French franc. The determination of the authorities to withstand any attack

GRAPH 2: **France: Nominal long-term interest rates compared with Germany**



on the franc has proved to be coherent with a consistent macroeconomic policy and sound economic performance. The stability of the franc within the EMS reduced the exchange-rate risk and so has contributed to a favourable investment climate. Moreover, the growing credibility of monetary policy reinforced the low inflation expectations, leading economic agents to look closer at the behaviour of international competitors. Indeed, the interest rate differential between the French franc and the Deutschmark has continuously narrowed during the last few years and has reached a historically low differential of about 100 basis points. Furthermore, the French authorities independently reduced their short-term interest rates three times this year, without any negative reaction from financial markets. However, further interest rate reductions will depend upon a continuation of the stability-oriented policy and a favourable external environment. Nevertheless, inflationary pressures are creeping up, at a time when some uncertainty exists concerning the eventual feeding of oil price increases into new inflationary effects. Moreover, French domestic demand is slowing down less markedly than that of the main trading partners, which contributes to widening the current account deficit.

A stable currency is a requirement for further steps towards EMU. Behind the credibility achieved by the French authorities lies a coherent programme of macroeconomic stabilization and microeconomic pro-market reforms. At the macro level, a stability-oriented monetary policy has been coupled with a budgetary policy aimed at stabilizing the public debt/GDP ratio by continuously reducing budget deficits. The moderate budget deficit is below 2 % of GDP, and the primary balance already exhibits a surplus, which is necessary to stabilize the public debt/GDP ratio. The increase of the oil price and the signs of a slowing down of economic growth suggest that fiscal policy should continue to maintain its medium-term consolidation path. A reduction of the tax burden on the enterprise sector would mitigate the inflationary impact of the oil price and safeguard the favourable financial position of the business sector. Compensating cuts could then be taken on the expenditure side. The draft Financial Law for 1991 is consisent with these requirements.

Table 2

France: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth M3 (% change)	8,9	7,2	8,0	4,5	6,0	5,5
Short-term interest rate	12,9	8,6	9,4	10,4	10,5	10,5
Long-term interest rate	13,9	9,6	8,8	10,0	10,5	9,7
Competitiveness (1980 = 100)	90,7	94,2	89,3	93,6	91,7	90,5
Budget balance (% of GDP)	−2,9	−2,1	−1,5	−1,2	−1,0	−0,8
Gross public debt (% of GDP)	31,5	35,0	36,0	36,1	36,1	36,0
Nominal wages per head (% change)	8,4	4,1	4,8	5,4	4,7	4,5
Real wages per head (% change)	0,7	1,3	1,5	2,0	1,1	1,5

For definitions, see Table 3 for Belgium, p. 36.

Stronger investment requires wage moderation

There are some worrying factors which began to show up even before the rise in oil prices. Most importantly, investment growth is decelerating although France has not yet achieved a sufficient level of full employment production capacity. Both for improving its external competitiveness and for absorbing the still too high unemployment, sustained strong investment is required. This is especially true as

capacity utilization rates are at historically high levels, so preventing further GDP growth through additional utilization of existing equipment. The main factors explaining the lower investment growth are: an increased uncertainty about the global economic environment; a pro-labour shift in the income distribution of productivity gains; a less favourable financial situation of the business sector, also partly due to the increase in debt charges, stemming from low self-financing coupled with high real interest rates on increased borrowing for investment. Therefore, wage moderation will be indispensable not only for restraining inflation but also for allowing a strong flow of extensive job-creating investment. Tight budgetary and monetary policies should keep inflation and inflationary expectations under control and prevent further rises in long-term interest rates at a time of increased excess demand for funds in the world economy.

Important reforms have been undertaken at the microeconomic level, but there is still scope for further action

Since 1983, the French authorities have introduced a series of structural reforms to cope with severe microeconomic rigidities and to comply with the rules of the internal market programme. These reforms have touched almost all sectors of the economy: the labour market has become more flexible through the abandoning of wage indexation, the relaxation of hiring, firing and working-time regulations, and a reduction of employers' social security contributions; goods and services markets have moved towards market behaviour through the elimination of controls on prices; the financial markets have been deregulated inducing a swift growth of new business finance instruments, capital movements have been liberalized, and quantitative credit controls and subsidized lending have been replaced by market mechanisms; the tax system has been simplified and some taxes have been reduced: the top VAT rate has come down in two steps from 33,3 % to 28 % and then to 25 %, corporate tax rates have been reduced in several steps from 50 % in 1986 to 42 % for distributed profits and 37 % for retained earnings, and a substantial alleviation of savings taxation took place last year.

In 1990, some new measures were taken: foreign direct investment was completely liberalized for the EC countries and authorization procedures were simplified for other countries; a programme of modernizing the public administration over the next seven years was launched in agreement with the trade unions; mechanisms for evaluating the effects of public policies and for reinforcing financial controls were implemented; new reductions in the top VAT rate (to 22 %) took place in September and the corporate tax rate on non-distributed earnings is planned to be pushed down (to 34 %) in the draft Financial Law for 1991.

Despite the importance of these reforms, there are still some major rigidities and inefficiencies in the French economy. The most important concerns the labour market and shows up in a persistently high unemployment rate, despite the strong economic growth of recent years. Because the level of unemployment is particularly high among low-skilled workers and young people, in France the insider-outsider problem might be reinforced by a minimum wage which is too high. Therefore, concern about low-paid workers should not disregard this point. On the other hand, even after the recent abatements, social security charges paid by companies still represent an important wedge which increases labour costs.

A second inefficiency concerns the tax system. First, direct taxes on income play a tiny role in overall tax revenues. A larger tax base and reduced marginal tax rates would be more in line with other Community countries. Second, local taxes are very complicated to administer and quite different across jurisdictions, and so are a source of distortion. Third, the top VAT rate still needs to be reduced further to meet the needs for fiscal harmonization within the Community.

A third issue worth mentioning concerns competition. Despite the improvements referred to above, there are still many examples of obstacles to the free play of market forces in areas such as public procurement contracts, air transport, motor vehicles, housing, insurance, taxis, legal and notarial services. Liberalization in these sectors is necessary to comply with the 1992 objective and it would reinforce the efficiency and flexibility of the economy.

Table 3

France: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	20,1	21,0	20,8	21,0	21,1	21,4
• % change	−1,0	5,7	5,6	3,8	3,3	4,5
of which:						
Construction (% change)	−1,4	3,4	3,8	3,0	2,1	3,4
Equipment (% change)	−0,6	7,6	6,9	4,5	4,1	5,3
Capital stock (% change)	−0,7	5,7	6,1			

Ireland

Strong growth has continued but some slowdown expected

The Irish economy has enjoyed a promising start to the new decade. The resurgence in activity since the mid-1980s has been maintained, with real GDP in 1990 expanding by more than 4,5 %. This brings the average growth rate in the period 1987-90 to 4,7 %, which compares favourably with the Community average of 3,3 %.

Table 1

Ireland: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,2	2,6	5,9	4,5	2,3	3,7
Total domestic demand (% change)	−0,2	−0,2	6,0	6,4	0,8	4,3
Employment (% change)	−2,0	0,3	0,8	1,6	0,7	0,7
Unemployment rate (%)	16,9	18,0	17,0	16,5	16,5	16,6
Inflation (%)	7,1	3,4	3,9	2,8	3,5	2,4
Balance of current account (% of GDP)	−5,6	0,2	1,6	1,2	0,4	−0,3

Recent economic success can be traced to the combination of a favourable external environment and improvements in nominal conditions brought about by a reinforcement of the macroeconomic policy-mix in the mid-1980s. In response to difficulties presented by persistent disequilibria in the public finances, the government introduced a combination of a tighter fiscal policy, a monetary policy geared to exchange-rate stability and wage moderation based on social consensus. This policy-mix, helped by a positive and almost immediate credibility effect, sharply improved the climate for investment and growth. The official commitment to the control of inflation was underlined and interest-rate differentials relative to other important currencies narrowed significantly. The positive trend in these nominal variables combined with moderate wage developments boosted confidence in the medium-term prospects for the economy. Growth accelerated, leading to some real economic convergence through growth higher than the Community average.

Over the period of economic recovery, the impetus to growth has shifted from external to internal demand. This shift has not significantly affected aggregate performance in terms of total output and external balance but has resulted in sectoral changes within the economy. After a protracted decline, rising profitability has promoted investment in domestically-based production and construction. As these sectors are labour-intensive relative to the financially stronger foreign-based sectors, there has been a positive employment effect. Job creation has equally benefited from increased demand for services, deriving from a recovery in private consumer demand. Employment in 1989 and 1990 is estimated to have risen very sharply.

Table 2

Ireland: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	21,1	17,2	18,1	19,0	19,9	20,6
• % change	−3,4	−3,4	12,0	10,2	6,5	6,7
of which:						
Construction (% change)	−8,0	−4,0	9,8	10,6	6,7	6,8
Equipment (% change)	−4,7	2,3	14,1	9,8	6,3	6,5

The most notable feature of Ireland's economic adjustment has been an impressive consolidation of the public finances. The pace of reduction in net borrowing by government has eased somewhat this year compared to the major advances in the period 1987-89, but the dynamics of budgetary adjustment remain strong. This is reflected in a continuing steep decline in the national debt/GDP ratio. The medium-term target of lowering the level of debt to 100 % of GNP (about 90 % of GDP) by 1993 from a peak of 131,5 % of GNP (118,5 % of GDP) in 1987 is attainable, although a continued tight control on public expenditure is essential.

Despite improvements in the last two decades, Ireland retains high energy and oil dependence. The currently favourable economic performance in terms of growth, inflation and external balance should facilitate the absorption of the initial oil price rises without major difficulty, but the high dependence on exports leaves growth in the economy vulnerable to a subsequent slowdown in world demand. While the Irish economy is expected to grow more slowly in the next two years, performance will remain above the Community average.

Table 3

Ireland: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	7,0	5,3	5,0	8,0	8,0	7,5
Short-term interest rate	13,1	10,5	9,8	11,6	11,3	10,5
Long-term interest rate	13,7	10,6	9,0	10,2	10,4	10,2
Competitiveness (1980 = 100)	89,0	82,7	67,3	65,8	63,1	61,7
Budget deficit (% GDP)	−11,0	−8,0	−3,5	−3,3	−3,5	−3,4
Gross public debt (% GDP)	101,5	116,5	104,7	101,4	99,4	96,6
Nominal wages (% change)	10,4	4,4	5,7	4,3	5,4	4,1
Real wages per head (% change)	3,1	1,0	1,7	1,5	1,8	1,7

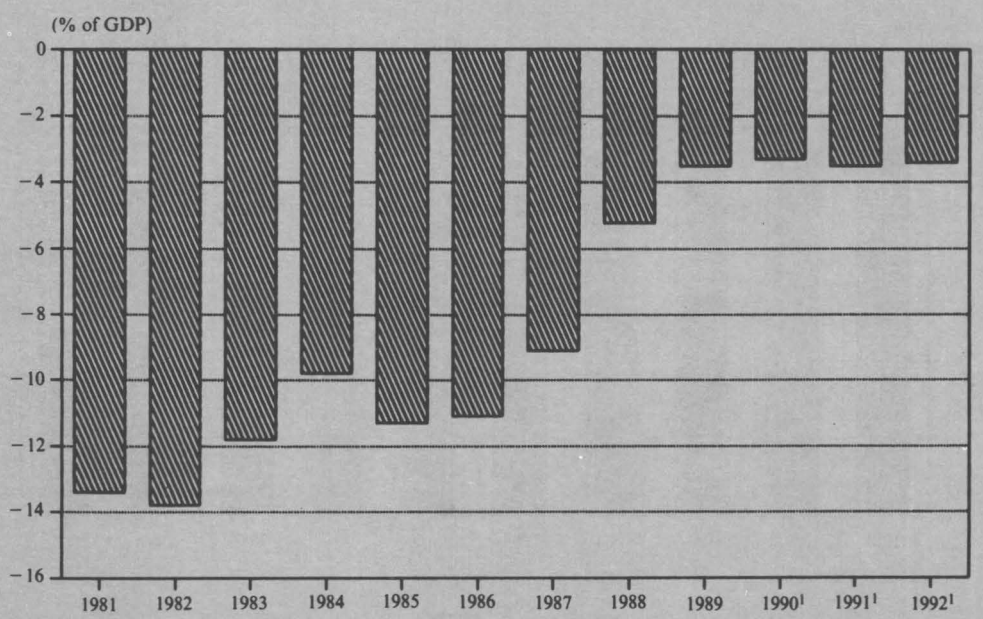
For definitions, see Table 3 for Belgium, p. 36.

Public finances and labour market still dominating domestic policy debate

With the disequilibria in the public finances now greatly reduced, budgetary policy is increasingly confronted by competing economic demands. On the macroeconomic level, there is the need to maintain the present momentum of consolidation in anticipation of economic and monetary union. On the microeconomic level, however, there is also a pressing need to improve the structure of the public finances, particularly in the area of taxation. There have been some improvements in the tax structure since 1987, most notably a reduction in personal income tax rates. However, a more comprehensive tax reform may be advisable if further reductions in income taxation, combined with lower indirect tax rates as a result of harmonization in the Community, are to be achieved within the constraints of the medium-term fiscal strategy.

Unlike the public finances, there has been only limited improvement in the labour market disequilibrium, although the exceptionally strong employment growth in 1989 is

GRAPH 1: **Ireland: Budgetary consolidation — Net borrowing by government**



1988 amnesty receipts excluded.

[1] Commission forecasts (November 1990).

encouraging. The root of the problem lies in the relatively sharp decline in the employment content of growth in the economy throughout most of the 1980s. Among the policy options available to the authorities to further promote the employment content of growth are:

(i) continued wage moderation based on social consensus to protect profitability levels and encourage higher levels of investment and labour demand;

(ii) a more neutral treatment of production factors within industrial and fiscal policy;

(iii) improved flexibility in the labour market through the encouragement of changes in working patterns where appropriate;

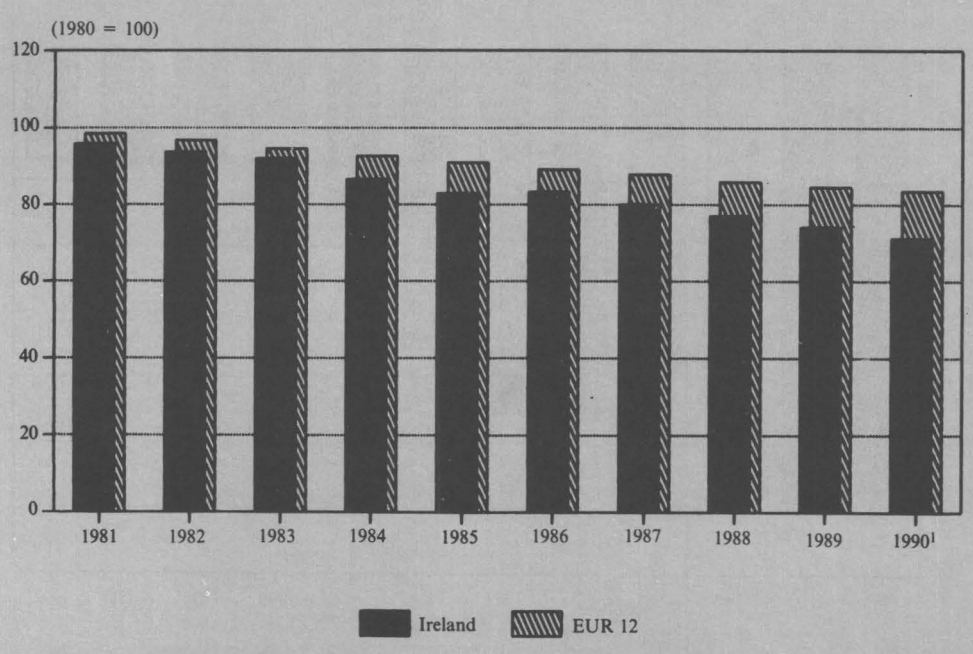
(iv) a more targeted approach to the provision of industrial training, with increased private sector participation in the formulation and financing of training initiatives.

Nominal adjustment for EMU substantially achieved but 'catching-up' process needs to be reinforced

The future of the Irish economy is increasingly shaped by moves towards economic and monetary union. Given the extent of the nominal adjustment already achieved, there is little to fear from monetary union. Inflation is below the Community average; as the budgetary situation continues to improve and the uncertainties relating to sterling are removed, interest-rate differentials are likely to narrow even further. Completion of the internal market presents a greater challenge, however, imposing even higher demands on the productivity and competitiveness performance of the economy.

The current macroeconomic policy-mix should not present difficulties in the context of EMU. Fiscal policy is likely to

GRAPH 2: **Ireland: Employment content of growth (employment per unit of GDP)**



[1] Commission forecasts (November 1990).

remain tight to reduce the 'debt vulnerability' of the economy and to provide sufficient margin to accommodate the operation of stabilization mechanisms in the event of an external shock. Adherence to exchange-rate stability within the ERM is an important preparation for the second and third stages of monetary union. Finally, continued wage moderation yielding demonstrable gains in output, employment and real income should help to promote a new discipline in industrial relations; this will be essential to protect employment when the nominal adjustment mechanism has been abandoned within EMU.

The success of the current macroeconomic policy-mix has facilitated a resumption of the catching-up process. However, if the present trend is to be maintained and accelerated, the non-inflationary growth capacity of the economy within the present policy-mix will need to be expanded. This can be achieved both by an increase in efficient infrastructural investment (supported by the Community structural Funds) and by appropriate supply-side initiatives. In Ireland's case, a comprehensive reform of the tax system (comprising direct and indirect sources), labour market reform and financial deregulation would be top of the supply-side agenda.

Italy

Slower growth and inflationary pressures threaten the positive achievements of the 1980s

After expanding more rapidly than the Community average in the 1983-88 period, the Italian economy has recently slowed a little. Real GDP growth was 3,2 % in 1989 and is expected to be around 2,5 % in 1990 and slightly less than that in 1991.

The increase in domestic demand, in spite of the slowdown experienced from the second half of 1989, will continue to exceed the increase in output. The worsening in the terms of trade due to the sharp increase in oil prices starting from August 1990 means that Italy can no longer count on favourable external price developments to prevent a further deterioration of the current account.

The growth of household consumption is likely to be sustained by the recovery in the labour share of total income, as the substantial rises already awarded in the public sector cannot but influence the outcome of the triennial industrial wage round starting in 1990. As the sudden rise in import prices feeds through to consumer prices, however, households' disposable income will be dented by inflation and consumer sentiment is likely to worsen, thus inducing a slowdown in consumption.

Table 1

Italy: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,3	3,2	3,2	2,6	2,3	2,7
Total domestic demand (% change)	2,3	4,1	3,3	2,9	2,7	3,2
Employment (% change)	0,6	0,7	0,2	0,9	0,4	0,5
Unemployment rate (%)	9,3	10,4	11,0	10,2	10,3	10,2
Inflation (%)	12,0	5,2	6,3	6,1	6,3	5,4
Balance of current account (% of GDP)	−0,4	−0,2	−1,3	−1,3	−1,7	−1,7

Investment has been the most dynamic component of domestic demand during the recovery since 1983. With capacity utilization in 1989 reaching the highest level of the decade, the need for a widening of the productive base was increasingly felt by industrial entrepreneurs, even if the modernization of the productive apparatus, bearing also in mind the opportunities and the risks presented by the completion of the single European market, continued to provide the major incentive for capital accumulation. These two factors contributed to explaining the resilience of the expansion in investment, the longest since the post-war reconstruction boom.

After the intense restructuring of the first part of the 1980s, which involved a dramatic turnaround in the economic and financial situation of medium-sized and large enterprises, industrial employment began to recover in 1988. A small rise is expected in 1990 followed by overall stability in 1991-92. This, in conjunction with the creation of jobs in the service sector and more limited growth of the labour force, should result in a small reduction in the unemployment rate.

Since 1988, the reduction in the inflation differential *vis-à-vis* the other ERM countries has stalled. Further progress has been prevented by the rise in unit labour costs and also by higher indirect taxes. The same obstacles stand in the way of greater convergence in inflation during the 1990-92 period. Moreover, these difficulties are likely to be compounded by the inflationary impulse from the rise in oil prices.

The completion of the industrial restructuring and the slowdown in production activity render unlikely a repeat of the rapid labour productivity growth seen in manufacturing in recent years. This means that the narrowing of the inflation differential requires restraint upon the growth of nominal incomes together with a recovery in efficiency and productivity in other sectors of the economy. In the 'non-tradable' sectors, the virtual absence of foreign competition and of the ensuing discipline exerted through the strong currency option has allowed costs to move much farther out of line with Italy's partners than is the case with the manufacturing sector.

There is evidence that more recently the Italian exporting sector has had to sacrifice profit margins in order to maintain price competitiveness in the face of rising unit labour costs and a stable or even appreciating nominal exchange-rate. This situation cannot last very long without threatening that very expansion of the productive base which was the most desirable outcome of the long recovery.

GRAPH 1: **Italy: Inflation differential *vis-à-vis* ERM countries**

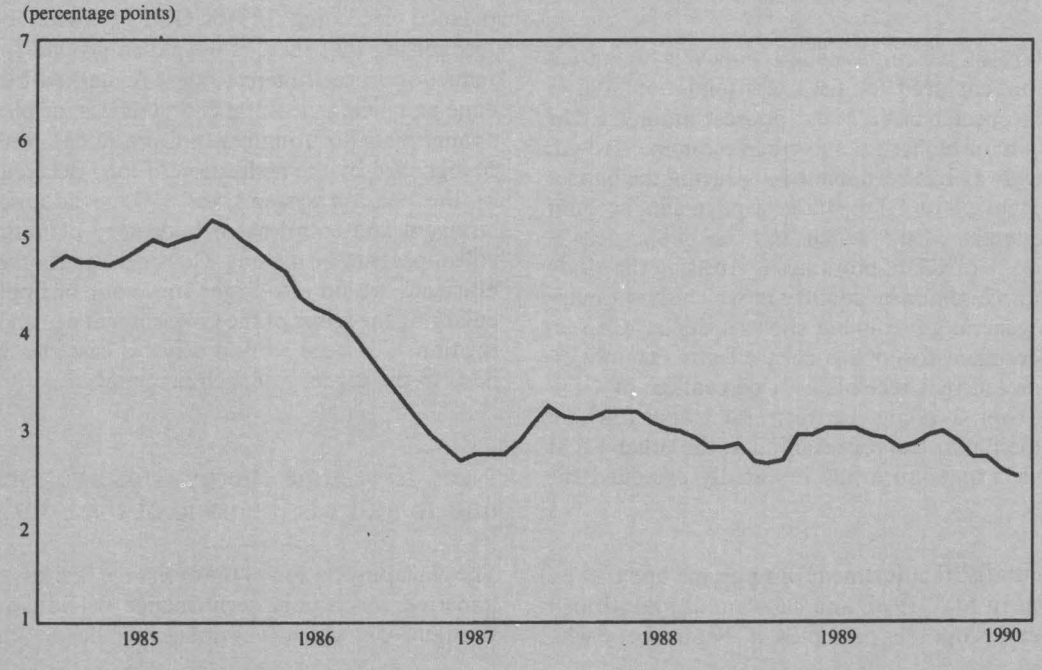


Table 2

Italy: Public finance and monetary indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change) (M2)	11,8	8,7	9,5	8,5	9,0	9,0
Short-term interest rate	16,9	11,8	12,7	12,0	11,8	11,5
Long-term interest rate	15,8	11,7	12,9	13,4	13,4	13,0
General government budget balance (% of GDP)	−11,6	−11,2	−10,2	−10,0	−9,4	−9,2
State-sector borrowing requirement (% of GDP)	13,6	11,8	11,3	10,7	10,0	9,7
Gross public debt (% of GDP)	77,7	92,5	98,9	100,9	102,9	104,8

Narrow-band obligation and capital movement liberalization underline the necessity of fiscal consolidation

The strength of the lira during the first three-quarters of 1989 reflected the determination on the part of the monetary authorities to keep a lid on the rate of money creation and to check inflationary pressures (reinforced by the rise in the prices of imported inputs) in the face of persisting large fiscal imbalances. The entry into the narrow band, successfully implemented at the beginning of 1990, and the lifting of the remaining exchange rate controls, which followed five months later, were accompanied by a strengthening of the lira and a further reduction of the interest-rate differentials *vis-à-vis* the other ERM currencies. The adjustment of the exchange rate to a more comfortable level allows the monetary authorities to exploit the limited room for manoeuvre since the complete abolition of exchange controls. The fact

remains none the less that monetary policy is becoming less and less usable as a tool for short-term stabilization of the national economy as the system enters Stage I of EMU.

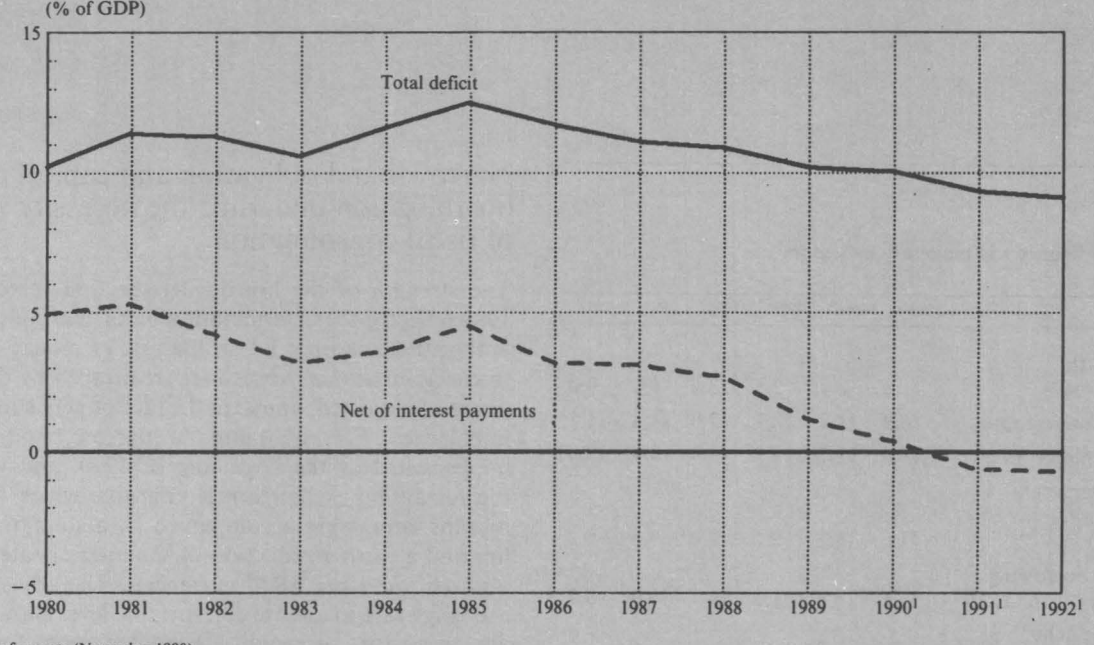
The new context in which monetary policy is operating underlines the urgent need for fiscal consolidation. Italy's record in this respect has been the poorest among ERM countries. In spite of higher than average economic growth only modest headway has been made in reducing the budget deficit as a percentage of GDP. Interest payments account for about nine-tenths of the deficit and the public debt is now close to 100 % of GDP, but it needs stressing that Italy is the only major Community country in which the primary balance of the general government shows a deficit. Corrective action undertaken so far has been effective mainly on the revenue side (current receipts as a percentage of GDP have risen by over 3 points between 1985 and 1989, in contrast with the flatter trend prevailing in the other ERM countries), while expenditure has repeatedly exceeded the planned targets.

The medium-term fiscal adjustment programme updated by the Government in May 1990, and substantially confirmed by the budgetary proposals presented in September 1990, while retaining the objective of its previous versions, namely, the stabilization of the public debt/GDP ratio by 1992, envisaged a more substantial adjustment in the primary balance (exceeding 3 % of GDP) between 1990 and 1993, recognizing that there is not much ground for relying on a reduction in real interest-rates. A marked bias toward revenue-enhancing measures characterizes the plan, while a firm commitment to bring expenditure under control, as would be signalled by the realization of long-delayed reforms (e.g., of the pension system) and by the adoption of a more stringent and coordinated budgetary planning mechanism, still appears to be missing. Considerations of microeconomic efficiency would also argue in favour of implementing and enlarging the scope of the Government's proposals for privatization. The need to find ways to ease the interest burden adds to the urgency of such proposals.

Need to resume energy conservation efforts and to address the issue of the South

The real appreciation of the exchange rate has not apparently impaired the export performance of Italian industry, the strength of which continues to lie in the traditional

GRAPH 2: **Italy: General government deficit**



[1] Commission forecasts (November 1990).

Table 3

Italy: Investment and competitiveness

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	21,7	22,0	22,9	23,0	23,3	23,6
• % change	2,9	6,2	5,1	3,0	3,3	4,1
of which:						
Equipment (% change)	7,1	12,1	6,3	3,4	4,0	5,3
Construction (% change)	−0,7	0,9	3,6	2,5	2,5	2,5
Nominal wages per head (% change)	10,9	8,8	9,2	8,9	9,0	7,7
Real wages per head (% change)	0,6	3,5	3,0	2,6	2,5	2,2
Competitiveness (1980 = 100)	99,9	103,0	110,2	116,3	119,9	122,7

For definitions, see Table 3 for Belgium, p. 36.

(labour-intensive) sectors and in the differentiated products sector. After the 1986 fall in oil prices, the trade deficit (on a fob/fob basis) was almost eliminated. The subsequent deterioration of the current account was attributable to the worsening of the balance on invisibles: the tourism surplus, in particular, has been steadily decreasing over the last five years as structural factors, such as the higher propensity to travel abroad on the part of Italian residents, are compounded by an ever-diminishing price competitiveness.

The rise in oil prices brings again to the fore the issue of Italy's dependence on imported energy. More than 80 % of energy use in Italy is imported, that is, some 35 percentage points above the Community average. After the collapse of oil prices in the mid-1980s the value of net imports of energy declined to around 1,5 % of GDP, a level close to that preceding the first oil price shock. Expectations of stable energy prices led to a slackening of energy conservation efforts which risks translating into a constraint on the growth of the economy given the limits placed upon the expansion of domestic energy production.

Comparisons between Italy as a whole and the Community can be misleading if they neglect the fact that the economic divide between the peripheral areas and the solid core of the Community runs across Italy itself, separating the advanced and affluent North/Centre from the backward and relatively poor South.

The disequilibria which beset the Italian economy can in fact be seen as a reflection of its regional disequilibria, and of the policy responses which these have elicited. The current size of the resource transfer, the imperatives of fiscal consolidation and the disappointing results in terms of economic catching-up between the two areas continue to suggest a radical change in the thrust of economic policy, from income maintenance to output and employment growth. The latter will probably have to include some degree of restoration of regional wage differentials, paying due attention to the wage leadership role played by the public sector in the South. The promotion of a more efficient public administration is a matter of particular urgency, too, not exclusively in the context of the question of the South. The well-known Italian inadequacies in this field amount more and more to a competitive disadvantage as the approaching of the 1992 deadline highlights the systemic dimension of economic competition.

Luxembourg

Economic performance is satisfactory

In 1989 and 1990, the Luxembourg economy has achieved strong growth, averaging some 4,5 % in real terms. Domestic demand and exports have been vigorous. Only the steel industry has shown a disappointing development.

For 1991 it is expected that growth will slow down slightly, because of a weaker rise in private sector investment. However, private consumption is continuing to expand vigorously, as a result of the increase in disposable income which is due to the substantial cut in taxation at the beginning of the year.

The level of employment has risen, especially in the services sector, leading to increased reliance on frontier workers and immigration and despite the reduction in the numbers employed in the steel industry. On average, industrial productivity has risen appreciably, in line with a very high level of capacity utilization.

The inflation rate rose back to an average of 3,5 % in 1989-90, having been pushed up both by import prices and domestic factors. Since mid-1990, however, price rises have accelerated more sharply as a result of the increase in oil prices.

Table 1

Luxembourg: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (%)	4,0	3,9	6,1	3,2	2,9	3,3
Total domestic demand (% change)	0,6	4,1	5,3	5,2	4,5	3,9
Employment (% change)	0,5	2,8	3,7	2,4	1,8	1,5
Unemployment rate (%)	3,2	2,4	1,8	1,7	1,6	1,6
Inflation (%)	6,6	1,8	4,0	3,5	4,0	3,5
Balance of current account (% of GDP)	40,6	35,1	31,5	27,3	24,1	22,5

Table 2

Luxembourg: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	20,0	24,0	25,6	27,5	28,3	28,7
• % change	−5,8	12,3	11,5	10,0	5,6	5,2
of which:						
Equipment (% change)	−7,0	12,3	14,9	12,0	6,3	5,8
Construction (% change)	−4,4	6,8	8,8	8,2	5,1	4,6

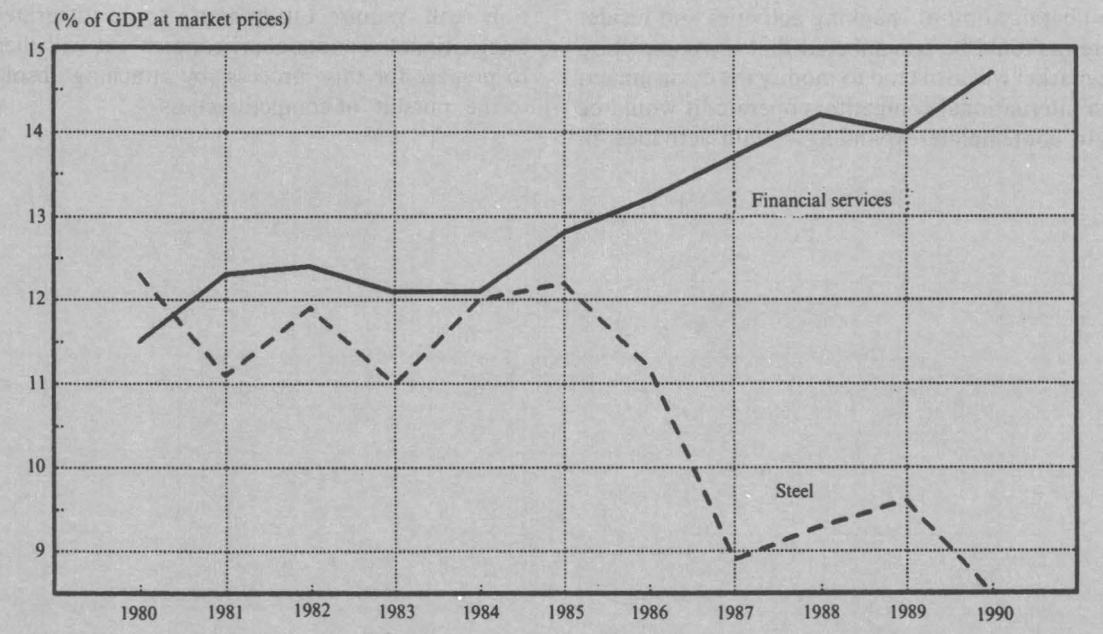
The policy of diversifying the economy needs to be continued

The proportion of services, particularly that of financial services, in gross domestic product, is rising steadily. This is a sector which is heavily dependent on international economic conditions and on the legal and regulatory framework, but also on the effects of the liberalization of capital movements within the Community. Diversification of activities is essential, if the Luxembourg economy is not to become too heavily dependent on trends in this sector.

The policy of diversification could in the future encourage the establishment of specialist high-technology enterprises which are not labour intensive. In view of the imbalance which exists on the labour market, and the fact that such firms create few jobs, this should not lead to much additional recruitment, which is difficult to achieve locally. Their competitiveness will depend on the level of their technology, and on being sufficiently well-organized and flexible to compensate for the absence of economies of scale. The availability of a highly skilled labour force and moderate wage costs would also ensure competitiveness. This will require a vocational training drive and in particular the implementation of an aid programme for young people engaged, at all levels, in studies abroad. If the scarcity on the labour market is reduced, the upward pressure on wages should be diminished. For there is a danger that the increases in labour costs will work through to the prices of private consumption and will, as a result of wage-indexation, affect the competitiveness of companies. The scarcity of labour also calls for increasing labour market flexibility, by relaxing certain regulations, in particular concerning temporary work.

The policies which have been pursued and the expansion of activity have produced budget surpluses (before allocation to the investment funds) which permit reforms in the areas of taxation and social security. The reduction of personal

GRAPH 1: **Luxembourg: Contribution to output: steel and financial services sectors**



Source: Statec.

Table 3

Luxembourg: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Budget balance (% of GDP)	3,5	2,2	3,3	3,6	1,4	1,1
Gross public debt (% of GDP)	14,6	12,0	8,8	7,8	6,8	6,0
Nominal wages per head (% change)	5,8	4,0	3,9	6,2	5,3	5,8
Real wages per head (% change)	−0,7	2,2	−0,2	2,6	1,2	2,3

For definitions, see Table 3 for Belgium, p. 36.

income taxes should help to moderate wage claims, while the reduction in taxes on profits, recently decided, could offset a rise in social security contributions which appears inevitable.

Adjustment in the context of Community deadlines

Economic developments in Luxembourg are not significantly different from those in the strongest economies of the Community; the increase in prices departs only moderately from the best performances achieved in the Community. Luxembourg also has specific characteristics of its own, such as a budget surplus and a large current-account surplus.

With the single market in prospect, and because of Luxembourg's importance as a financial centre, regulations have been adapted: changes concern collective investment undertakings, the liberalization of banking activities and insider trading. Here it should be remembered that the completion of the single market will also tend to modify the environment within which international competitors operate. It would be inadvisable to contemplate expanding certain activities, in the financial and audiovisual sectors in particular, on the basis of the exploitation of current tax advantages, which could be eliminated if legislation is harmonized. Harmonization will require Luxembourg to be integrated into the international economic environment: it will therefore have to prepare for this process by attaching absolute priority to the pursuit of competitiveness.

Netherlands

Favourable results for economic activity against a background of low inflation

In the last two years, the objective of economic policy has been to consolidate the favourable results achieved previously. The average real GDP growth rate of about 3 ¾ % in 1989 and 1990 is well above the rates of the preceding years; output in the business sector, excluding energy, has even climbed by over 4,5 %. The more sustained expansion of activity has led to an appreciable rise in employment which rose by 1,6 % per year in 1989-90, while the unemployment rate fell from 8,4 % to 7,4 %.

Table 1

Netherlands: Macroeconomic performance

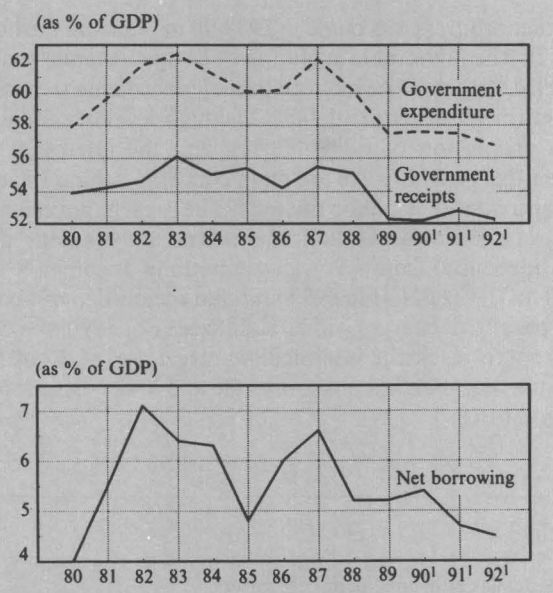
	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	2,4	1,9	4,0	3,4	2,0	2,5
Total domestic demand (% change)	2,1	2,1	4,3	3,9	1,7	2,1
Employment (% change)	−0,2	1,5	1,6	1,7	0,8	1,1
Unemployment (% civilian labour force)	11,7	9,8	8,4	7,4	7,2	6,9
Inflation rate (%)	2,4	0,2	2,1	2,4	2,8	2,5
Balance of current account (% of GDP)	3,8	2,2	3,6	3,3	3,4	3,4

The vigorous growth of the last two years is attributable to the firmness of domestic demand, in particular to investment in plant and machinery and to private consumption. The latter recovered strongly in 1990, reflecting a substantial improvement in real personal disposable income, as a result of the rise in employment but above all of the reduction in direct taxes.

The balance of payments surplus has again increased (to about 3,5 % of GDP): this is due to the increase in the large trade surplus and is despite the deficit on services and factor incomes.

Inflation has remained very low in international terms; nevertheless, 1990 has seen the disappearance of the moderating effect of the cut in the rate of VAT, recorded in 1989.

GRAPH 1: **Netherlands: Fiscal indicators**



¹ Commission forecasts (November 1990).

Some slackening of GDP growth is forecast in 1991. Domestic demand, both fixed investment and consumption, should slow down; exports should lose some momentum after performing well in 1990.

Table 2

Netherlands: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	18,7	20,5	21,7	21,5	21,4	21,4
• % change	4,6	6,0	3,9	2,9	0,8	2,5
of which:						
Equipment (% change)	11,4	6,0	5,5	5,5	3,5	2,6
Construction (% change)	−0,1	5,8	2,6	0,8	−1,6	2,4

The principal medium-term objectives are to reduce the budget deficit and to improve the functioning of the labour market

Further progress was made in 1988-90 in reducing the budget deficit. The favourable evolution of budget revenue has even enabled tax cuts to be made without jeopardizing the original target for reducing the deficit. The high level of public debt as a proportion of GDP (78 %), and the interest burden which this generates are the main concerns behind the effort to consolidate the public finances. The present government's programme envisages that the central government deficit will be reduced from 5,9 % of net national income (NNI) in 1989 to 3¼ % of NNI in 1994 and that the burden of taxation and parafiscal charges will be stabilized. For 1990, the deficit is likely to reach the intermediate target, i.e. 5¼ % of NNI, because of a shortfall in tax revenue and lower-than-forecast expenditure.

Table 3

Netherlands: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	9,7	7,5	14,4	11,5	7,0	5,5
Short-term interest rate	6,0	5,3	7,4	8,7	9,5	9,5
Long-term interest rate	8,2	6,3	7,2	8,9	9,0	9,0
Competitiveness (1980 = 100)	85,9	89,7	86,8	87,1	85,1	83,9
Budget balance (% of GDP)	−5,8	−5,9	−5,2	−5,4	−4,7	−4,5
Gross public debt (% of GDP)	65,9	74,8	77,6	77,8	78,5	78,8
Nominal wages per head (% change)	1,6	1,5	0,5	4,7	4,4	4,2
Real wages per head (% change)	−0,8	1,3	−1,5	2,2	1,5	1,6

For definitions, see Table 3 for Belgium, p. 36.

For 1991, the Government has decided on economy measures to curb the rise in expenditure; in particular it will discontinue the amount compensating for the effects of price rises, and reduce subsidies to the social security funds. The Government must nevertheless face up to the difficulty of evaluating the 1991 increase in wages and social benefits in the public sector, the increase having become less easy to control following re-establishment of the link between public-sector wages and wages in the corporate sector. Moreover, this uncertainty is made even more acute by the possibility that inflation could accelerate as a result of the crisis on the oil market, and this could lead to compensatory wage claims. Nevertheless, since the rise in the world price of crude oil will, in the long run, be accompanied by an adjustment in the selling prices of natural gas, budget revenue from the gas industry will increase as a result. This possibility has been incorporated into the 1991 budget, allowing a forecast reduction in the deficit for 1991 to the level estimated in the multiannual programme (4¾ % of NNI). Alternatively, any additional gas revenue could have been treated as a reserve to be used, if it does materialize, either to reduce the deficit further, or to cut the tax burden.

The continuation of job creation during the next two years should permit a further reduction in the level of unemployment. Improvement is, however, being slowed down by the rise in the participation rate, chiefly for women. The persistence of a high level of unemployment limits the number of contributors to the social security fund, and there is also evidence of a growing number of persons receiving benefits from the invalidity and sickness schemes. Although the number of unemployed is falling, the structure of unemployment is deteriorating. The increasing number of vacancies indicates a growing discrepancy between supply and demand. The rapid increase in the number of persons receiving benefit from the incapacity for work scheme is currently attracting attention not only because of the resultant cost to the budget but also because these persons are not available to the labour market at a time when labour shortages are becoming evident in some sectors. The emphasis is now being placed on vocational training in order to facilitate the re-employment of the unemployed and the disabled; in this context, technical studies should be given priority. Moreover the Government is planning to take measures to slow down the rise in the number of beneficiaries in the invalidity benefit scheme.

Maintenance of the policy of exchange-rate stability and preparation for closer integration in the Community

The central bank has adhered to the objective of keeping the guilder's parity stable *vis-à-vis* the German mark. It has therefore shadowed the Bundesbank's short-term interest rate policy. Because of the rise in liquidity, the central bank in June 1989 introduced a compulsory reserve scheme in order to secure compliance with the limit on domestic credit expansion; this decision was suspended in April 1990, since the fall in money creation meant that the scheme was no longer needed.

The prospects for 1992 will offer new opportunities for development in the financial area. The Dutch rules governing the capital markets have undergone major changes in order to enable the Amsterdam market to improve its position with regard to guilder bond transactions and to become more competitive. The issuing of bonds has been liberalized, while new instruments have been authorized. Although in general activity is at present largely deregulated, defensive rules concerning company acquisitions still seem fairly rigid.

In the preparation for the challenges of the 1990s, the improvement of the financial situation of enterprises is an important element. Since their competitive position is equally dependent on the tax environment and the physical infrastructure, policy in this respect is extremely important. Although the tax treatment of firms is at present no more severe than in other Community countries, there is in neighbouring countries a tendency to reduce taxation which has to be watched and followed. The high rate of taxation and parafiscal charges on households, which limits disposable income, is a factor which could discourage the establishment of new firms. As far as indirect taxes are concerned, the Dutch authorities in January 1989 reduced the higher rate of VAT (from 20 % to 18,5 %), the effect of which was also to support the purchasing power of households. According to the government agreement, it is intended to reduce this rate further by 1994.

The Netherlands authorities state that they are amongst those most concerned by environmental policy. The launching of an ambitious programme for the years ahead, if possible in cooperation with the neighbouring countries, should help to improve conditions in this area, although it will carry with it the risk that the competitive position of firms will deteriorate.

Portugal

Portugal continues to close the gap with the Community in real terms, but inflation accelerates

The strong growth process which began in 1985 has continued during the last two years. Gross fixed capital formation and exports have been the principal driving forces behind this buoyancy. Investment began to expand in 1986, and continues to be supported by political stability, a distinct improvement in expectations caused by the prospect of Portugal's closer integration into the Community, the liberalization and the modernization of the economy and the increase in company profitability. Fixed capital formation has been strongly boosted in the last two years by direct foreign investment and by increasing transfers from the Community.

Table 1

Portugal: Macroeconomic performance

	1983-85	1986-88	1989	1990	1991	1992
GDP growth rate (% change)	0,3	4,4	5,4	4,2	3,2	3,8
Total domestic demand (% change)	−3,8	8,7	4,1	5,0	3,4	4,2
Employment (% change)	−0,9	−0,7	1,8	0,7	0,2	0,3
Unemployment rate (%)	8,5	6,9	5,0	4,4	4,9	5,0
Inflation (%)	24,6	11,3	12,8	13,2	12,6	11,0
Balance of current account (% of GDP)	−2,8	0,9	−1,2	−1,2	−1,7	−1,9

Substantial progress was made in the field of public finances between 1984 and 1989. During this period the general government deficit fell from 12 % to 4 % of GDP, as a result not only of particularly favourable cyclical factors (domestic and external), but also because the tax system was completely overhauled and an effort was made to moderate the growth of budget expenditure. In addition, from 1985 steps were taken to improve the transparency of public finances, which was becoming essential; in particular, far greater demands were made on the financial markets as a method of financing the public deficit. However the reform of the civil service pay system, the end of windfall gains brought about last year by the shorter payment delays associated with the implementation of the direct taxation reform, and an increase in the interest burden resulted in a marked widening of the general government deficit in 1990.

Table 2

Portugal: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth (% change)	23,5	19,2	10,7	14,0	10,0	7,0
Short-term interest rate	21,5	14,1	12,6	14,0	15,0	16,0
Long-term interest rate	—	14,9	14,9	15,4	15,3	16,0
Competitiveness (1980 = 100)	95,5	97,8	102,5	106,0	111,3	115,6
Budget balance (% of GDP)	−10,4	−6,5	−3,8	−6,0	−5,6	−4,7
Gross public debt (% of GDP)	62,3	71,3	71,5	67,8	64,7	62,2
Nominal wages per head (% change)	21,8	17,6	13,0	16,9	15,6	13,7
Real wages per head (% change)	−2,1	5,7	0,2	3,3	2,7	2,4

For definitions, see Table 3 for Belgium, p. 36.

Since 1988, there has been a break in the process of reducing the differential between the Portuguese inflation rate and the Community average. The sharp expansion of domestic demand recorded in 1987 and 1988 put prices under severe pressure. In addition, the increase in food prices — with a weight of 46 % in the consumer price index — which was attributable to bad weather conditions, has accelerated the general rise. The prices of services have also increased sharply because the wage increases granted in sectors subject to external competition — and in which remarkable improvements in productivity seem to have taken place — have spread throughout the economy.

Economic performance over the next two years will probably suffer the effects of a tighter monetary and fiscal policy stance. As regards fiscal policy, such a stance is already perceptible in the budget for 1991. Nevertheless, the recent increase in petroleum product prices creates uncertainty as to the future evolution of prices and of real growth, since Portugal is the Community country most heavily dependent on energy imports.

Priority of economic policy: the fight against inflation

The central problem of the Portuguese economy is undoubtedly the resurgence of inflation: this is particularly serious in the context of a relatively rapid entry by the escudo into

the EMS, which is the aim of the national authorities. For this reason, all the instruments of economic policy are currently focused on rapidly reducing inflation in the economy.

Fiscal policy was markedly eased in 1990, but should already be tightened in 1991; it should conform to the guidelines of the Quantum programme (framework for Portuguese participation in EMU) which sets out a medium-term fiscal adjustment strategy, with the priority objective of improving nominal convergence and the escudo's future participation in the EMS exchange-rate mechanism. It should be possible to reduce the budget deficit by limiting expenditure and perhaps increasing the tax burden by raising indirect taxes. In the absence of income from privatization, the restriction of expenditure would nevertheless be hampered by the growing burden of interest on the public debt; the reform of the financial system has led to the abandonment of the preferential channels for financing public indebtedness, more of which now has to be financed on market terms.

In the last two years monetary policy has had to cope with massive inflows of capital. In a situation in which the economy is becoming financially integrated with the Community and at an international level, a small and pre-announced depreciation of the escudo (some 3 %) combined with high domestic interest rates has attracted inflows of capital which rendered much less restrictive the orientation of monetary policy. As a consequence, temporary measures restricting capital inflows were imposed in June; capital swap operations by non-residents were suspended for 90 days and companies were required to lodge a non-interest-earning deposit with the central bank in respect of new foreign borrowing. The exchange-rate policy of gradual depreciation at a preannounced rate was also abandoned and the escudo is now moving within a band which is undivulged but it is defined in relation to the currencies of the EMS exchange-rate mechanism.

Incomes policy is also an option which will be considered in order to achieve success in reducing inflation. Employers and unions will have to take account of the long-run costs for the Portuguese economy if prices and nominal wages increase at a rate which is far higher than the Community average. In this situation, the implementation of an active pay policy, based on credible and prudent objectives, but focused on the progressive deceleration of wage increases, could prove essential. The recent wage agreement between some social partners is a significant step in that direction.

Preparing the Portuguese economy for Community deadlines

The process of liberalizing the financial markets, domestically and externally, has been pursued in recent years, and has led to the rapid financial integration of the Portuguese economy internationally and within the Community. The banking sector has gradually become open to wider competition, while new instruments have been developed. Existing institutions, including the stock exchange, have been modernized and the taxation of financial instruments has been simplified and made more transparent. The administrative control of bank interest rates has been abandoned, except for the minimum rate for six-month deposits. In March the compulsory ceilings on credit expansion were scrapped, with the banks undertaking to respect an overall guideline for credit expansion (a 0 % increase for the second half of 1990).

The privatization of the economy also seems to be progressing well and should accelerate in the next few years; this will provide substantial resources (80 % of the income from privatization) to be allocated to reimbursing the public debt and will ease the interest burden on the budget. Combined with the implementation of a restrictive fiscal policy, this process should lead to a gradual but significant reduction in public finance imbalances, which is an important precondition for the escudo's entry into the EMS and Portugal's participation in the development of economic and monetary union.

Table 3

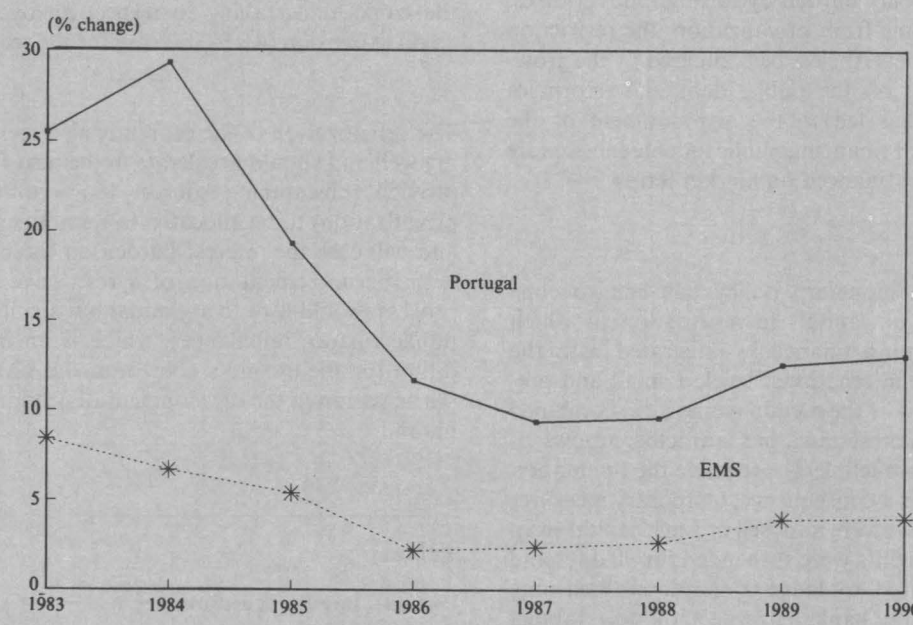
Portugal: Investment performance

	1983-85	1986-88	1989	1990	1991	1992
Gross capital formation						
• % of GDP	24,9	24,4	27,0	27,5	27,8	27,9
• % change	−9,4	13,6	8,3	9,1	6,9	7,1
of which:						
Equipment (% change)	−13,0	18,8	9,0	11,0	8,0	8,5
Construction (% change)	−6,2	9,4	7,5	7,0	4,5	5,5

Investment in infrastructure, supported by the Community's structural Funds, will continue, the particular aim being to improve transport and communications. Efforts are also being concentrated on improving the training of the workforce; despite underemployed pockets of labour, shortages of skilled labour could become evident in the next few years.

With regard to the different industrial sectors, the traditional, labour-intensive industries will continue to benefit from investment flows, in particular from abroad; moreover, specialization is increasingly tending to take place within sectors. Nevertheless, a number of production units are bound to disappear, since they will no longer be competitive when faced with keen competition from third countries. New, technologically more advanced industries should, however, continue to develop. This structural adjustment is associated with the real appreciation of the escudo, which puts pressure on competitiveness and consequently favours the modernization of certain sectors. However a level of real appreciation which could not be sustained over a longer time horizon should be avoided.

GRAPH 1: **Portugal: Consumer price index compared with EMS members**



United Kingdom

Uncertain progress in reducing inflation

Sterling entered the exchange-rate mechanism of the EMS in October 1990, and this was accompanied by a one percentage point reduction in interest rates. This move occurred after the measures undertaken since mid-1988 to restrain extreme overheating of the domestic economy had resulted in a clear slowing of activity and the monetary aggregates. However, concrete progress in the government's main objective, the containment and substantial reduction of inflation, has yet to be realized.

After averaging 6,6 % p.a. in 1987 and 1988, growth of total domestic demand slowed markedly in 1989 to 3,1 % and remained at the same annualized rate in the first half of 1990. The slowing of domestic demand growth has not been a smooth and gradual process.[1]

Increased domestic demand restraint has permitted an improvement in external performance. Growth of imports of goods slowed considerably during 1989, while growth of exports, benefiting from lower pressure on capacity and increased competitiveness from exchange-rate depreciation, showed an equally remarkable improvement over the same period. In the first half of 1990 these trends were not fully sustained, reflecting some recovery in domestic demand. Since then exchange-rate appreciation and high earnings growth have eroded most of the competitiveness gains of the previous year, but in the third quarter the trade balance improved.

Output as measured by average GDP at market prices grew by 2,2 % in 1989, about half the rate recorded in the two previous years. Non-oil output to the fourth quarter of 1989 also grew about 2¼ %, somewhat below the estimated rate of growth of productive potential; annualized growth continued at about this pace in the first half of 1990. Unemployment only began to rise from the spring of 1990. Since then indicators such as industrial production, monetary growth, retail sales and survey evidence have pointed to a more pronounced downturn in activity.

Progress in controlling inflation has nevertheless been limited. Price inflation rose from 1988, and accelerated from late 1989. The main monthly measure, the retail price index (RPI), rose by almost 11 % in the year to October 1990; an adjusted measure of 'underlying' inflation, the RPI excluding mortgage interest costs and the new local government community charge (poll tax), rose by over 8 % (Graph 1). In 1990 wage settlements accelerated further: the underlying increase in earnings rose to 10 % p.a. from around 9 % p.a. in the two previous years. Against a background of slowing output growth, unit labour costs have accelerated sharply: for the whole economy to around 9¼ % p.a. (Graph 2).

The economic outlook is thus dominated by the prospect of an appreciating real exchange rate and the need for the policy stance to remain oriented to reducing inflation. In the short term the economy is faced with a period of markedly slower growth. A more substantial downturn cannot be excluded, consequent on further downward revisions in capital expenditure or less buoyant external conditions, particularly because of the appreciation of sterling since early 1990, or resulting from the Gulf crisis. The crisis and the associated rise in oil prices have less serious direct implications for the United Kingdom economy than for other member countries, given the UK's indigenous oil production (still somewhat in excess of self-sufficiency). Nevertheless, higher cost pressures and weaker international demand for the onshore economy aggravate the UK's already difficult situation.

Table 1

United Kingdom: Macroeconomic indicators

	1983-85	1986-88	1989	1990	1991	1992
GDP[1] (% change)	3,1	4,4	2,2	1,5	0,7	2,4
Total domestic demand (% change)	2,3	4,1	3,1	0,9	0,4	2,7
Employment (% change)	0,7	1,9	2,8	2,0	−0,4	0,0
Unemployment rate (%)	11,3	10,1	7,0	6,4	7,3	8,0
Inflation rate[2] (%)	5,1	4,4	6,1	7,0	6,3	4,8
Current account balance (% of GDP)	0,4	−2,3	−3,7	−2,8	−2,0	−2,1

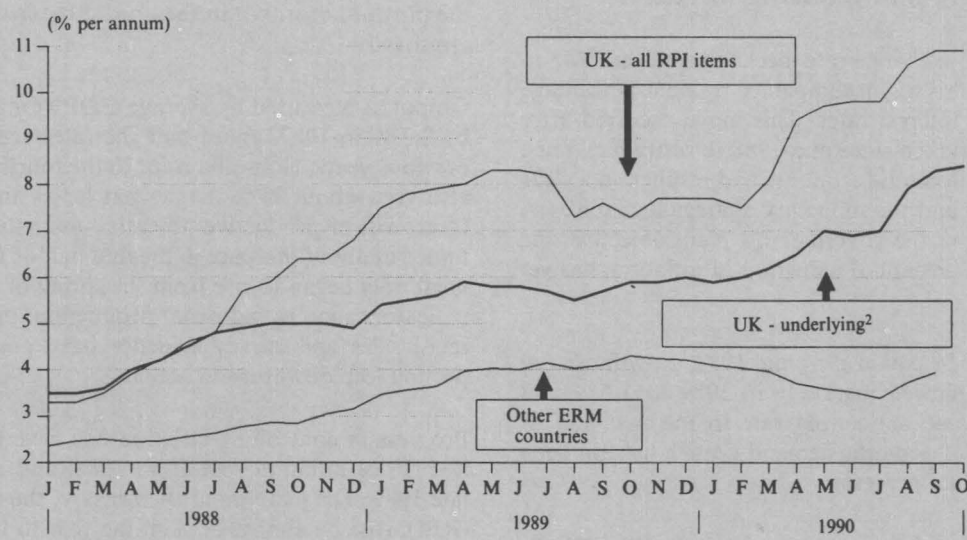
[1] Average measure at market prices.
[2] Implicit deflator of private consumption; adjusted to remove impact of local authority tax changes.

The ERM, wages and the policy stance

Successful participation in the exchange-rate mechanism (ERM) requires a major and sustainable improvement in inflation performance. This implies, above all, lower nominal

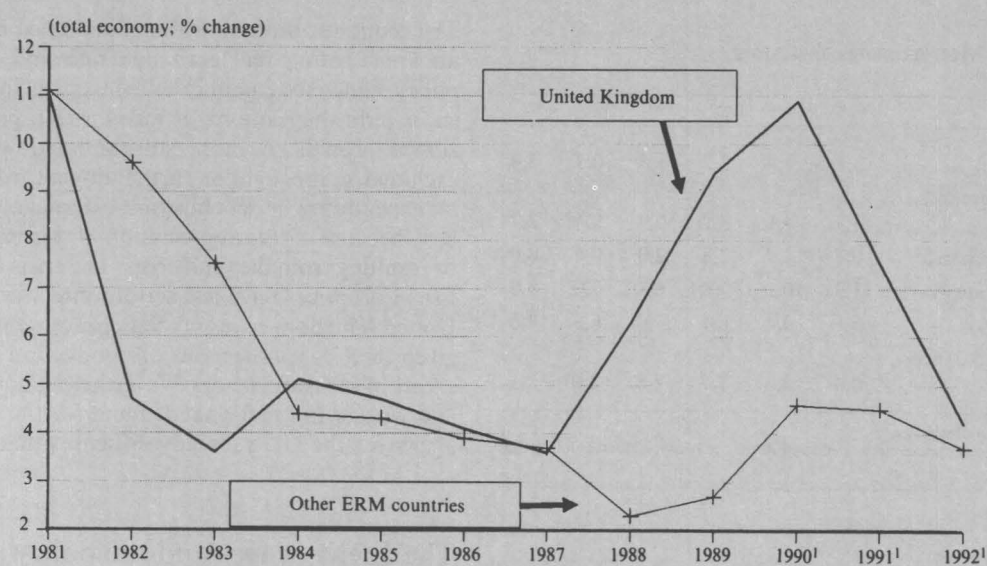
[1] Interpretation remains subject to significant uncertainty at the detailed level because of acknowledged shortcomings in official statistics from the mid-1980s: substantial 'statistical adjustments' have been incorporated in national data to produce a more coherent overall set of national accounts.

GRAPH 1: **United Kingdom: Inflation compared with other ERM countries**[1]



[1] Consumer price index.
[2] Retail price index, excluding mortgage interest payments and local authorities' community charge.

GRAPH 2: **United Kingdom: Nominal unit labour costs compared with other ERM countries**



[1] Commission forecasts (November 1990).

wage growth. Despite measures to improve the functioning of the labour market, the central objective of achieving a substantial and permanent reduction in inflationary pay bargaining has proved elusive. Substantial employment growth, set against skill and mobility constraints, has led to wage settlement levels rising. There are now reasons for expecting some short-term reductions in wage inflation, as the labour market weakens with overall activity, and as price inflation, particularly the RPI measure, eases. However, it seems improbable that these factors alone will be sufficient to produce a rapid, spontaneous reduction in the rate of wage increases approaching levels in other ERM countries (excluding Spain, averaging about 4¼ % p.a.).

Table 2

United Kingdom: Economic policy indicators

	1983-85	1986-88	1989	1990	1991	1992
Money growth M4 (% change)	13,4	16,6	18,3	14,2	11,0	12,0
Short-term interest rate	10,8	10,3	13,9	14,8	13,0	11,5
Long-term interest rate	15,8	11,7	9,6	11,4	11,3	10,7
Competitiveness (1980 = 100)	84,5	78,0	78,6	81,3	86,0	85,2
Budget balance (% of GDP)	−3,3	−1,0	0,9	−0,2	−0,7	−0,6
Gross public debt (% of GDP)	59,5	55,1	45,7	43,0	41,8	40,5
Nominal wages per head (% change)	7,2	7,9	8,8	10,4	8,7	6,7
Real wages per head (% change)	2,0	3,4	2,5	3,2	2,2	1,8

For definitions, see Table 3 for Belgium, p. 36.

A more severe deflationary shock might have the effect of breaking the established momentum of inflationary expectations but at considerable output cost. ERM membership of itself should help reduce inflationary expectations. However, if the current backward-looking nature of wage-bargaining continues, the speed of the reduction in such expectations may be limited. Far better would be for wage bargainers to become aware of the constraints implied by the ERM. The government as well as the employers' and trade union organizations might play a role in promoting non-inflationary bargaining and the government could also have an influence through its direct role in wage negotiation as an employer.

The government will also need to ensure that the stance of its macroeconomic policies is appropriate. It is important that pressure continues to bear down on inflation and that this is not endangered by encouraging expectations of undue easing of policy, monetary or fiscal. The government's medium-term financial strategy (MTFS) can play an important role. In the most recent March 1990 version the public sector debt repayment (PSDR) was projected to decline from 1¼ % of GDP in the 1990-91 financial year (unchanged from the 1989-90 outturn) to ½ % of GDP in 1991-92 and to balance from the following year. The discretionary changes in the March 1990 budget were slightly tightening in effect. However, there already appears to have been a more significant weakening in the fiscal position than foreseen in March, only partly attributable to the economic slowdown, and in November the government revised down its forecast of the 1990-91 PSDR to ½ % of GDP.

Community policies and the single market

If inflation can be brought under control, the United Kingdom has little to fear and much to gain from the single market after 1992. Market-oriented policies have long been pursued by the present government as a means of reinvigorating the economic base. In Community discussions the UK has championed internal market measures and has been the most forward to embody directives agreed at Community level into domestic legislation.

Industry and trade in the UK should thus be poised to take advantage of the fuller opportunities offered by the single market. For manufacturing, research undertaken for the Commission by the UK Department of Trade and Industry points to the higher technology industries benefiting particularly (computers, telecommunications equipment and pharmaceuticals, for example). UK manufacturing is strong in high-demand-growth sectors, which augurs well for the expansionary effects of the 1992 programme, and these areas may also benefit disproportionately from more liberal public procurement practices. Even in more traditional sectors, recent performance has improved considerably, often aided by substantial foreign investment (the car industry is a primary example). The UK's strength in financial and related services should also stand it in good stead. The dynamic macroeconomic simulations prepared at the time of the Cecchini report pointed to UK GDP potentially up to 4 % higher after six years than if the 1992 programme did not take place.

More immediate considerations, however, also point to the efforts necessary if these gains are to be realized. The existing macroeconomic imbalances identified earlier need to be corrected by a period of restrained growth. The UK is thus entering the run-up to the single market — and Stage I of EMU — temporarily out of phase with some of its Community partners, and the increases in real wages which should accrue in the longer term from higher productivity will have to be more restrained in the short term. More deep-seated weaknesses will probably be exposed, in particular the deficiencies in educational and skill levels which are already widely recognized but are very difficult to correct quickly. Improvements in working practices need to be further encouraged to raise productivity levels, which on average still lag behind those in the rest of the Community. For similar reasons the higher investment levels of the past three years need to be sustained, with macroeconomic adjustment achieved through higher saving.

Table 3

United Kingdom: Investment and productivity

	1983-85	1986-88	1989	1990	1991	1992
Gross fixed capital formation						
• % of GDP	16,7	17,7	19,6	19,1	18,6	18,6
• % change	5,8	7,8	4,8	−1,2	−1,6	2,5
of which:						
Non-residential						
• Business	5,4	10,2	7,1	−1,0	−3,1	3,2
— manufacturing	11,2	5,5	5,0	3,0	−4,4	2,8
— other	5,1	13,1	7,6	−1,9	−2,9	3,3
• General government	25,8	−2,3	32,9	13,6	7,7	0,0
Residential	3,2	6,8	−7,9	−6,3	6,7	1,2
Labour productivity						
• Whole economy	2,5	2,7	−0,2	−0,4	1,1	2,4
• Manufacturing	5,9	5,0	3,6	1,6	2,0	4,5
• Non-manufacturing	1,4	2,0	−1,7	−0,9	0,8	1,9

Analytical studies

Evaluation by the Commission services

Study No 1

The outlook and potential for growth in the Community at the beginning of the 1990s

The outlook and potential for growth in the Community at the beginning of the 1990s

Tables

Graphs

Summary

Economic growth in the Community underwent a remarkable recovery in the 1980s. Although some problems have still to be solved with regard to nominal and real convergence, the foundations for sound and lasting growth are in the main again in place. Internally the major Community projects (single market, economic and social cohesion, economic and monetary union), and externally the prospects offered by both greater trade liberalization and the development of the Central and East European economies could result in real growth being more rapid than envisaged by the standard trend projections: the new growth theories and the updating of older theories on long waves of growth provide theoretical support for this possibility. But if this prospect of stronger growth is to become a reality in the 1990s, appropriate and coordinated economic policies must be maintained. Particular attention will also have to be paid to certain challenges and risks which the Community faces in the years ahead: these include the increasing of convergence and of economic and social cohesion between the Member States and the main regions of the Community, the link between growth and energy, relations with the less developed countries and with the Central and East European countries, and reconciling the growth process with concern about protecting the environment.

1. Introduction

The theoretical analyses of balanced growth enjoyed their 'golden age' in the years following the Second World War; this was the result of a combination of several factors:

(i) the war-torn European economies were eager to reconstruct as quickly as possible;

(ii) the developing countries were trying to launch themselves into the race for growth;

(iii) the centrally planned economies were setting themselves the target of catching up with and surpassing the standard of living of capitalist countries.

In the 1970s, criticisms and analyses of the limits to growth met with more interest than the study of the actual determinants of growth. This relative lack of interest was not to last: the change of attitude was due to the considerable increase in unemployment and the problems raised by the apparent low-growth trap in which Europe and more particularly the Community seemed to be caught for a decade.

The fundamental change of stance of economic policies at the end of the 1970s and the beginning of the 1980s again focused attention on the study of the foundations for sound and lasting growth. For the Community as a whole, these views were summarized by the cooperative growth strategy for more employment set out notably in the 1985-86 Annual Economic Report, the aim of which was to restore, against a background of stability, growth which was strong and durable, and created more employment.

Section 2 of the present study will analyse the most significant movements of the main macroeconomic indicators during the 1980s, so that the economic situation at the start of the new decade — 1990-2000 — can be compared with the situation which existed at the beginning of the 1980s. Section 3 will examine recent developments and their implications for the medium term. Section 4 will deal with the factors which are likely to result in a permanent increase in the Community's rate of growth over and above the one which is produced by the 'mechanical' trend projections, and lastly Section 5 will analyse the challenges and the risks in prospect for the years ahead.

2. The 1980s: from stagflation to the resumption of soundly-based growth

Ten years ago, the Community was faced, as it is today, with a rise in oil prices. However, the general economic situation at the start of the two decades is fundamentally different.

At the beginning of the 1980s, the economic situation in the Community was far more unfavourable than it had been in the years of strong growth which preceded the first oil-price shock of 1974:

(i) the average growth of real GDP, which had already fallen from 4.8 % in 1960-73 to 2,2 % in 1974-80, was continuing to decline and was no higher than 1,5 % in 1981-85;

(ii) inflation was over 10 % a year for the Community as a whole, with wide differences between Member States;

(iii) total employment fell in absolute terms for three years in succession (1981-83) and in 1984 was down to 2,5 % below its 1979 level. In addition, the rapid growth of the working-age population led to a more than proportionate rise in the unemployment rate, which in 1984

was close to 11 % for the present EUR 12, i.e. 4,5 points higher than in 1979;

(iv) general government deficits deteriorated by several points of GDP in all the member countries and climbed to over 5 % of Community GDP between 1981 and 1985, with a concomitant increase in the public debt and the interest charges on it. At the same time, the public sector's contribution to national saving, which was equal to 5 % of GDP in 1970, fell to an average of − 1,5 % of GDP from 1981 to 1984.

In terms of the medium-term outlook, the deterioration in supply-side factors was also very worrying: the low productivity of labour, the fall in the productivity of capital and the persistence from 1974 of high real unit labour costs combined to reduce the profitability per unit of fixed capital to two-thirds of its average level in 1961-73. At the same time, as a result of the decline in profitability and the poor performance of final demand, the share of gross fixed capital formation in GDP — 23,9 % in 1973 — fell to under 20 % at the beginning of the 1980s and reflected a marked slowdown in the growth of the stock of fixed capital, which fell from over 5 % in the 1960s to 2,2 % at the beginning of the 1980s.

Externally, in addition to the second oil price shock, the Community was faced with keener competition from the Asian countries (Japan and the newly industrialized countries) both on its export markets and on its own internal market. There were also signs of mounting protectionism, in the more or less hidden form of non-tariff measures, and of a deep debt crisis in the developing countries.

Lastly, the prevailing mood among those involved in economic activity, and in the media, was one of 'Euro-pessimism', while the Community authorities had become bogged down in budgetary quarrels with no great projects to mobilize their energies.

Since 1985, the Community's economic situation has progressively recovered, as a result of the combination of several factors which have all helped to restore the conditions necessary for sound and sustained growth:

(i) a consensus was gradually formed between governments, employers and unions, on the need for a fundamental shift in monetary policies and wage behaviour so that both fostered stability, for a revision of budgetary policies so that they contributed to consolidation, for a better balance between the unit costs of labour and of capital and for a restoration of the profitability of capital;

(ii) the external environment has improved as a result of the expansionary policy of the Reagan administration in the United States of America, the reverse oil price shock of 1986 and the absence of any major financial crisis for the most heavily indebted countries;

(iii) the Community has also benefited from the accession of Portugal and Spain: as their economies have started to catch up, these two countries have contributed to the buoyancy of the whole Community and to the resumption of a strong growth in intra-Community trade, so making the Twelve less vulnerable to external shocks;

(iv) the ratification of the Single Act, the confirmation of the Community's commitment to strengthening the economic and social cohesion and the doubling of the structural Funds, the programme setting up the large internal market, and the project of step-by-step creation of economic and monetary union, have radically changed the Community's image and have reversed the expectations of economic agents;

(v) lastly, the success of the European Monetary System has significantly reduced the exchange risks and uncertainties on exchange markets within the Community.

The results may be summarized as follows (see Table 1 and Graph 2):

(i) real GDP growth has gone through more than nine years of unbroken expansion and acceleration, increasing from 0,2 % in 1981 to 3,8 % in 1988 and 3,4 % in 1989;

(ii) inflation is down to a level comparable with that of the 1960s, with marked progress in convergence between the inflation rates of member countries. In particular the convergence of inflation between the narrow-band members of the EMS exchange-rate mechanism has returned to its 1960s level;

(iii) wage moderation and increases in capital productivity have led to a remarkable recovery in the capital profitability index which rose from 63,5 in 1981 to 85,8 in 1989 (average level 1961-73 = 100);

(iv) net employment creation was of benefit to 7,8 million individuals from 1984 to 1989;

(v) the vigorous revival of investment from 1986 to 1990 took the growth of the capital stock to over 3 % a year, with a parallel recovery in the Community's productive capacity;

(vi) the Community's external position returned to equilibrium and the consolidation of budget balances resulted in a reduction of 2,5 points of GDP in the Community's overall borrowing requirement and in the public sector again making a positive contribution to national saving.

Table 1

Synthesis of the 1960-94 medium-term macroeconomic indicators — EUR 12
(annual percentage change, unless otherwise stated)

	1973/1960	1983/1973	1989/1983	1990	1991	1992	1993	1994	1994/1989
1. Gross domestic product (GDP)									
At constant prices	4,8	1,8	2,9	3,0	3,1	3,0	3,1	3,2	3,1
At current prices	10,2	13,6	8,2	8,3	7,8	7,1	6,8	6,5	7,3
Price deflator	5,2	11,6	5,2	5,1	4,5	4,0	3,6	3,1	4,1
2. Gross fixed capital formation (GFCF)									
Total	5,6	−0,5	4,5	4,6	4,1	4,6	5,2	5,8	4,8
Private	5,7	−0,3	4,6	4,2	4,1	4,9	5,6	6,2	5,0
3. Share of GFCF in nominal GDP(%)									
Total	23,4	21,7	19,6	20,8	20,9	21,2	21,7	22,2	21,4
General government	3,6	3,2	2,8	2,8	2,9	2,9	2,9	2,9	2,9
Other sectors	19,8	18,5	16,8	18,0	18,0	18,3	18,8	19,3	18,5
4. Final domestic uses including stocks	5,0	1,5	3,3	3,0	2,9	3,0	3,1	3,3	3,1
5. Exports, goods and services	8,0	4,0	5,2	6,7	7,3	6,2	6,2	6,3	6,5
6. Imports, goods and services	8,4	2,3	6,9	6,5	6,4	6,1	6,2	6,4	6,3
7. Inflation (private consumption price index)	4,6	11,7	4,8	4,7	4,3	3,9	3,6	3,2	4,0
8. Compensation per employee									
Nominal	10,0	14,0	6,2	6,7	6,1	5,7	5,3	4,9	5,8
Real, private consumption deflator	5,1	2,0	1,4	1,9	1,7	1,7	1,6	1,6	1,7
Real, GDP deflator	4,6	2,1	1,0	1,6	1,5	1,6	1,6	1,7	1,6
9. Labour productivity (real GDP per person employed)	4,5	2,0	2,0	1,6	2,1	2,1	2,2	2,2	2,0
10. Real unit labour costs	0,1	0,1	−1,0	0,0	−0,6	−0,5	−0,6	−0,5	−0,4
11. Profitability of fixed capital stock (index 1961-73 = 100)	110,0	69,3	77,8	86,6	88,1	89,1	90,1	90,9	89,0
12. Corrected wage share (as a % of GDP at factor cost)	73,3	75,1	71,4	70,2	69,9	69,5	69,1	68,8	69,5
13. Total employment	0,3	−0,2	0,9	1,4	0,9	0,9	0,9	1,0	1,0
14. Unemployment rate (% of civilian active population)	2,6	6,3	10,2	8,5	8,3	7,9	7,6	7,1	7,9
15. Current balance (% GDP)	0,4	−0,4	0,6	0,2	0,3	0,4	0,4	0,4	0,3
16. Net lending, general government[1] (% GDP)	−0,6	−4,0	−4,3	−3,3	−2,9	−2,5	−2,0	−1,3	−2,4
17. Gross public debt[1] (% GDP)	:	41,4	57,5	57,7	57,5	57,0	56,3	55,1	56,7
18. Real long-term interest rate (GDP deflator)	2,5	−0,8	4,9	6,2	6,9	6,5	6,1	6,0	6,3

Note: the 1990-94 projections are dated June 1990 and do not include events posterior to that date.
[1] Excluding FRG Unity Fund.
Source: Commission services.

The starting situation for the 1990s is therefore significantly sounder than it was for the 1980s. This could provide a favourable basis for the continuation of growth in Europe.

3. The medium-term macroeconomic outlook

The medium-term trend projections carried out in May and June 1990 suggested that the trends prevailing from 1986 to 1990 would be consolidated, with Community real GDP growing by over 3 % on average for 1990-94, an average inflation rate back to under 4 % a year, net employment creation close to 1 % a year (or over 7 million new jobs created in 1990-94), a steady decline in public deficits and the maintenance of a small current account surplus.

These projections, which assume no changes in policy or in the external environment, therefore contained encouraging signs but also highlighted some problems which had not been fully solved:

(i) with regard to the Community's economic and social cohesion, development from 1986 to 1990 and the June 1990 trend projections showed that the least-favoured countries (with the exception of Greece) have again started to close the gap in terms of economic performance, but that this process is not yet as vigorous as it was in the 1960s; [1]

(ii) the high rate of employment creation was accompanied by a reduction of unemployment, but unemployment remains relatively slow to fall as a result of the equally fast growth of the labour force and of participation rates;

(iii) nominal convergence made remarkable progress in the second half of the 1980s but still needs to progress in the countries not yet members of the narrow band of the ERM;

(iv) profitability is close to its average level in 1961-73 but should keep its rising trend in order to support a dynamic growth of investment in the years to come.

Nevertheless, these projections did not fully include all the effects expected from the internal market, the effects of the structural Funds in helping the least-favoured countries to catch up, the step-by-step attainment of economic and monetary union (EMU), or the prospects opened up in the medium term by the conversion of the former centrally planned economies of Central and Eastern Europe into market economies.

In the spring of 1990, it was therefore possible to envisage that the period 1990-94 would be set to complete, by appropriate macroeconomic and structural policies, the process of consolidation which was started in the 1980s and in this way would set the stage, in the best possible conditions, for the attainment of the single market and EMU, and for the least-favoured countries of the Community and its new partners in Central and Eastern Europe to catch up.

The success of this process would thus allow all the member countries to free themselves from the external and/or budgetary constraints which are still inhibiting their growth. Provided that the external environment remained favourable, a further acceleration of the trend growth rate from between 3 and 3,5 % in 1991-95 to between 3,5 and 4 % in 1995-2000 could be envisaged. At the same time, the maintenance of a labour intensive growth would have enabled employment to grow at a rate of between 1 and 1,5 % a year, thus bringing about a rapid reduction in the unemployment rate.

Is the Gulf crisis likely to invalidate these conclusions? At the present time, it is not really possible to forecast how the crisis will be solved or how much time this will take. [2] Nevertheless there are objective factors which make it less threatening (barring war and major destruction) than the two previous oil price shocks:

(i) if some adjustments are made with regard to refining capacity, the production shortfall seems manageable;

(ii) since 1972, most European countries have significantly reduced (by about one quarter) the net energy consumption per unit of real GDP;

(iii) consumption of petroleum products subsequently has fallen even further as a result of the greater use of other sources of energy;

(iv) the Community has become less dependent on the rest of the world as a result of the development of the North Sea oilfields;

(v) the fall of the dollar against the ecu which has occurred since the third quarter of 1990 should, if it is maintained, reduce the inflationary implications of the dollar-denominated rise in oil prices.

The mechanical effects of the Gulf crisis are therefore unlikely to modify the medium-term outlook fundamentally, provided that economic policies take into account the lessons of the earlier shocks. The examination of movements in exchange rates, inflation and external balances following the earlier two oil price shocks shows that disparities and

[1] This point is dealt with in greater detail in Study No 3, 'Economic and social cohesion in the Community'.

[2] The macroeconomic implications of the Gulf crisis are presented in greater detail in Study No 2.

incoherence of economic policy reactions among the member countries generated divergent effects which went well beyond the mechanical effects resulting from energy balances. The divergence and lack of policy coordination hence severely affected the Community's cohesion between 1975 and 1980.

The effect of the Gulf crisis is therefore to increase the need for monetary, budgetary and structural policies which are closely coordinated and directed towards maintaining the fundamental achievements of the 1980s and towards the success of the major Community projects. The crisis also required the maintenance of the *de facto* consensus between workers and employers that has already produced the wage moderation of the 1980s and should result in income losses due to the rise in energy costs being fairly shared between wages and profits. This would preserve the future development of employment-creating investment which remains crucial for the future growth of the Community.

In this way, the potential for growth in the medium term and the improvement in the Community's real and nominal convergence would not be called into question.

4. The potential for growth in the longer term

As has been pointed out in Section 3 above, the 'constant policy' projections made by Commission departments and other institutions (OECD, IMF, etc.) do not, by their very nature, take account of a number of factors that could strengthen the long-term growth trend of the European economies.

Thus, for the Community itself, the aim of all the major Community projects — completing the internal market, strengthening economic and social cohesion and the attainment by stages of economic and monetary union — is to improve the growth prospects that the Community can find in a better use of its own resources. In addition, the prospects of a further liberalization of world trade opened up by the 'Uruguay Round' negotiations, and the progressive conversion of the former centrally planned economies into market economies which are more closely integrated into world trade, should provide the Community with an external environment which is favourable to its own development and its full integration into the development of the world economy.

Major theoretical and empirical problems are posed by the precise quantification of the abovementioned factors. Nevertheless, the first evaluations [1] already provide for significant orders of magnitude (e.g. a cumulative increase by 4,5 % of real GDP in the medium term for the internal market effects alone). Furthermore, the recent developments with regard to the microeconomic determinants of growth provide a theoretical basis for evaluating the possible dynamic effects on growth that would go beyond the first estimates and would lead to a permanent increase in the Community's trend rate of growth. Finally, according to the long wave theory, some key elements of the macroeconomic and sectoral evolution of the Community are behaving in a way consistent with the initial phase of a new long wave of rapid expansion in the 1990s.

4.1. The major Community projects: internal market, economic and social cohesion and EMU

Even though they cover different time spans, the 1992 programme, the strengthening of economic and social cohesion and the realization by stages of EMU all fundamentally relate to the medium or even the long term. [2] They are structural reforms designed to improve supply-side conditions in the Community. In short, these reforms should:

(i) favour the expansion of productive capacity in redirecting resources towards the most productive uses;

(ii) increase the growth potential via increases in labour and capital productivity;

(iii) strengthen intra-Community trade by improving real convergence in the Community and by removing the risks and uncertainties linked to exchange-rate fluctuations;

(iv) improve resource mobility and make fast adjustments possible.

Of course, the major Community projects are already having a perceptible impact through their effect on the expectations of economic agents. Thus, even though the remarkable performances of gross fixed capital formation since 1988 are partially due to the improvement of profitability and the expansion of final demand, results from specific business surveys show that the positive expectations linked to the 1992 programme and to the EMU perspective have also played a role in accelerating the growth of investment in equipment and machinery.

[1] See for instance 'The economics of 1992' *European Economy* No 35, March 1988.

[2] Thus, the catching-up process of the least-favoured countries has to be conceived over a period of 10 to 20 years given the present gaps between incomes per capita (see Study No 3, 'Economic and social cohesion in the Community').

However, it will be the task of economic policies, at both the global macroeconomic level and the structural level, to ensure the required environment for the conversion of these new potentials into effective growth.

Within the Community, the coordination of economic policies in the framework of the EMU both at the monetary and at the budgetary level, should provide supply and demand with the conditions needed for their full expansion (inflation control, quantitative and qualitative restructuring of public revenue and expenditure, etc.). These coordinated policies should also support the national efforts of the least-favoured countries so that they are able to catch up more rapidly without having to suffer an unsustainable deterioration in their internal and external equilibria.

With regard to other policies, competition policy should maintain the continuity over time of the initial market liberalization measures, particularly in the traditionally regulated sectors (telecommunications, air transport, information technology, energy, etc.). The ending of the artificial segmentation of markets makes it possible to increase growth potentials by weakening cartels, by diluting the weight of national or regional pressure groups, etc.

Finally, European research policy will have to support the development of those innovations which will exert a fundamental influence on the Community's technological competitiveness in the medium and longer run, while taking care to avoid the dispersion and duplication of national efforts by constant work of coordination and exchange of information.

4.2. The external environment of the Community

The Community market already forms a unit which is less dependent on the rest of the world than any of its member countries. Today, extra-Community imports and exports of goods represent no more than 10 % of the GDP of the Twelve which would enable the Community (when it has reached the stage of one single market) to reap the same advantages as those long attributed to the United States of America alone in terms of attenuation of the impacts of external shocks on its internal market.

The events in the Gulf have nevertheless shown that shocks coming from the rest of the world are still critical when they hit strategic variables of economic development such as the cost of energy (see Section 5 below).

Furthermore, the expansion of world trade at a rate higher than GDP growth since the end of the Second World War undeniably contributed in earlier years to the Community's growth through the well-known ways of comparative advantages and of intra-industrial trade integration. The success of the 'Uruguay Round' negotiations in increasing the liberalization of trade on goods and extending it to services is likely to provide world trade with a new positive stimulus and, by this means, to sustain extra-Community trade.

Similarly, the success of the liberalization process in the USSR and Central and Eastern Europe should lead, after an unavoidably difficult period during which the economies concerned are converted and reconstructed, to the establishment of more intensive trade relations between the Community and these countries. The trade relations and the catching-up process of the former centrally planned economies will themselves be made easier by strong growth in the Community in so far as it will provide Central and East-European countries with some of the outlets needed for their own output and would limit the duration of the adverse effects on growth and employment of the adjustment policies now being implemented in these countries.

4.3. The microeconomic dynamics of an acceleration of growth

Within the framework of the existing analytical instruments, considerable problems are raised if one wishes to quantify the effects on the Community's growth of the structural reforms induced by the internal market, the strengthening of economic and social cohesion and the realization by stages of EMU as well as the effects of the greater liberalization of the trade in goods and services and the radical transformation of the East and Central European economies. In particular, it is still very difficult to determine dynamic effects resulting from changes in supply conditions.

Given these limitations, the evaluations of the effects of the internal market (*European Economy* No 35, 1988) result in an increase of several percentage points of real GDP with respect to the 'constant policy' trend projection. Evaluation of the gains stemming from EMU are more complex since the precise timetable for the effective realization of EMU is still under discussion, but the first estimates just published [1] also point towards a potential increase in medium- and long-term growth.

In this connection, recent research (Romer (1985), Grossman and Holtzman (1988), Krugman (1988), Baldwin (1989)) which may be summarized under the title of 'new growth

[1] 'One market, one money', *European Economy* No 44, 1990.

theories' emphasizes the possible endogenous linkages between a change in economic efficiency and the change in the long-term rate of growth: this linkage is missing from the usual neo-classical growth schemes (on which most of the macroeconomic models used for the abovementioned quantifications are based).

These new theories are all based on the approach that if the marginal product of capital (or any other accumulating factor) does not diminish when the capital stock increases, then any event (internal market, cohesion, EMU) that causes a rise in investment may lead to a permanent increase in the rate of growth of output: this contrasts with the neo-classical approach, where the event leads to a rise in the level of output which, after a while, falls back to its former equilibrium rate of growth.

Although these new theories [1] vary in approach, depending on their assumption as to the critical factor which accumulates (fixed capital, human capital, stock of knowledge, cost-saving technological innovations), all are based on the common assumption that the accumulating factor does not face diminishing returns. The presence of economies of scale is therefore essential to all of them and may result from several factors.

Thus Krugman (1988) focuses on innovations leading to labour saving per unit of capital. In his model, the rate of growth is a function of the innovation rate which is itself a function of the profitability of innovations. Any new innovation incorporates a fixed cost but provides the innovating firm with a temporary profit margin advantage with respect to its competitors, a margin which is linked to the volume of overall transactions in the economy. A given increase in economic efficiency increases the volume of GDP enabling the innovating firms to distribute their fixed costs over a larger number of units, a fact which increases the profitability of innovation and hence the rate at which innovation appears.

It must, however, be pointed out that as yet few empirical studies have been carried out to support the new growth theories. As noted by Baldwin (1990) they must still rather be considered as mathematical parables than as realistic growth models. Considerable uncertainty therefore surrounds the empirical evaluations that could be derived from these theories concerning the potential impact of the internal market and EMU on the rise in the Community's long-term rate of growth.

These measurement problems, however, do not diminish the relevance of the elements that one tries to measure and it seems reasonable to argue that both the neo-classical analyses and the new growth theories all converge towards an acceleration of the Community's trend output growth in the longer run, despite any transitory phenomena which, like the Gulf crisis, might temporarily hide the basic trend.

4.4. Towards a new long upswing

The possibility, evoked in the former section, for the Community to register a permanent increase in its future trend rate of growth is also supported by the Krondratieff-Schumpeter long wave approach to long-term economic development. Indeed, the present situation exhibits some striking similarities with the long wave theory (see Box 1) and would justify the hypothesis that Western economies are now in the recovery phase of the long stagnation which started in 1974. It can therefore tentatively be advanced that the 1990s could mark the beginning of a new long wave of expansion.

This appreciation is based on three elements consistent with the theory of the long wave approach. [2]

The first element supporting the hypothesis that industrialized countries are approaching the end of long stagnation is the technological revolution in information technology which started in the 1970s. The second element is the increase in profitability during the 1980s, an evolution that usually characterizes the recovery phase of a long stagnation. In addition (and subsidiarily), since 1982 the business cycle shows an atypical pattern, the prosperity phase having the longest duration ever registered since the 1950s.

(i) The technological revolution in information technology

In a period of intense technological change, it is difficult to tell which innovation(s) will take the form of a technological revolution, since it is only in retrospect, with a certain time-lag, that one can decide what are major innovations or minor ones. None the less, the innovations in the field of computer and information technology which developed in the 1970s in connection with the large-scale application of microelectronics, present the characteristics of a technological revolution. They are, in fact, innovations that radically change the way of producing output in an increasing number of industries and services; this change will be even more funda-

[1] See Box 2 for a more analytical description of the traditional and new approaches to growth.

[2] The arguments presented here are developed in more detail in Reati (1990, b).

mental when the CIM (computer integrated manufacturing) techniques are further improved and generalized.

The computer revolution fits with the long wave scheme (see Box 1) in the sense that it is a process innovation appearing during the depression in an already existing industry. Its diffusion is mainly in the existing industries.

The computer and information technology was accompanied, in the 1980s, by a cluster of radical innovations. They started with the introduction of new materials (optical fibres) and products (laser), developed independently from the computer innovation, but now involved in an interesting and promising combination with the computer (telematic, bio-informatic, sensors and switches).

Bio-technology is at least as revolutionary as the computer and microprocessors. However, it is quite unlikely that it could be the basis for a technological revolution pulling the economy into a new long upswing because it is not yet perfected.

Empirical evidence is difficult to provide in an adequate way since the existing statistical classifications of sectoral data do not coincide with new products and activities, which, as a rule, are mixed with other, more traditional items in the industrial nomenclatures. However, the indication to be found in the existing material confirms a much faster growth of value-added and investments in the categories in which the new technologies are included (office and data-processing machines, electrical and electronic capital goods, telecommunications, advanced machine tools) when compared to the evolution of total manufacturing (see Table 2).

(ii) The recovery in profitability

Two main questions have to be considered in this context. The first concerns the general evolution of profitability in the 1980s: is it in accordance with what is predicted by the long wave theory? If yes, one would have another indication that the Community economies are in the second phase of the long stagnation. The second question refers to the nature of the recovery which will appear: is it just due to the business cycle or does it also reflect the incipient consequences of the technological revolution?

Profitability will be defined at the macroeconomic level as the net operating surplus divided by the net capital stock (at replacement prices). At a sectoral level, considering that capital stock data are not available for all the branches (or groupings) considered here, the evolution of the rate of profit has to be approximated in some cases by the ratio of the gross operating surplus into value-added.

Table 2

Indicators on the spreading of the technological revolution
(at current prices)

NACE	Sector	Variant	Germany			France			Italy			United Kingdom		
			Relative growth index[1]	% share of manufacturing[2] 1975	1987	Relative growth index[1]	% share of manufacturing[2] 1975	1987	Relative growth index[1]	% share of manufacturing[2] 1975	1987	Relative growth index[1]	% share of manufacturing[2] 1975	1987
330	Office and data-processing machines	VA	129,0	1,7	2,1	157,7	2,3	3,6	276,8	1,3	3,6	217,3	1,2	2,7
		INV	94,1	3,8	3,6	134,2	2,8	3,7	316,9	0,6	1,9	297,5	0,6	1,8
		VA/L	103,7	149,0	154,0	96,2	239,0	230,0	197,9	122,0	242,0	141,8	172,0	244,0
342	Electrical capital goods	VA	115,8	4,7	5,4	127,4	2,8	3,6	94,2	2,2	2,0	95,2	2,0	1,9
		INV	—	—	—	132,0	1,7	2,2	141,8	1,0	1,4	115,2	1,1	1,2
		VA/L	110,6	85,0	94,0	100,6	92,0	93,0	109,3	97,0	106,0	86,2	94,0	81,0
344	Telecommunications equipment	VA	152,8	4,4	6,7	97,3	2,6	2,6	150,2	1,8	2,7	185,4	2,9	5,4
		INV	221,3	3,8	9,7	—	2,0	1,0	255,7	0,6	1,6	203,6	2,1	4,3
		VA/L	116,7	91,0	106,0	104,8	95,0	100,0	119,4	97,0	116,0	115,6	87,0	101,0
322	Machine tools	VA	114,9	1,8	2,1	54,7	1,0	0,5	96,1	1,6	1,6	70,7	1,3	0,9
		INV	209,5	1,2	2,5	93,4	0,5	0,5	181,2	0,6	1,1	80,8	0,8	0,6
		VA/L	114,9	87,0	100,0	80,1	106,0	85,0	85,4	112,0	96,0	96,9	85,0	82,0

Symbols: VA = value-added at factor cost
INV = gross fixed capital formation
VA/L = value-added per unit of employment

[1] Relative growth index with respect to total manufacturing = 100, for the period 1975-87 except for INV where the end year in 1986 (D, UK) or 1985 (F, I).
[2] The line VA/L in these columns refers to the level of the sectoral ratio in the two years expressed as a percentage of the same ratio for total manufacturing.

Source: Visa database and Commission services.

At the macroeconomic level for EUR 12 as a whole, the profitability of the capital stock, as shown in Graph 3, has followed an evolution similar to that predicted by the long wave theory. The fall in profitability ended in 1981 and started a strong recovery from 1982. These observations are confirmed for the manufacturing sector data both for the EC countries and for the United States of America. It also appears that, at the manufacturing level, for which data on capacity utilization are more reliable than on the overall GDP level, these conclusions are not affected when correcting the profitability figures with the rate of capacity utilization in order to eliminate biases due to labour hoarding during recessions. Finally, the available data on gross profit shares in value-added [1] in the branches most concerned with the technological revolution are also following the same pattern.

The evolution of profitability thus also points in the right direction for the appearance of a new long expansionary wave.

(iii) The behaviour of the business cycles

This aspect plays a subsidiary role with respect to the two other points developed above. Indeed, to ascertain that the present business cycle follows an atypical pattern does not prove, by itself, that the underlying long-term trend is changing. However, if we consider that there are two other strong elements in favour of this thesis (the technological revolution and the recovery in profitability), the business-cycle argument reinforces the conclusions that can be derived from the previous stage of the analysis.

For this purpose we shall compare the length of the prosperity phase which started around 1982 with the same phases of the previous cycles, taking the evidence provided by the OECD in its main economic indicators. The focus is on industrial production rather than on GDP because the former series are monthly, and thus allow to determine the turning points of the cycles with more detail. In any case, the business cycles chronology derived from GDP does not differ substantially from that obtained on the basis of industrial production.

The dates of the cycles in the four largest countries of the EC as well as the USA are reported in Table 3. As stated in footnote 6, the true peak of the present cycle is still unknown since the cycle is incomplete.

[1] The available data do not permit to compute the profitability rate in the same way as for the more aggregated variables.

The striking result is the difference between the average length of the prosperity phase of the business cycles of the past and the length of the prosperity started at the beginning of the 1980s. This is even more accentuated if the comparison is limited to the last long expansion (from the 1950s to 1973) : in EUR 4 the average length of prosperity was 22,3 months and in the USA 35 months, against more than 90 months for the present cycle.

The explanation of this anomalous evolution is complex. There is, firstly, the normal play of the business cycle mechanism, in which the recovery in profitability stimulates investment which, in turn, fosters aggregate demand. Secondly, this dynamic was certainly reinforced by the '1992 effect', which contributed to creating a self-sustaining expansionary climate. Thirdly, it is very likely that the present prosperity is also (and mainly) due to the direct and indirect effects of the technological revolution on investment and on the level of activity.

The present widespread dynamism and enthusiasm that is usually linked to the 1992 objective could also be interpreted in the sense that something new was under way, and that the completion of the internal market was one of the institutional changes required to speed the process of getting out from the long stagnation.

5. Conclusion : the potentials and the risks

After a decade of low growth and fundamental disequilibria the Community succeeded in restoring the major part of the required basis for a sound, sustainable and labour-creating growth against a background of price stability and the recovery of the internal and external equilibria.

The Community has also adopted action programmes which are all likely to increase its growth potential in the medium and long term and the effect of which can already be felt with regard to the expectations of those involved in economic activity.

Lastly, developments of theories both old (long wave theory) or recent (new growth theory) converge in the view of an acceleration in medium-term growth even though it is still difficult to evaluate its magnitude.

In the 1990s the Community could thus return to a high-growth, full employment situation which seemed inconceivable or at least highly improbable 10 years ago.

Nevertheless, the future holds challenges and risks that will have to be met and overcome.

Table 3

Business cycle chronology[1], [2], [3]

	Cycle			Trough to peak		Peak to trough	
	Initial trough	Peak	Final trough	Duration in months	Amplitude[4]	Duration in months	Amplitude[4]
EUR 4							
I		**1961/3**	**1963/2**			**23**	**+5,0**
II	**1963/2**	**1964/2**	**1967/4**	**12**	**+5,4**	**38**	**−6,4**
IIa	1963/2	1964/2	1965/7	12	+5,4	17	−4,0
IIb	1965/7	1966/3	1967/4	8	+31	13	−5,5
III	**1967/4**	**1970/3**	**1972/1**	**35**	**+6,5**	**22**	**−6,0**
IV	**1972/1**	**1973/9**	**1975/6**	**20**	**+8,9**	**21**	**−14,0**
V	**1975/6**	**1980/1**	**1982/11**	**55**	**15,3**	**34**	**−12,3**
Va	1975/6	1977/1	1978/2	19	+10,4	13	−2,7
Vb	1978/2	1980/1	1982/11	23	+7,6	22	−12,3
VI	**1982/11**	(1990/12)[6]		(97)			
USA							
I		**1960/1**	**1962/12**			**35**	**−11,3**
Ia		1960/1	1961/2			13	−14,4
Ib	1961/2	1961/12	1962/12	10	+6,3	12	−3,2
II	**1962/12**	**1966/10**	**1967/7**	**46**	**+6,0**	**9**	**−5,3**
IIa	1962/12	1963/5	1964/10	5	+2,2	17	−3,5
IIb	1964/10	1966/10	1967/7	24	+7,3	9	−5,3
III	**1967/7**	**1969/8**	**1970/11**	**25**	**+7,4**	**15**	**−12,5**
IV	**1970/11**	**1973/9**	**1975/3**	**34**	**+14,2**	**18**	**−19,7**
V	**1975/3**	**1979/3**	**1982/11**	**48**	**+21,3**	**44**	**−21,0**
Va	1975/3	1979/3	1980/7	48	+21,3	16	−21,4
Vb	1980/7	1981/7	1982/11	12	+6,9	16	−15,5
VI	**1982/11**	(1990/12)[6]		**(97)**			
VIa[5]	1982/11	1984/8	1986/9	21		25	

1 *Source:* OECD (1987), 'OECD leading indicators and business cycles in member countries 1960-85', supplement No 39, January, *Main economic indicators.*
2 Information on cycles after 1982 was communicated directly by OECD services.
3 Figures which are not in bold refer to sub-cycles.
4 Amplitude of the prosperity phase (+) or recession phase (−) is measured as a percentage of the trend: percentage above trend at peak *plus* percentage below trend at trough (OECD 1987, p. 74).
5 This chronology is provisional.
6 1990/12 is not the true peak of the cycle, but it is taken just to give a rough approximation of the duration of the present prosperity.

Thus, if the potential of the internal market and of the EMU is to become a reality, the economic and social cohesion of the Community will have to stay at the forefront of priorities during the first years of the creation of the economic and monetary union and of its single market. The strengthening of that cohesion is fundamental in order to show the countries which are now less-favoured that the Community's integration is not done at their expense but is the very condition of the resumption of their catching-up process. It will also make it possible to absorb more easily the unavoidable structural adjustments which will accompany the attainment of EMU. [1]

The events in the Gulf were an opportune reminder of the importance of the link between growth and energy and the necessity for the Community to pursue its efforts towards a further reduction in the energy consumption per unit of GDP. Indeed, the Japanese example shows that measurable

1 Economic and social cohesion is analysed in greater detail in Study No 3.

gains in primary energy consumption per unit of GDP could still be made : for 1972 = 100 the consumption index per unit of real GDP was, in 1989, 76,8 in the Community versus 69,7 in Japan. The major efforts, however, concern the least-favoured countries (except Ireland) which are still today at the 110 (Spain) to 120 (Greece, Portugal) level for 1972 = 100 and will thus have to combine the strengthening of their catching-up process with a reduction of their unit consumption of energy. In that field, technology transfers from the other Community members should play an important role.

Along the same lines, the abrupt and fundamental change in East-West relations should not pull the Community away from its long-lasting interest in North-South relations. It would indeed be politically, morally and economically unacceptable for whole continents or sub-continents to be marginalized. The 1981/82 debt crisis already showed that an abrupt reduction in demand from the developing countries had measurable consequences on exta-Community trade. Besides, non-oil-producing LDCs have always been the major victims of oil price shocks and raw material price instability. For those countries, dynamic growth in the Community would also be a support for their own development.

The dynamics of the international adjustment process between the major industrial countries would also have to be sustained. Indeed, the data available before the Gulf crisis did show some slowing-down in the adjustment process in the US and Japanese current balances. The latest evaluation of the growth expected in the United States of America in 1990-91 together with the recorded fall of the dollar should, nevertheless, bring about a reduction of the current balance deficit. Close coordination within the EMS and other international entreaties would also have the effect of keeping intra-Community parities stable and avoiding the international adjustment process from being achieved at the expense of the growth of world trade.

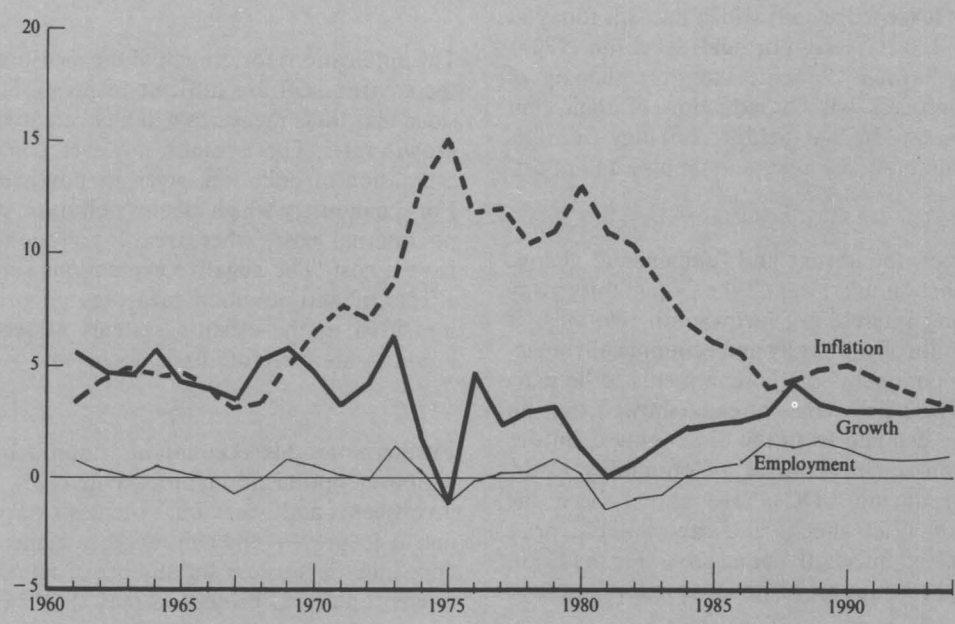
Concerns about the environment have assumed growing importance in recent years and the Community has already demonstrated its will to contribute to the search for international agreements on various points (in particular the greenhouse effect and the depletion of the ozone layer).

The implications for growth of the measures taken to protect the environment are difficult to grasp. Some authors consider that these measures will have an adverse effect on real growth rates. Those results, however, come from the underestimation of pollution, given its powerful external effects. For the industry which creates pollution, pollution itself has no internal cost, whereas anti-pollution investment does have a cost. The negative evaluations simply based on the effects of anti-pollution measures on production costs as measured in the existing systems of sectoral or national accounts are therefore basically biased.

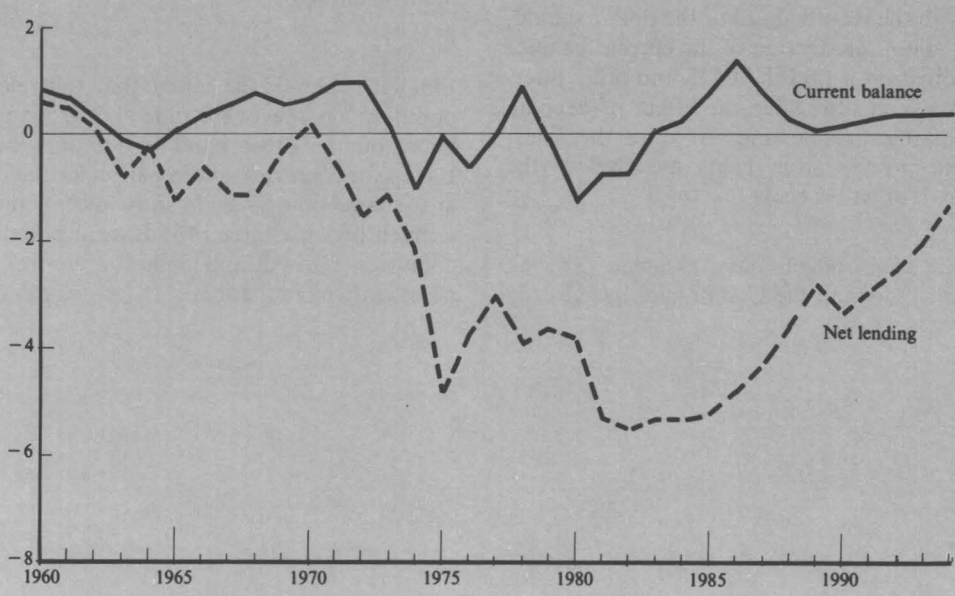
Furthermore, this 'accountants' approach ignores the intertemporal optimization process involved by anti-pollution investments and behaviour : the costs of present actions are meant to prevent the considerably higher costs that would appear in the future in the absence of action. The investments in environmental protection may then have positive effects on growth when seen in a long-term view. Finally, even though these investments might reduce the production capacity of a polluting firm, those investments must themselves be produced elsewhere, and have, as all investment, multiplier effects, technological fall-outs and scale effects, provided that they are from the start conceived for the Community market.

Finally, it should be noted that the relationship between pollution on the one hand, and growth and standard of living on the other hand is not univocal. Thus the East European countries and in particular the former GDR have at the same time a significantly lower standard of living and a much higher degree of industrial pollution than Western countries. Growth and pollution control are therefore not necessarily incompatible.

GRAPH 1: **Growth, inflation and employment** (EUR 12, % per year)

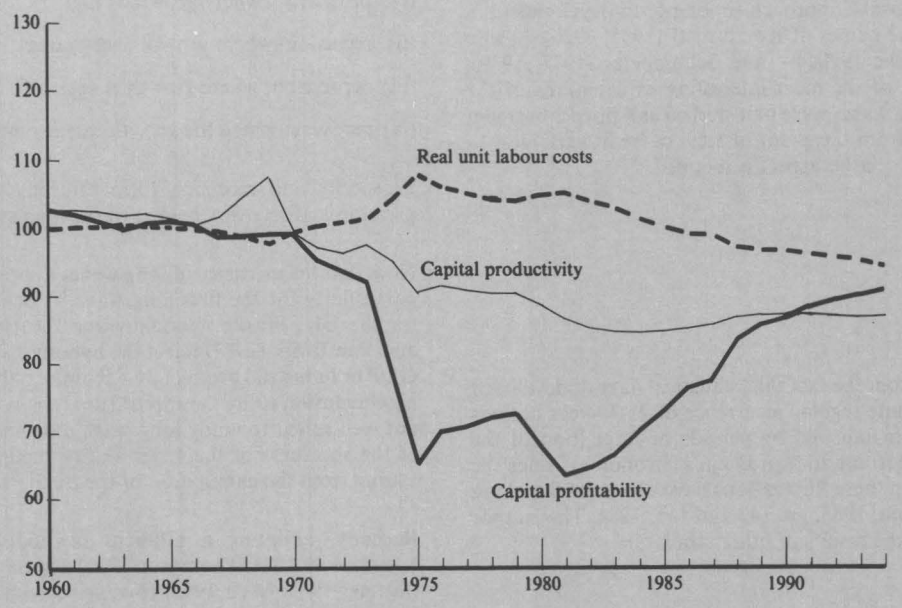


GRAPH 2: **General government net lending and current balance — EUR 12**[1] (% of GDP)



[1] For government net lending, EUR 10 (EUR 12 excluding Greece and Portugal) until 1981.

GRAPH 3: **Real unit labour costs, fixed capital profitability and productivity** (index 1961-73 = 100)



Box 1: The long wave theory

The long stagnation of the 1970s produced a resurgence of interest in the longwave approach to long-term development, a theory linked to the names of Kondratieff (1935, 1926) — who popularized it in the 1920s — and Schumpeter (1977, 1939), who provided one of the most interesting explanations of the phenomenon. Long waves were first studied as a price movement and subsequently from the point of view of 'real' variables. In this chapter only the latter aspect is retained.

A real phenomenon?

The theory starts from the fact that statistical data of developed countries show a quite regular recurrence of 25-30-year periods of sustained growth followed by periods of stagnation of the same duration. According to Van Duijn's chronology, since the industrial revolution these fluctuations have produced four long waves (see Van Duijn, 1983, pp. 143 and 155; 1984. This author takes into account the results of other scholars):

I. 1782-1845

(A) expansion:	1782-1802	— prosperity
	(war 1802-1815)	
	1815-1825	— recession
(B) stagnation:	1825-1836	— depression
	1836-1845	— recovery

II. 1845-1892

(A) expansion:	1845-1866	— prosperity
	1866-1872	— recession
(B) stagnation:	1872-1883	— depression
	1883-1892	— recovery

III. 1892-1948

(A) expansion:	1892-1913	— prosperity
	(war 1914-1918)	
	1920-1929	— recession
(B) stagnation:	1929-1937	— depression
	(war 1939-1945)	
	1937-1948	— recovery

IV. 1948-(1995?)

(A) expansion:	1948-1966	— prosperity
	1966-1973	— recession
(B) stagnation:	1973-1982	— depression
	1982-(1995?)	— recovery

As noted by Schumpeter, each long wave develops in four phases:

(i) prosperity, where growth is high;

(ii) recession, where growth decelerates;

(iii) depression, where growth is near zero or even negative;

(iv) recovery, where the growth rate is modest.

Prosperity and recession form the long expansion while depression and recovery belong to the long stagnation.

Note that the existence of long waves in production is contested, particularly for the first long wave.[1] For instance, taking data for the UK, France, Germany and the USA, Solomou (1987) and Van Ewijk (1982) reject the hypothesis of a 50 year cycle in GDP or industrial production.[2] However, the last author reaches his conclusion using the spectral analysis, a method which seems not well suited to study long wave movements, mainly because of the shortness of the series and of methodological problems arising from the elimination of the trend.[3]

Recently, adopting a different methodology (Bieshaar and Kleinknecht 1984; Thompson 1990) and new filtering techniques (Gerster 1988; Metz 1992) conclusive evidence was provided in favour of the existence of long waves. Even if the final word has not yet been pronounced, it is reasonable to conclude from these elements that 'today more scepticism is needed to disbelieve in long waves than faith to believe in them' (Screpanti 1984, p. 519).

The explanation by the technological revolutions

1. The results of research into the relationship between technological changes and long waves in output can be summarized in the following way:

(i) one of the fundamental causes of the long upswing is a 'technological revolution';

(ii) radical innovations, thus, do not appear at random but show a precise time pattern, correlated with the economic long waves;

(iii) innovations cluster;

(iv) the radical innovations which materialize first are process and product innovations in existing industries; they are followed by product innovations giving rise to entirely new industries.

[1] Nevertheless, the fact that this long wave does not appear clearly from data could simply be due to an insufficiency of the statistics. In fact, figures referring to that period are not very reliable and, in addition, they concern almost exclusively one country (UK).

[2] For a more exhaustive summary of the empirical evidence see Van Duijn (1983, Chapter IX), Kleinknecht (1986), Screpanti (1984) and Goldstein (1988, pp. 81-92).

[3] This question is discussed in Van Duijn (1983, pp. 169-172) and Reijnders (1992).

Let us briefly comment on each point, starting from the second one.

2. Mensch (1979) and Van Duijn (1983) were among the first to undertake a systematic empirical test of the Schumpeterian theory of long waves produced by radical technological changes. Their results, sympathetic with the Schumpeter approach, were challenged by Solomou (1986), who maintained that, as a matter of fact, radical innovations appear at random.

More recently, Kleinknecht (1987 and 1990) provided further empirical evidence which conclusively rejects the core of Solomou's criticism. In fact, analysing a larger sample of 'radical innovations'[1] from the beginning of the nineteenth century to 1968, Kleinknecht reached the conclusion that Solomou's criticism is plausible only for the early period of capitalism (i.e. until the first half of the nineteenth century). From 1860 until now the evidence shows a clustering of radical innovations towards the end of the depression phase and at the beginning of the expansion.

3. The mechanism through which a wave of radical innovations provokes a wave of growth is investment, and this happens only when facing a 'technological revolution'. Thus, the separation of the few radical breakthroughs in technology from the large stream of smaller piecemeal changes is fundamental: the long upswing in output can start only under the influence of the former. They create a new 'technological paradigm', making all the existing plants and equipment obsolete, requiring a massive investment to replace them. This initial impulse to economic activity and its multiplier effect provide the basis for the upswing in output.

4. Historical experience also shows that the unique technological breakthroughs characterizing a long wave are accompanied by a number of radical innovations in related fields. This bunch of innovations — which are directly or indirectly generated by the first technological revolution and contribute to implement it — further sustain the economic activity by the investment they require.

5. Van Duijn (1983) shows that, during the depression phase of the long wave, the major innovations tend to appear in the existing industries and they concern the process as well as the product. During the recovery (i.e. the second phase of the long stagnation), the number of major process innovations in existing industries radically falls, while there is a continuation of the flow of product innovations. However, the dominant feature of this phase is the appearance of radical product innovations which create new industries. The propensity to innovate, thus, seems to change in accordance with the schema shown at the foot of the page (Van Duijn 1983, p. 137).

6. At first sight it appears paradoxical that the wave of radical innovations starts during the depression, just when the rate of profit is at its lowest level and the outlook for demand is gloomy. Mensch (1979) gives a reply noting that when depression reaches its deepest point and enterprises have a very poor (or even negative) profitability, they are faced with a choice: either they innovate, bringing the rate of profit to a normal level or they disappear. Innovations overcome depression. In this sense the upswing is endogenous. Kleinknecht (1987) completes the argument noting that, during the expansion, two contradictory elements enter into play. On the one hand, the favourable perspectives could encourage innovation. On the other, as long as the established lines of production are running well, firms have no incentive to implement radical new products and find it more profitable to concentrate innovation and R&D efforts on gradual improvements within those lines. In this situation, the aversion to radical change is enhanced by the fact that new technologies often represent an uncomfortable substitution giving rise to competition with existing technologies and industries. This explains why, when the first wave of radical innovations is fully implemented, there is no other one which takes over. How an economy moves out of this period depends on the intensity of risks and incentives: a prolonged depression with market saturation and overcapacities for established products may force firms to find new ways to create a new technological paradigm.

For Mandel (1980) also, the technological revolution plays a fundamental role in explaining the long waves, although he places this factor in a broader synthesis. The massive implementation of radical innovations is in fact possible under two conditions: (1) an exceptional long-term increase in the actual and expected average rate of profit; (2) a long-term expansion of demand. The first condition depends on some exogenous factors and this entails the non-automatic characteristics of long waves.

[1] A distinction should be made between 'invention' and its successful introduction on the market as 'innovation', because the time lag between the two is sometimes considerable.

Type of innovation	Depression	Recovery	Prosperity	Recession
Product innovation (new industries)	*	****	**	*
Product innovation (existing industries)	***	***	*	*
Process innovation (existing industries)	***	*	**	**
Process innovation (basic sectors)	*	**	***	**

The more stars the greater the propensity to innovate.

However, the factors which have determined the long expansion tend to turn into the opposite. The generalization of the technological revolution has many detrimental effects on profits, since the capital intensity of production increases, technological rent vanishes, productivity growth levels. This decrease in profitability is still more accentuated by some other features that, historically, have characterized the final phase of the expansion: increases in prices of raw materials, tight labour markets, increased worker s' resistance to new labour processes, acute social conflicts and stronger competition between enterprises. The falling rate of profit breaks the pace of the accumulation of capital. Contrary to expansion, the transition to stagnation is thus endogenous.

The role of institutions

It is widely admitted that the technological revolution that will eventually generate the long upswing cannot be implemented without deep social, organizational and institutional changes. For instance, Freeman and Perez (1988) emphasize that at the roots of each long wave there is a new techno-economic paradigm, something wider than the mere technological paradigm.[1]

The crucial role of the institutions (broadly defined) was systematically incorporated in a model of long-term development of capitalist economies with the French theory of 'regulation' (see Boyer 1986 and Jessop 1990 for a survey) and its equivalent in the USA, the 'Social structure of accumulation' (Bowles, Gordon and Weisskopf 1984; 1986). While the latter was devised to enrich the conventional explanation of long waves, the former developed independently and in a competing way from the long waves approach.[2]

(a) The regulation theory

The regulation theory (Aglietta 1976; Boyer and Mistral 1983; Lipietz 1979; Boyer 1986) studies long-term structural change from a systemic approach, considering the mechanisms which contribute to the reproduction of the basic social relationships of a system of historically determined institutional forms.[2] Institutions thus include not only the forms of State intervention and monetary and credit relationships but also the wage/labour nexus, the forms of competition and the mode of adhesion to the international regime. The emphasis is also put on the interdependence between the productive organization and the consumption norm (or mode of consumption).

The starting point of the regulation theory is similar to that of long waves: a radical technical change (the assembly-line at the beginning of this century; automation and 'Fordist' mass production in the fourth long wave) which, however, is not viable without a corresponding change in consumption. Mass production must go together with mass consumption, and the latter must grow regularly. It is then crucially important to have a wage bargaining allowing a parallel and foreseeable growth of real wage and productivity. Social consensus is also essential. Social security (the 'indirect wage') powerfully eases the attainment of this consensus and the scope for State intervention to facilitate the accumulation of capital broadens. The long expansion is thus made possible by an 'efficient' mode of regulation.

A 'structural crisis' like that of the 1970s and 1980s happens when the very functioning of regulation comes into contradiction with existing institutional forms, which should then be abandoned or by-passed. The contradictions which have undermined the mode of regulation during the last two decades, were, first, the slowdown in productivity growth which eroded the basis of mass consumption and, second, public finance deficit which put into question the Welfare State, a fundamental piece of social consensus. The institutions for collective bargaining were no more effective, inflation became a 'toxic drug', profitability deteriorated, the established hierarchy among nations was upset, etc. Economic crisis manifests itself as a crisis of regulation.

Long stagnation will end when the system will succeed in adopting a new accumulation regime, entirely different from the previous one, and in finding an appropriate mode of regulation.

(b) The 'social structure of accumulation'

For the 'social structure of accumulation' theorists, long upswings depend on a periodically reconstructed set of institutions (the 'social structure of accumulation') which provides the economic, social and political stability required for favourable profit expectations and therefore for rapid capital accumulation. Radical changes in the institutional framework are thus the necessary conditions for a technological revolution and the ensuing long upswing. The erosion of these institutions sets the stage for economic crises: business cycles are unable to restore the high growth trend of the previous phase.

Bowles, Gordon and Weisskopf (1986) and Gordon (1989) provided empirical evidence of their theory considering the postwar US economy. For this purpose, they devised some statistical proxies of the institutional features which prevailed in that period, such as: 'the capital/labour accord', the 'pax americana' and 'the capital/citizen accord'. Adding these variables to the variables reflecting technology and capacity utilization they obtained a more adequate econometric account of productivity, profitability and investment behaviour.

Some other features of long waves

Two other elements of long waves are important to understand the present situation: the evolution of profitability and the

[1] More generally, Olson (1982) linked the decline of nations to institutional rigidities.

[2] However, long waves and regulation seem complementary rather than rival theories (Reati and Roland 1988).

[3] A general definition of 'regulation' is provided by the philosopher G. Canguilhem: 'la régulation, c'est l'ajustement, conformément à quelque règle ou norme, d'une pluralité de mouvements ou d'actes et de leurs effets ou produits que leur diversité ou leur succession rend d'abord étrangers les uns aux autres'.

different behaviour of business cycles according to the phases of the underlying long-term movement.

(a) The evolution of the rate of profit

Concerning the rate of profit, the fundamental question is to know whether the level and the evolution of profitability is a cause or rather a consequence of the long waves in production.[1] If, for the upper turning point of the wave, it can be easily admitted that the decline in profitability is one of the main causes of the transition to stagnation, things are less clear for the upswing. For some authors the technological revolution and the upswing are caused by the evolution of profitability.[2] For some others, the evolution of profitability is rather the consequence of the long wave movement: first comes the technological revolution; it induces expansion and, with expansion, profitability increases. However, for the purpose of this analysis, it is not necessary to establish exactly in which direction runs causality. It is just enough to know the broad evolution of profitability during the phases of the long wave movement.

The available evidence shows that:

(1) long stagnation is characterized by three separate movements in the rate of profit:

   (i) there is, firstly, a very strong decline during the depression, pushing profitability to its lowest level;

   (ii) towards the end of the depression profitability starts to recover, under the 'curative' effect of the business cycle. The weakest enterprises go out of business, those who survive restructure and, by this way, the profitability of the sector improves;

   (iii) this upward trend continues and accelerates during the recovery;

(2) during the long expansion profitability develops in stages:

   (i) during the prosperity profitability usually stays at high and growing levels;

   (ii) during the recession, the rate of profit starts to fall and this produces the turning point of the production trend: thus there is the exhaustion of the effects of one of the factors supporting the expansion. The causes of this decline in profitability are numerous: social conflicts and excessive wage increases, an overaccumulation of capital with respect to the possibilities of profit, a decline in productivity growth, tight labour markets favouring wage increases, etc.

(b) The business cycles pattern

The long wave movement moulds the shape of the business cycle (Kondratieff 1935, p. 111; Dupriez 1966, vol. II, pp. 253-257). In fact, during the long expansion the prosperity phase of the business cycle tends to be long and/or more accentuated and the recession short and/or less intensive. It is quite rare that, during the long upswing, the short-term recession leads to a drop in the level of production, but there is only a deceleration of growth. During the long stagnation, the business cycle is characterized by short (and/or mild) periods of prosperity and long and deep recessions, often resulting in a fall in the level of activity.

[1] This point is discussed in Reati (1990, pp. 20-23).

[2] For Mandel (1980) it is only when profitability is very high and stable that firms innovate massively. For Mensch (1979) we have seen that it is the opposite.

Box 2: The new growth theory

In its most simple form, the relationship between output, capital and employment at the macroeconomic level could be written:

$$Y/L = BKg\,(K/L)^{a} \qquad (1)$$

where Y = output (real GDP at factor cost)
K = stock of fixed capital
L = employment

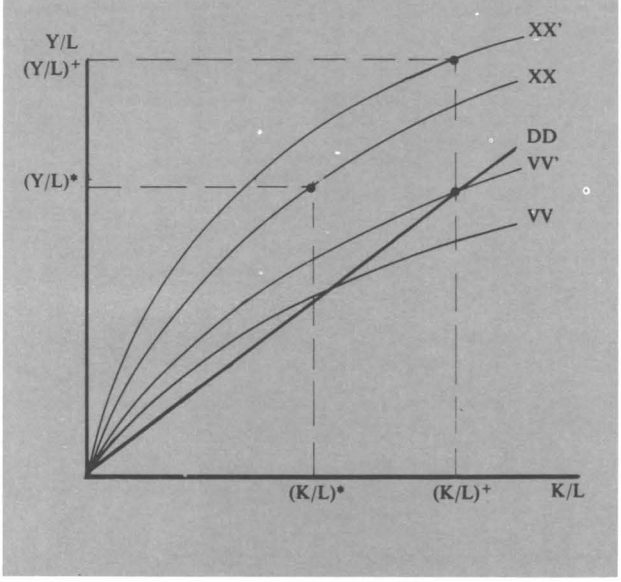
Parameter g measures at the aggregate level the economies of scale and is generally set equal to zero in traditional models, whereas it can take positive values in the new growth models.

Parameter a is derived from the elasticity of output with respect to labour (equal to $1-a$).

Finally, parameter B is a measure of global efficiency, which can be modified by structural reforms (like those implied by the internal market programme) or by technical progress.

In agreement with the usual assumptions, the relation between Y/L and K/L has the form given in Figure 1, as XX. In order to simplify the presentation, it will be assumed that L remains constant and that there is no independent technical progress. It is also assumed that in equilibrium the economic agents save and invest a constant fraction s of GDP. The relation between gross investment per person employed and K/L is therefore given by the curve VV which is simply equal to s.XX with $O<s<1$.

FIGURE 1: **Relation between output and capital per employee**



From a general point of view, gross investment in one period is used either to increase the stock of fixed capital or to replace the fraction of the stock scrapped during that period.

In steady state equilibrium the K/L ratio must remain constant which implies, for L constant, that the totality of investment is used to compensate for scrapping. If d is the scrapping rate, the amount of investment per employed person will be in equilibrium equal to d.K/L, represented as the straight line DD in Figure 1. Since investment is also equal to saving, the intersection of DD and VV gives the equilibrium level of K/L, i.e. $(K/L)^{*}$.

In this context, let us assume that a given event causes a permanent increase in the efficiency parameter B. This implies that any combination of K and L will produce more output than before and translates into an upward move in the curves XX and VV which become XX' and VV'. Since saving has increased, the equilibrium ratio of K/L for d constant is fixed once and for all at a higher level $(K/L)^{+}$ to which is associated a higher level of (Y/L) but the long-term rate of increase of (Y/L) is unchanged.

In the new growth theory approach formula (1) is rewritten as:

$$Y = BK^{(a+g)}\,L^{(1-a)} \qquad (2)$$

and it is assumed that K is the only factor submitted to accumulation. If $(a+g)<1$, the capital stock exhibits decreasing returns. In dynamic terms, the transition from XX to XX' in Figure 1 makes capital more profitable at point $(K/L)^{*}$, which increases investment but as soon as K/L increases towards $(K/L)^{+}$, the profitability per unit of capital decreases until it reaches, at point $(K/L)^{+}$ its former level. The only way to have a permanently higher rate of growth is to have $(a+g)\geq 1$.

The case $(a+g)>1$ would imply a continuous acceleration of the growth of output in the long run, a fact not observed during this century and would lead at the limit to an infinite growth rate, which is absurd.

It is, however, sufficient for $a+g$ to be strictly equal to 1 to generate a permanent increase in rate of growth of Y following a given increase in B, the economic efficiency parameter. This comes from the fact that when $a+g=1$ the marginal product of capital decreases no more when K is increased so that the ratio K/L has no stable limit. In other words one unit more of capital will increase output with an amount independent of (K/L).

More specifically a further unit of K will add $BL^{(1-a)}$ to Y whatever is K/L. In order to determine the long-run rate of growth of Y, it suffices to determine the amount of saving that

will be invested. If the saving rate s is constant, this amount is, in any given period, equal to $s.Y_t = S_t$. If one replaces Y_t by its definition in (2) and takes scrapping into account, the stock of capital in the next period $(t+1)$ will be given by:

$$K_{t+1} = K_t(1-d) + S_t \qquad (3)$$

Taking the log-derivative of (2) with $(a+g) = 1$ and making use of (3), the long-run rate of growth of Y(y) is given by:

$$(1+y) = [1-d + s.BL^{(1-a)}] \qquad (4)$$

Thus any permanent increase in B for given values of a, d, s, and L will lead to a permanent increase in $(1+y)$.

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Study No 2

Analysis of the potential economic consequences for the EC of the Iraq/Kuwait crisis

Analysis of the potential economic consequences for the EC of the Iraq/ Kuwait crisis

Tables

Graphs

Summary

Since August 1990 the world economy has been confronted by an important and unexpected rise in oil prices. Although it is still difficult to formulate a precise forecast about future developments, a rise to an average of, say USD 30 per barrel in 1991 would represent an increase of the oil price by about 70 %, all other things being equal. The effective impact, however, will also be influenced by other factors and most notably by the evolution of the US dollar against the EMS currencies, by the degree of energy dependency and by the evolution of the domestic inflation rates.

From the present fall of the dollar and the important reduction in energy dependency since 1972, one can presume that a USD 30 price per barrel for crude oil would represent a significantly lower shock on ecu prices and current balances than those registered in 1974-75 and 1979-81. However, given the highly uncertain evolution of the Gulf crisis, a larger shock cannot be ruled out.

Two oil price scenarios are presented in this study for illustrative purposes. The analysis takes into account the fall of the dollar vis-à-vis the ecu in the third quarter of 1990 and the macroeconomic implications of different wage/price developments.

These scenarios show that, although the assumed price increases would make a dent in economic growth in 1990-91 and cause some immediate increase in price levels, the medium-term implications would still be manageable and would not impair the favourable long-run growth perspective of the Community, provided that adequate economic policies are implemented in a strongly coordinated way in the member countries, together with wage moderation. The experience of the former oil price shocks has shown that uncoordinated and divergent policy and wage reactions could lead to much larger detrimental macroeconomic impacts and divergences between countries than the mere mechanical pass-through of the oil price increase alone. Whatever might be the effective future oil price, coordinated economic policies in the Community are therefore of fundamental importance for the maintaining of the Community's economic and social cohesion and for strengthening the basis of a sustainable and dynamic growth process in the medium term.

1. Recent evolution of the oil market

This study presents a tentative analysis of the effects of the present oil price increases which result from the invasion of Kuwait by Iraq in August 1990. The analysis is based on two multinational models, Compact and Quest, currently used by the Commission services. [1] Since the general situation in the Gulf is still very uncertain and the evolution of oil prices (at least on spot markets) still very erratic and dominated by speculative moves (see Graph 1) two scenarios describing two different possible evolutions of oil prices will be presented.

In order to understand better the magnitudes of the simulation results it is useful to compare the assumptions presently retained for the price of imported oil to actual developments during the two previous oil price shocks of 1973-74 and 1979-81.

[1] Compact is an annual model for the EUR 12 aggregate, whereas Quest is a quarterly model which treats all Member States individually as well as the USA and Japan.

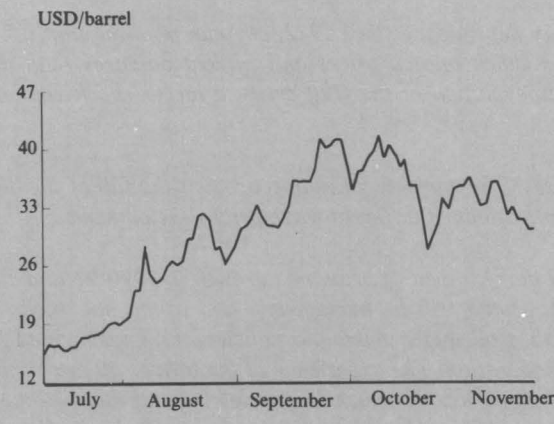
(i) Evolution of the dollar-quoted oil market-price

Since August 1990 the world economy has been confronted by an unexpected and important rise in crude oil prices. Taking as an example the spot price of Brent crude, the average of daily quotations in dollars rose from USD 17,3 per barrel in July to USD 35,1 in September and USD 36,0 in October.

The evolution of spot prices should of course be taken with caution since speculative and other factors might cause significant short-term divergences between spot quotations and the effective average price of imported oil from all sources, which is the relevant dollar-cost indicator for a given economy. However, when looking at the historical series, these two variables proved to vary very closely to one another in the long run.

If one assumes, for illustrative purposes, that the rise in spot market prices will be maintained during several quarters and that the effective average price of oil will reach, say, USD 30 per barrel in 1991, oil importers will face a dollar price increase of about 70 % with respect to the 1989 average price.

GRAPH 1: **Spot quotation of Brent oil in US dollars per barrel, 12 July to 19 November 1990**



Price variations registered during the previous oil price shocks were much higher in relative terms. Thus, in 1973-74, the price of oil [1] rose from USD 2,7 in 1973 to USD 10,5 in 1974, i.e. by nearly 400 %. During the second oil price shock, the absolute orders of magnitude were larger, from USD 13,8 in 1978 to USD 36,3 in 1981 but the relative change was smaller at 260 % (see Table 1 and Graph 2).

The present increases are therefore about half-way between the former oil price shocks in absolute dollar terms but are still significantly smaller in relative terms.

Furthermore, the dollar import price is but one element in the final impact of oil price rises on oil and energy balances and costs in the Community. On the one hand, one should take into account the evolution of the dollar *vis-à-vis* national currencies as well as the evolution of the real price of oil which both determine the effective price effect for the Community's economies. On the other hand, the evolution of oil and energy dependence since 1972 will also affect the sensitivity of these economies to any rise in oil and energy costs.

[1] Which remained steady at around USD 1,8 per barrel during the 1960s.

(ii) The influence of exchange-rate variations

Since oil is quoted in dollars on world markets, the evolution of the dollar against the Community's currencies may either amplify or reduce the dollar changes quoted in Section (i).

As shown in Graph 2, the strong appreciation of the dollar against the ecu during 1981-85 not only increased the initial impact of the 1981 oil price rise but also made it more long-lasting, with ecu import prices *rising* until 1985 whereas dollar-denominated prices started to *decrease* from 1982 onwards.

Conversely, the present evolution of the dollar from an average of ECU 0,9 in 1989 to about ECU 0,75 presently would, if maintained throughout 1991, significantly dampen the price effect. Indeed, the USD 30 per barrel assumption for 1991 would result in an ecu import price of 22,5, i.e. a relative change of about 40 % in ecus (from ECU 16,0 in 1989 to ECU 22,5 in 1991) as against nearly 70 % in dollars (from USD 17,7 to USD 30).

(iii) The evolution of the real price of oil for the Community

The effective cost of a change in oil prices for the Community is also influenced by the evolution of the price of oil relative to domestic inflation. Graph 3 shows the evolution of the ecu import price of oil, both in nominal and in real terms, the latter being computed as the ratio of the nominal ecu import price index to the Community's GDP price index. As can be seen, the cumulated effects of the changes in the ecu rate and in the GDP deflator since 1973 brought the real price of oil in the Community in 1989 well below its level in 1974. Given the assumptions made in this study for the nominal price of oil, the ecu/dollar rate and average inflation in 1991 the real price of oil would still remain at a lower level in 1991 than in 1974. In fact, it would be equivalent to 75 % of the level of 1974 and to about 50 % of the real price of 1981.

According to the mechanical computations presented in Table 5 for illustrative purposes, the nominal average price of imported oil would have to reach USD 55 per barrel in 1991 in order to replicate the 1978-81 oil price shock.

(iv) The evolution of oil and energy dependence

Another important difference between the present situation and those prevailing during the two previous oil price shocks can be found in the present state of energy and oil dependence in the member countries.

Table 1

Average oil import price, EUR 12 (dollars or ecus per barrel)

	Dollars			Ecus			
	Average import price	Price index 1972 = 100	Annual % change	Average import price	Price index 1972 = 100	Annual % change	Real price index[1] 1972 = 100
1972	2,7	100,0	—	2,4	100,0	—	100,0
1973	2,8	103,7	3,7	2,3	95,8	−4,2	87,6
1974	10,5	388,9	275,0	8,7	361,5	278,1	294,2
1975	11,3	418,5	7,6	9,1	378,4	4,6	271,6
1976	11,8	437,0	4,4	10,6	438,6	16,5	287,6
1977	13,7	507,4	16,1	12,0	499,0	13,2	302,2
1978	13,8	511,1	0,7	10,8	450,1	−10,0	253,7
1979	19,8	733,3	43,5	14,4	600,1	33,3	308,9
1980	32,5	1 203,7	64,1	23,3	970,2	61,8	450,0
1981	36,3	1 344,4	11,7	32,5	1 351,7	39,5	571,8
1982	33,6	1 244,4	−7,4	34,3	1 424,8	5,5	556,3
1983	29,9	1 107,4	−11,0	33,6	1 396,1	−2,0	518,6
1984	29,0	1 074,1	−3,0	36,8	1 527,4	9,5	537,6
1985	27,8	1 029,6	−4,1	36,4	1 513,9	−1,1	508,4
1986	14,4	533,3	−48,2	14,6	608,1	−59,9	197,8
1987	18,1	670,4	25,7	15,6	656,3	6,9	208,2
1988	14,9	553,3	−17,7	12,6	527,9	−19,2	160,5
1989	17,7	655,6	18,8	16,0	680,4	27,0	196,9
1990[2]	23,7	877,8	33,9	18,9	781,6	18,1	216,7
1991[2]	30,0	1 111,1	26,6	22,6	944,4	19,6	248,4

[1] Index of oil price in ecus deflated by the deflator of Community GDP in ecus.
[2] On the assumption of:
(i) an average import price of USD 23,7 in 1990 and USD 30 in 1991;
(ii) the dollar remaining at the levels of the beginning of October 1990 until the end of 1991 (USD 1 = DM 1,545 and ECU 0,755).

Source: Energy statistics of the IEA and national accounts of Eurostat.

As a consequence of technological innovations, changes in the sectoral composition of output and specific energy policy measures in the Community, energy intensity has declined by 25,6 % between 1973 and 1989 for EUR 12 as a whole (see Table 2 and Graph 4).

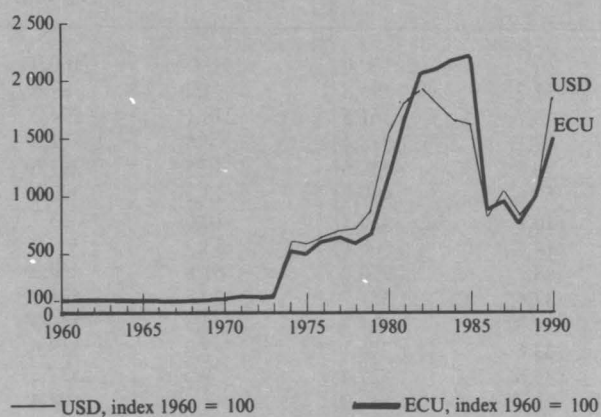
Furthermore, the volume of oil consumption per unit of GDP has dropped by 43,6 % on average during the period from 1973 to 1989 (see Table 2 and Graph 5) [1] as a result of the substitution of other sources of energy for oil.

[1] There are however important differences between countries. Most notably Greece and Spain have not been successful in reducing their oil dependence and Portugal has even significantly increased its share of oil consumption in GDP, a fact that may be linked to their transition towards a productive structure with a higher industrial content.

Finally, due to the exploitation of oil fields in the North Sea by the United Kingdom and Denmark, the import dependence of the Community *vis-à-vis* the rest of the world has been reduced even more, namely by 55,6 % for the same period (see Table 2 and Graph 6).

For the USA and Japan similar developments concerning oil consumption can be observed with Japan performing only slightly better than the EUR 12 countries on average (see Graph 5). While for the Community as a whole and Japan oil imports are roughly in line with oil consumption, a different picture emerges for the USA. Although the USA has been nearly as successful in reducing oil consumption as the two other regions its share of oil imports in real GDP has in 1989 again reached the level of 1973 (see Graph 6).

GRAPH 2: **Oil import price**



GRAPH 3: **Oil real import price**

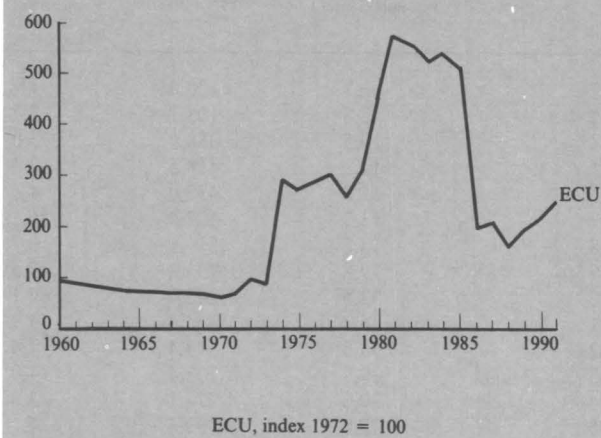


Table 2

Energy intensity[1]

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
							Volume of primary energy requirements per unit of GDP at 1985 prices								
1970	100,3	109,2	102,0	89,7	94,8	99,3	99,0	94,6	107,2	90,8	101,4	103,1	99,8	101,1	101,3
1975	88,8	88,2	93,6	103,1	107,4	92,5	86,2	92,6	84,3	92,9	106,6	90,7	92,7	96,2	97,5
1980	83,0	84,5	90,4	110,1	116,4	92,3	84,8	82,1	70,8	89,3	108,2	82,5	88,3	89,2	85,3
1985	74,7	74,5	83,5	118,9	112,8	87,0	79,2	74,3	55,1	80,0	115,7	75,4	81,7	76,0	72,5
1989	69,0	70,0	74,7	123,7	110,2	83,4	75,5	73,6	51,6	76,2	126,3	67,4	76,4	71,9	69,7
							Volume of total requirements of oil and oil products per unit of GDP at 1985 prices								
1970	98,1	105,0	98,2	87,8	96,3	90,0	89,5	92,2	98,8	103,7	91,8	96,5	95,6	97,2	95,1
1975	78,4	81,9	86,6	98,7	121,3	87,8	90,2	87,7	85,1	75,8	116,7	80,3	86,9	96,7	95,6
1980	68,8	62,1	77,1	108,4	130,0	77,4	79,7	74,7	64,1	79,2	118,9	64,7	77,4	85,0	77,0
1985	49,6	44,8	62,2	99,5	95,3	55,4	52,6	59,6	54,4	53,8	118,0	56,0	60,4	67,5	54,6
1989	47,7	35,6	53,6	99,6	97,7	50,8	44,2	58,7	65,1	54,2	136,2	50,9	56,4	64,1	54,2
							Volume of net imports of oil and oil products per unit of GDP at 1985 prices								
1970	100,6	107,5	98,1	91,9	95,0	92,5	73,7	95,2	99,0	100,8	94,3	101,0	97,3	76,3	96,7
1975	80,8	83,5	86,6	87,2	106,3	83,1	74,1	82,6	85,5	75,5	108,9	78,1	83,7	131,8	96,4
1980	70,4	59,3	80,1	116,9	117,7	78,1	66,5	72,0	64,1	77,6	118,3	1,5	66,7	121,0	76,8
1985	50,2	33,3	61,4	87,2	87,9	51,9	42,2	56,0	55,4	48,4	104,0	−36,3	41,7	72,2	53,1
1989	53,2	15,1	53,2	98,2	94,0	48,6	36,1	53,3	64,7	53,2	128,8	−5,7	44,4	100,4	52,6

[1] 1 000 toe per billion PPS; 1972 = 100.

Source: Energy statistics of the IEA and national accounts of Eurostat.

Table 3

Net imports of oil and oil products, in billion ecus[1]

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 11	EUR 12	USA	J
1972	0,5	0,3	2,3	0,1	0,6	1,9	0,1	1,6	0,0	0,7	0,1	1,8	8,2	10,1	3,8	3,9
1973	0,5	0,3	2,3	0,2	0,7	2,1	0,1	1,7	0,0	0,7	0,1	1,8	8,6	10,5	4,8	4,3
1974	1,8	1,1	8,2	0,7	2,7	8,0	0,3	6,3	0,1	2,3	0,4	7,0	31,9	38,9	17,9	16,9
1975	1,6	1,1	7,8	0,5	2,7	6,6	0,3	5,7	0,1	2,1	0,4	5,8	29,0	34,7	19,7	16,0
1976	2,0	1,2	10,2	0,9	3,6	9,0	0,4	7,3	0,1	2,9	0,6	6,1	38,1	44,2	27,4	19,3
1977	2,3	1,4	12,1	0,8	3,9	9,6	0,5	8,1	0,1	3,1	0,6	4,6	42,6	47,2	42,0	22,4
1978	2,1	1,3	11,1	0,9	4,1	8,6	0,5	7,4	0,1	2,9	0,6	3,3	39,6	42,8	33,8	20,0
1979	2,8	1,6	15,7	1,1	4,7	11,8	0,7	9,7	0,1	4,2	0,9	1,8	53,2	55,1	46,2	26,7
1980	4,0	2,3	22,8	2,1	8,1	18,1	1,0	16,0	0,2	6,3	1,5	0,3	82,4	82,7	56,2	41,7
1981	4,6	2,5	25,9	2,8	11,1	21,9	1,2	21,5	0,2	7,2	2,0	−4,1	101,0	96,9	65,8	50,1
1982	5,3	2,4	18,2	2,6	10,2	22,5	1,1	21,7	0,3	6,8	2,3	−7,0	93,2	86,2	55,2	52,4
1983	4,7	2,1	24,8	2,4	9,9	20,6	1,0	19,7	0,2	6,2	2,3	−10,5	93,9	83,4	52,8	50,9
1984	4,9	2,2	27,7	2,6	10,2	22,4	1,1	21,9	0,3	6,6	2,6	−10,2	102,4	92,2	63,5	58,0
1985	4,9	2,2	27,9	2,7	10,0	21,0	1,1	21,2	0,3	6,3	2,2	−13,0	99,9	86,9	56,5	54,0
1986	2,4	0,9	12,6	1,1	3,9	8,6	0,5	8,3	0,1	3,1	1,0	−5,1	42,6	37,5	29,8	24,6
1987	2,4	0,7	12,6	1,3	4,7	9,4	0,5	9,7	0,1	2,8	1,1	−5,4	45,5	40,0	33,2	23,6
1988	2,0	0,5	10,3	1,1	4,0	7,6	0,4	7,6	0,1	2,7	0,9	−3,3	37,1	33,8	29,0	21,0
1989	2,6	0,4	12,2	1,4	5,6	9,6	0,5	10,0	0,2	3,4	1,4	−1,0	47,3	46,3	40,9	26,4
1990[2]	3,1	0,5	14,4	1,7	6,6	11,3	0,6	11,8	0,2	4,0	1,7	−1,2	55,8	54,6	48,3	31,2
1991[2]	3,7	0,6	17,3	2,0	7,9	13,6	0,7	14,2	0,2	4,8	2,0	−1,4	67,0	65,5	57,9	37,4

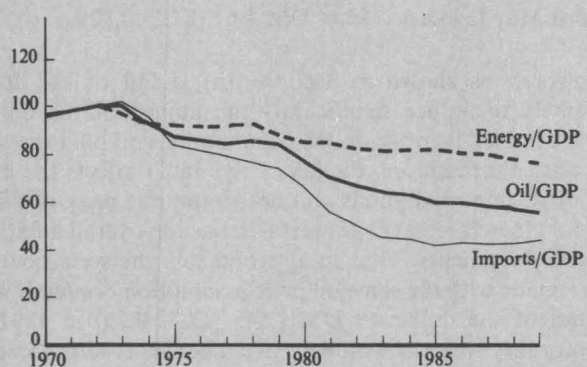
EUR 11 = EUR 12 excluding the UK.

[1] The value of imports is obtained by multiplying the volume of imports of oil and oil products expressed in toe by average crude oil import prices for each country.

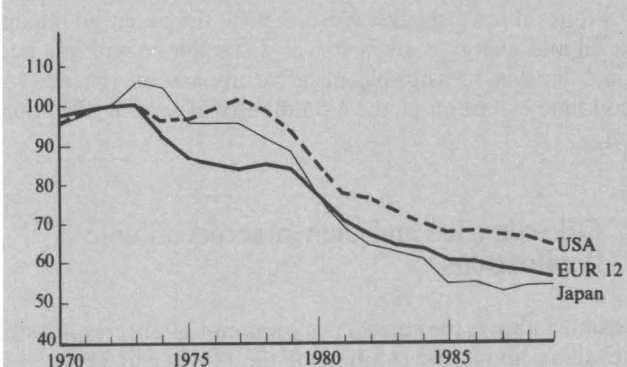
[2] The value of imports is obtained by multiplying the volume of imports of oil and oil products expressed in toe in 1989 by estimates of average crude oil import prices in ecus based on the estimates in Table 1.

Source: Energy statistics of the IEA and national accounts of Eurostat.

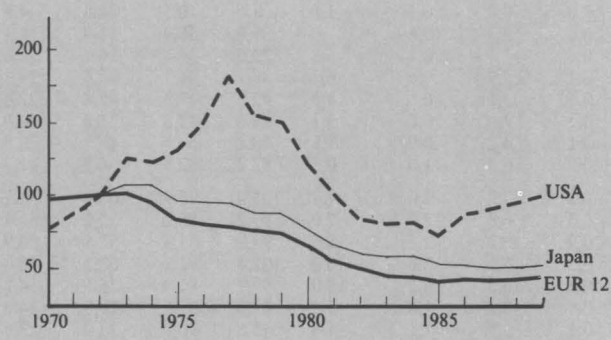
GRAPH 4: **Energy intensity EUR 12** (1972 = 100)



GRAPH 5: **Oil intensity per unit of GDP** (1972 = 100)



GRAPH 6: **Oil imports per unit of GDP** (1972 = 100)



Source: Energy statistics of the IEA and national accounts of Eurostat.

On the basis of these evolutions, and barring a war escalation leading to major disruptions in Gulf oil supplies, it appears that the present oil price increase would have a significantly smaller impact on net oil bills in the Community than the previous oil price shocks. Nevertheless, the potential impact on oil and energy costs is still of a sizeable magnitude and could have a measurable negative impact on the macroeconomic evolution of the Community at least in the short run.

2. Oil scenarios and their macroeconomic implications

As stated above, the considerable amount of uncertainty still prevailing about the solution of the Gulf crisis leads to a very wide range of possible oil prices and one cannot exclude either a large (temporary or long-lasting) price increase with important macroeconomic impacts on the Community growth, inflation, employment and external balance or, in the case of a fast political solution to the crisis, a rapid fall of the oil price to its pre-crisis level, with very limited macroeconomic effects. There is therefore a need for illustrative scenarios that would quantify these implications under various behavioural and external assumptions and would put into light their policy implications.

Two scenarios were investigated. [1]

The first scenario (S1) is based on the oil price assumptions retained by the Commission services in the October/November 1990 short-term forecasting exercise. This scenario assumes implicitly a negotiated solution to the Gulf crisis in the near future, with a progressive return to a more normal situation on the oil market during the second half of 1991. This would result in a temporary rise in the average oil import price of the Community from USD 17,4 per barrel during the first semester of 1990 to USD 30 during the second semester and USD 33 during the first semester of 1991. Prices would then fall towards a new stable level of USD 25 per barrel from the second semester of 1991 onwards.

The second scenario (S2) is based on the assumption of a long-lasting crisis and of a supply shortage leading to a permanent increase by USD 15 in the price of imported oil with respect to pre-crisis projections from the second semester of 1991 onwards and putting the dollar/barrel price at USD 35 in the foreseeable future.

In both cases a step-by-step approach was followed in order to clarify the issues.

In the first step, the oil price scenarios will be quantified in isolation, i.e. *without* the impact of the dollar fall. In other words, the scenario will be done under the assumption that the dollar remains during 1990-91 at the level retained in the April/May forecasts, i.e. at DM 1,67 (ECU 0,82).

However, as shown in Section 1(ii), a fall of the dollar is likely to reduce significantly the impact of the dollar-denominated increase on the Community's oil bill expressed in ecus. Furthermore, the fall of the dollar affects the price of other imported goods and not simply the price of oil. It should therefore have a powerful impact on overall inflationary developments. Thus in a second step the scenarios will be remade with the same oil price assumption *combined* with a fall of the dollar to DM 1,545 (ECU 0,75) in 1991 in conformity with the October/November short-term forecast assumptions.

Finally, the experience derived from the previous oil price shocks shows that their macroeconomic impacts are strongly influenced by wage behaviour. In the third step the present

[1] The case of a fast solution to the crisis was not investigated since, in yearly terms, its macroeconomic implications would be negligible.

Table 4

Net imports of oil and oil products, as a percentage of current GDP[1]

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 11	EUR 12	USA	J
1972	1,6	1,7	1,0	1,2	1,2	1,1	2,0	1,4	1,9	1,5	1,3	1,3	1,2	1,2	0,4	1,4
1973	1,4	1,3	0,8	1,4	1,1	1,0	1,6	1,3	1,7	1,3	1,1	1,3	1,1	1,1	0,4	1,3
1974	4,1	4,1	2,6	4,3	3,6	3,5	5,8	4,1	4,5	3,7	3,8	4,3	3,4	3,5	1,5	4,3
1975	3,3	3,5	2,3	3,1	3,1	2,4	4,9	3,4	4,5	2,9	3,6	3,1	2,7	2,3	1,5	3,9
1976	3,3	3,2	2,6	4,3	3,7	2,8	5,3	3,9	4,6	3,4	4,0	3,1	3,1	3,1	1,7	3,8
1977	3,3	3,5	2,7	3,7	3,7	2,8	5,7	3,8	4,9	3,2	4,4	2,1	3,1	3,0	2,4	3,7
1978	2,9	2,8	2,2	3,5	3,6	2,3	4,6	3,1	4,0	1,7	4,0	1,3	2,6	2,4	1,9	2,6
1979	3,5	3,3	2,8	3,9	3,3	2,8	5,5	3,6	4,2	3,7	6,2	0,6	3,1	2,8	2,6	3,6
1980	4,7	4,7	3,9	7,5	5,3	3,8	6,9	4,9	5,2	5,1	8,6	0,1	4,4	3,7	2,9	5,5
1981	5,3	4,8	4,2	8,5	6,7	4,2	7,1	5,9	6,6	5,7	8,9	−0,9	5,0	3,9	2,4	4,8
1982	6,2	4,1	2,7	6,6	5,6	4,0	5,7	5,3	7,2	4,8	9,8	−1,4	4,2	3,2	1,7	4,7
1983	5,2	3,3	3,4	6,1	5,7	3,5	4,8	4,2	6,2	4,1	9,7	−2,0	4,0	2,9	1,4	3,8
1984	5,0	3,2	3,5	6,1	5,1	3,5	4,9	4,2	6,1	4,2	10,6	−1,9	4,0	3,0	1,3	3,6
1985	4,7	2,9	3,4	6,3	4,6	3,0	4,4	3,8	6,1	3,8	8,2	−2,2	3,6	2,6	1,1	3,1
1986	2,1	1,0	1,4	2,9	1,7	1,2	2,1	1,4	2,4	1,7	3,3	−0,9	1,4	1,1	0,7	1,2
1987	2,0	0,8	1,3	3,2	1,9	1,2	1,9	1,5	2,8	1,5	3,4	−0,9	1,4	1,1	0,9	1,1
1988	1,6	0,5	1,0	2,5	1,4	0,9	1,3	1,1	2,1	1,4	2,4	−0,5	1,1	0,8	0,7	0,9
1989	1,9	0,5	1,1	2,9	1,7	1,1	1,5	1,3	2,8	1,7	3,5	−0,1	1,3	1,1	0,9	1,0
1990[2]	2,0	0,6	1,2	3,3	1,8	1,2	1,7	1,4	2,9	1,8	3,7	−0,2	1,4	1,2	1,1	1,4
1991[2]	2,3	0,7	1,4	3,6	1,9	1,4	2,0	1,6	3,1	2,1	4,0	−0,2	1,6	1,3	1,3	1,6

EUR 11 = EUR 12 excluding the UK.

[1] The value of imports is obtained by multiplying the volume of imports of oil and oil products expressed in toe by average crude oil import prices for each country.

[2] The value of imports is obtained by multiplying the volume of imports of oil and oil products expressed in toe in 1989 by estimates of average crude oil import prices in ecus based on the estimates in Table 1.

Source: Energy statistics of the IEA and national accounts of Eurostat.

Table 5

Impact of the oil price shocks — EUR 12[1]

1973-74	1978-81	1989-91[2]				1988-91[2]			
		USD 25 = ECU 18,9	USD 30 = ECU 22,6	USD 35 = ECU 24,6	USD 55 = ECU 41,5	USD 25 = ECU 18,9	USD 30 = ECU 22,6	USD 35 = ECU 24,6	USD 55 = ECU 41,5[3]
2,3	1,5	−0,02	0,20	0,40	1,2	0,24	0,45	0,56	1,5

[1] Change in the import bill expressed as a percentage of current GDP.

[2] On the assumption of import volumes in 1991 being equal to those of 1989 and of the dollar remaining at the levels of the beginning of October 1990 until the end of 1991 (USD 1 = DM 1,545 and ECU 0,755).

[3] Barrel price producing the same deterioration of the oil bill in 1988-91 as in 1978-81.

scenarios will be investigated under alternative assumptions on the impact of the oil price on wage formation. Initially (steps 1 and 2), the scenarios will be made with a full pass-through of price increases due to oil prices into wages within one year. In step 3 it is assumed that a social consensus would emerge for an equal distribution of the oil cost burden between wages and profits. More specifically, the pass-through of price increases due to higher oil prices into wages will be limited to 50 % of its amount. This assumption is of course purely illustrative, but, given the order of magnitude, any other wage/profit distribution could be derived from the present one by interpolation. Thus, for instance, a total absence of repercussions (0 % pass-through) would practically double the differential impact between step 3 and step 2.

Before going further, it should be emphasized once more, that the analyses presented in this study are *not* forecasts but mere illustrative scenarios. One should therefore not try to compare the variations with respect to the June 1990 projections given in the tables to the effective changes in the Commission's short-term forecasts since the latter include many changes in assumptions rather than merely the change in the price of oil and logically produce different outcomes.

(i) Impact of the oil price increase *'stricto sensu'*

For the Community as a whole, and under the assumption of full transmission of the price increases due to oil into wages, the first scenario (S1: temporary price increase) shows a slowdown of real GDP by about 0,4 points in 1990 and 1,3 points in 1991 (see Table 6), when compared to the pre-crisis (May 1990) forecasts. Inflation measured by private consumption prices would increase by 1,4 points in 1990 and by 2,2 points in 1991.The growth of employment would also fall by 0,3 to 0,6 points and the public budget and current balance would deteriorate by 0,3 to 0,5 points of GDP. Since the shock is temporary, growth, inflation and employment would progressively return to their baseline levels in the medium term.

The second scenario (S2: permanent price increase) would have impacts in 1991 roughly 50 % larger than those of S1, with a slower resorption in the medium term.

(ii) Effect of the fall of the dollar

When the observed fall of the dollar is introduced in the scenarios and is assumed to persist in 1991, the inflationary impact is reduced by about 0,7 points in 1991 (see Table 7) and by about 0,3 points on average over the period 1990-94. But the fall of the dollar would also increase slightly the negative impact on growth by about 0,1 points per year on the average. This results from the two opposite effects of an ecu appreciation. Since the appreciation applies to all extra-EC imports and not merely to oil it reduces significantly import costs and has therefore beneficial effects on inflationary developments. On the other hand it affects competitive-

Table 6

Oil price scenario — Isolated impact of the oil price[1]
(average annual rate of change in %, except when otherwise noted)

	Baseline[2]			Temporary[3]			Permanent[4]		
	1990	1991	1994/1989	1990	1991	1994/1989	1990	1991	1994/1989
Real GDP	3,0	3,1	3,1	2,6	1,8	2,8	2,5	1,3	2,7
Real private consumption	3,3	2,8	2,9	2,7	0,9	2,5	2,6	0,5	2,5
Real total investment	4,6	4,1	4,8	4,2	1,5	4,5	4,1	1,1	4,3
Private consumption price	4,7	4,3	4,0	5,1	6,5	4,6	5,2	7,3	5,0
GDP deflator	5,1	4,5	4,0	4,9	6,3	4,4	5,0	7,1	4,8
Nominal wage/employee	6,7	6,1	5,8	6,9	8,0	6,5	7,0	8,4	6,8
Total employment	1,4	0,9	1,0	1,1	0,3	0,7	1,1	0,0	0,6
Unemployment rate (%)	8,5	8,3	7,9	8,8	9,2	9,1	8,8	9,5	9,2
Budget balance (% GDP)	−3,3	−2,9	−2,4	−3,4	−3,7	−3,1	−3,5	−4,0	−3,3
Current balance (% GDP)	0,2	0,3	0,3	−0,1	−0,2	−0,2	−0,2	−0,3	−0,2

[1] Changes in oil prices without exchange rate effect and with full pass-through of price increases due to higher oil prices into wages.
[2] 1990-91: economic forecasts, April-May 1990; 1992-94: medium-term projections 1990-94, June 1990.
[3] Oil prices will reach USD 30 per barrel in the second semester of 1990 and USD 35 in the first semester of 1991, and fall afterwards to USD 25.
[4] Permanent rise in the average import price of oil by USD 15 per barrel from the second semester of 1990 onwards.

Source: Compact model of the Commission services.

ness of the EC on third markets and therefore entails some negative impact on real GDP growth (see Table 7).

(iii) Effects of different wage behaviour

It is assumed in steps 1 and 2 that the domestic price increases due to the change in oil prices would be fully transmitted into wage increases within one year. Under the assumption that the oil-induced consumption price increase is only passed into wages by 50 %, the inflationary impact of a temporary oil price rise would be reduced by 0,8 points (see Table 7) in 1991 and inflation could practically be brought back to its pre-crisis 1990-94 trend in the medium term when the influence of the dollar fall is added to the wage moderation effect. Real GDP growth would be slightly higher (by about 0,3 points in 1991 and by 0,2 points on average during the period 1990-94). In the case of a permanent oil price rise the assumption of a 50 % pass-through would reduce inflation by one point in 1991 and by 0,6 points on average during the period 1990-94 as compared to the case without wage moderation. Real GDP growth would also exceed the rate obtained without wage moderation by 0,4 points in 1991 and 0,2 points on average during the period 1990-94.

3. Individual country considerations

(a) EC member countries

As shown in Tables 3 and 4, there are significant differences among Member States in net oil and energy bills, and countries may be regrouped into 3 subgroups.

Group 1 : Countries with combined oil and energy bills lower than the EC average

United Kingdom	the only country having a positive oil and energy bill
The Netherlands	negative oil bill but positive energy bill thanks to natural gas
Denmark	negative, but low, oil and energy bill

Group 2 : Countries close to the EC average

France Germany	around the EC average
Italy Ireland Spain Belgium	0,2 to 0,8 points above the EC average

Group 3 : Countries significantly above the EC average

Luxembourg Greece Portugal	more than 1,5 points of GDP above the EC average

Thus, among the largest ERM countries (except the United Kingdom), the relative impacts on the external positions would be about the same. However, in absolute terms, a further deterioration of the current account could cause problems in Spain and Italy and possibly in France in the case of a permanent shock.

The smallest ERM members are in a somewhat better position, since all of them except Denmark have at present large current balance surpluses, able to absorb the assumed oil price increases.

For Denmark, the initial position is different but, given its favourable oil and energy bill position, the impacts of the assumed oil price scenarios should be small and should not disturb too deeply the official target of current balance consolidation.

(b) United States and Japan

Results for growth and inflation in the United States are of the same order of magnitude as for the EC, their potential for increased domestic oil production (which reduces the external balance impact) being roughly compensated by their higher intensity of use of oil per unit of GDP.

Japan, on the other hand, would benefit from its strong energy-saving programmes (which put its oil intensity of use per unit of GDP slightly below the EC average) and would register somewhat lower impacts on growth, inflation and current balance.

(c) Eastern and Central European countries

As regards the Eastern and Central European countries, the situation is more complex. Compared to the EC average, their oil and energy consumption per unit of output is very

Table 7

Oil price scenarios incorporating the fall in the dollar[1]
(average annual rate of change in %, except when otherwise noted)

	Baseline[2]			Without wage moderation[3]						With wage moderation[4]					
				Temporary[5]			Permanent[6]			Temporary[5]			Permanent[6]		
	1990	1991	1994/1989	1990	1991	1994/1989	1990	1991	1994/1989	1990	1991	1994/1989	1990	1991	1994/1989
Real GDP	3,0	3,1	3,1	2,5	1,7	2,7	2,4	1,2	2,6	2,6	2,0	2,8	2,5	1,6	2,8
Real private consumption	3,3	2,8	2,9	2,8	1,0	2,5	2,7	0,6	2,5	2,8	1,2	2,6	2,8	0,9	2,7
Real total investment	4,6	4,1	4,8	4,1	1,3	4,4	4,0	0,9	4,2	4,2	2,0	4,6	4,0	1,7	4,5
Private consumption price	4,7	4,3	4,0	4,8	5,8	4,3	4,9	6,6	4,7	4,6	5,0	3,9	4,8	5,6	4,1
GDP deflator	5,1	4,5	4,0	4,7	5,8	4,2	4,8	6,6	4,6	4,5	5,0	3,8	4,7	5,6	4,0
Nominal wage/employee	6,7	6,1	5,8	6,7	7,6	6,3	6,8	8,0	6,6	6,4	6,6	5,9	6,5	6,8	6,1
Total employment	1,4	0,9	1,0	1,1	0,2	0,6	1,1	−0,1	0,5	1,2	0,4	0,8	1,2	0,2	0,7
Unemployment rate (%)	8,5	8,3	7,9	8,8	9,3	9,2	8,8	9,6	9,3	8,7	9,0	8,7	8,7	9,2	8,8
Budget balance (% GDP)	−3,3	−2,9	−2,4	−3,3	−3,6	−3,0	−3,4	−3,9	−3,2	−3,2	−3,3	−2,7	−3,3	−3,5	−2,8
Current balance (% GDP)	0,2	0,3	0,3	0,0	−0,3	−0,3	−0,1	−0,4	−0,3	0,0	−0,3	−0,2	−0,1	−0,4	−0,3

[1] Based on a fall in the DM/USD reference rate from 1,67 to 1,55 from the third quarter of 1991 onwards.
[2] 1990-91: economic forecasts, April-May 1990; 1992-94: medium-term projections 1990-94, June 1990.
[3] Full pass-through of the rise in consumption prices due to higher oil prices into wages within one year.
[4] The rise in consumption prices due to higher oil prices is only passed into wages by 50% within one year.
[5] Oil prices will reach USD 30 per barrel in the second semester of 1990 and USD 35 in the first semester of 1991, and fall afterwards to USD 25.
[6] Permanent rise in the average import price of oil by USD 15 per barrel from the third quarter of 1990 onwards.

Source: Compact model of the Commission services.

high. While it reveals a considerable potential for energy savings in the longer run, it implies today that these economies are very vulnerable to increases in oil and energy prices. The smaller Eastern and Central European countries largely import oil from the USSR — the single largest oil producer in the world — at a price which now follows the international market price. Formerly, energy imports were bartered against exports of goods typically valued at a higher price than they would fetch on the world market. Should their oil bill rise according to current market prices and have to be paid in convertible currencies, the economies of the smaller Eastern and Central European countries could be strongly hit, given the difficulty they would probably register in increasing their own, hard-currency export receipts.

(d) Less developed countries

If one excludes oil producers, less developed countries would also be hit more than industrialized countries by an oil price rise: contrarily to what happened in the OECD, their economic development since 1973 did not go together with significant reductions in energy and oil dependency. The oil price impact would therefore be stronger. They would also be affected by the slow down of demand coming from industrialized countries. Finally, the non-oil-producing, heavily indebted countries would register an increase in their debt charges due to a possible rise of nominal interest rates. All in all, the non-oil-producing LDCs would also be strongly hit by any new oil price shock.

4. Overall evaluation and policy implications of the oil price rise scenarios

When the results of the various scenarios are compared to the actual development of key economic variables during the two previous oil price shocks (Table 5) the impact for EUR 12 is smaller than the impacts registered after 1974 and 1979. As stated in Section 1, this is due to several 'objective' factors:

(i) the assumed oil price hike is less steep than in the previous oil price shocks;

(ii) the intensity of use of energy per unit of GDP has decreased by one-quarter in the EC since 1972;

(iii) the intensity of use of oil products was reduced even more, given the substitution of other sources of energy for oil;

(iv) at the external balance level, the dependence on extra-EC oil sources was reduced by the development of intra-EC oilfields in the North Sea.

This, however, should be no reason for complacency: the dent in economic growth and the jump in inflation cannot be neglected and might be made much worse by wrong policy and behavioural reactions. Variants built on the amplitude and the speed of the repercussion of the price increases into wages show that the risk of a wage/price spiral and of a new process of high inflation should not be taken lightly, since it would result in a damaging squeeze of profitability which in turn would reinforce the medium-term negative effects on investment, growth and employment.

Furthermore, the experience of the previous oil price shocks also emphasizes the need for policy actions that are not only adequate but also closely coordinated among member countries.

As shown in Study No 4 on convergence in the Community, the fact that countries reacted to the 1974 oil price shock individually, with very divergent policies and wage behaviour, resulted in deep divergences in the evolution of exchange rates, inflation and external balances which went very much above what the initial oil balance and intensity positions would have suggested. With the benefit of hindsight, this lack of coordination appears as one major reason for the very weak cohesion of the EC during the second half of the 1970s.

The response to the second oil price shock of 1979-81 showed some improvement in policy coordination due notably to the existence of the EMS, but since the effects of the 1974 shock were not resorbed, dispersion remained high and the improvement of the Community's internal cohesion required long and painful efforts all through the 1980s.

Of course, since the last oil price shock, the consensus on economic policy and the coordination of monetary policies did improve significantly. However, the perspectives opened by economic and monetary union (EMU) are so fundamental for the future of the Community that the progress made under the ERM should not be endangered and future developments should not be hampered by a resurgence of divergent policy actions, as observed in the previous oil price shocks.

Should the price of oil follow one of the present scenarios (or any combination thereof), the case is strong from a Community point of view to provide, from the start, an adequate and strongly coordinated policy response, using the institutional framework provided by Stage I of EMU.

Indeed, the experience of the previous oil price shocks seems to plead for an economic policy stance that would remain directed towards price and exchange-rate stability and would

Table 8

Economic performance of EUR 12 during the two previous oil price shocks

	First oil price shock			Second oil price shock		
	1972	1974	Difference 1974/1972	1978	1980	Difference 1980/1978
Growth[1]	4,2	1,9	−2,3	3,0	1,3	−1,7
Inflation[2]	6,4	15,0	8,6	9,2	13,6	4,4
Trade balance[3]	1,0	−1,5	−2,5	0,9	−1,3	−2,2
Exchange rates[4]	1,12	1,19	6,3[5]	1,27	1,39	9,3[5]
Nominal short-term interest rates[6]	5,5	12,3	6,8	8,9	13,8	4,9
Nominal long-term interest rates[6]	8,0	11,5	3,5	10,4	13,0	2,6
Real long-term interest rates[6]	0,9	−1,6	−2,5	−0,1	3,8	3,9
Budget balance[7]	−1,5	−4,8[8]	−3,3	−3,9	−5,4[9]	−1,5
Nominal compensation per employee[10]	11,7	18,0	6,3	12,7	15,0	2,3
Nominal unit labour costs[10]	7,1	16,3	9,2	9,5	13,9	4,4

1 Annual growth rate of GDP.
2 Annual growth rate of deflator of private consumption.
3 Balance on current transactions with the rest of the world (% of GDP).
4 Units of dollars per ecu.
5 Cumulated change in %.
6 In %.
7 Net lending (+) or borrowing (−) of general government of EUR 10 (% of GDP).
8 1975.
9 1982.
10 Annual % change.

Source: Commission services.

not try to compensate for the loss of real demand and income resulting mechanically from oil price movements.

In general terms, therefore:

(i) monetary policy would have to maintain its anti-inflationary stance, keeping as its primary target the stability of prices and exchange rates in the EMS. This could imply some increases in nominal interest rates, with real interest rates remaining nearly constant;

(ii) fiscal policies should not relax their medium-term targets of budgetary consolidation even though the working of the 'automatic stabilizers' and the rise in interest rates could cause some initial deterioration in public balances. They should also not try to compensate for the unavoidable loss of private demand and income that any oil price shock implies. They should however maintain the actions and expenditure (e.g. training, research, etc.) which affect the future growth potential;

(iii) with respect to wage developments, such stability-oriented monetary and fiscal policies would also help in the avoidance of a full and fast transmission of price increases due to oil into wages and in the implementation of an equitable distribution of the oil burden between wages and profits. This in turn would preserve profitability and would minimize the negative impact on the level of investment which is needed to sustain the future growth of the Community;

(iv) finally, on a more sectoral and structural level, the present events show that energy-saving efforts in the Community are definitely not outmoded and should remain a major policy target.

Such a policy stance, inspired from the experience of the former oil price shocks, would of course not enable the Community to escape a temporary slow-down of growth and some acceleration of inflation. But by avoiding the development of an inflationary spiral, it would preserve the chance of a sound growth path in the medium term.

What matters, from the Community point of view, is to put such a policy into action in a closely coordinated manner in order to avoid the divergences between member countries which after 1974 and 1979 endangered the Community's cohesion.

Study No 3

Economic and social cohesion in the Community

Economic and social cohesion in the Community

Tables

Graphs

Summary

The European Community has pursued the objective of a harmonious development across its Member States and main regions since its very beginning. More recently, the EEC Treaty, as amended by the Single European Act, in its Articles 130a, 130b and 130c has reconfirmed this target and called for a strengthening of the economic and social cohesion in the Community with particular emphasis on a resumption of the catching-up process in the least-favoured regions and countries.

To reach that aim, national economic policies in all member countries should be conducted and coordinated in line with the fulfilment of the cohesion target. For the economically stronger countries, it implies a sufficient contribution to a dynamic growth pattern in the Community and the opening of markets to trade from their least-favoured partners. The latter will, however, be in the main responsible for their own development and should conduct their economic and social policies in a way that would provide the basis for a strong and sustainable growth of real GDP, without inflationary build-up and unmanageable internal and external imbalances.

The national policies will have to be complemented and supported by policy actions at the level of the Community, in the framework of the internal market and the progressive realization of economic and monetary union.

In the field of Community actions, specific tools are provided by the structural Funds, the European Investment Bank and other financial instruments. The structural Funds in particular have been significantly reformed in recent years and would make a significant contribution to the catching-up process in the least-favoured countries and regions, in close cooperation with nationally-based counterparts.

1. Introduction

The European Community has pursued the objective of a harmonious development across its regions and Member States since its very beginning. This goal was first stated in the preamble to the Treaty of Rome. It was reconfirmed and spelt out in the Single European Act of 1 July 1987. Article 130a of the EEC Treaty as amended by the Single European Act explicitly calls for the strengthening of the Community's economic and social cohesion and for the disparities between the various regions and the backwardness of the least-favoured regions to be reduced. The latter objective is further specified in Article 130c which refers to the role of the European Regional Development Fund.

The Single Act also recognizes that the strengthening of economic and social cohesion in the Community can only be the outcome of an efficient interplay of appropriate economic and social policies. Indeed, Article 130b contains three main policy guidelines:

(i) it first stipulates explicitly that 'Member States shall conduct their economic policies and shall coordinate them in such a way as, in addition, to attain the objectives set out in Article 130a';

(ii) it then specifies that the Community shall take into account the objective of strengthening economic and social cohesion in the implementation of its common policies and of the internal market;

(iii) finally, Article 130b states that the Community shall support the achievement of the objectives stated in Articles 130a and 130c through the use of the structural Funds, the EIB and the other existing financial instruments.

Article 130b reflects the fact that, in accordance with the subsidiarity principle, the most important instruments of economic policy, both at the macro- and at the microeconomic level, remain in the hands of the Member States who therefore carry the largest responsibility for the achievement of the convergence objective. The economic policy action at Community level must act in a synergetic way to national policies in order to strengthen economic performances in the least-favoured member countries. Finally, the structural Funds and other financial instruments, provided that they are efficiently used in a conducive national framework, will considerably improve both supply and demand conditions in the recipient countries and regions. It may be noted at this stage that these Funds have fixed yearly amounts and are therefore not comparable to federal equalization schemes (as exist, for example in Germany).

The first part of this study will deal with the macroeconomic aspects of the economic and social convergence process and will therefore concentrate mostly on national economies. It should of course be emphasized that the Community's structural Funds policies also have important regional and microeconomic effects in the recipient countries. The second part will deal more explicitly with the role of the structural Funds.

2. Macroeconomic implications of economic and social convergence

The first guideline of Article 130b directly raises the issue of member countries' actions. Given the emphasis put on policy coordination, the catching-up process in the least-favoured regions concerns *all* countries.

The economically stronger countries could contribute to the process by their support for a dynamic medium-term growth in the Community and by opening up further their markets for their least-favoured partners. In particular, the competitive advantages gained by least-favoured countries in specific sectors should not be cancelled out by subsidies in the economically stronger countries. Present developments in the United States and non-oil-producing extra-EC countries make the point all the more necessary since an increase in intra-EC trade will in the short run be critical in order to compensate for the expected reduction in demand from outside the Community. These economically stronger countries could also use their EMS membership to reinforce their nominal convergence and provide the anchor of stability that will help the least-favoured countries to contain and reduce their own inflation rates.

The major responsibility for more rapid economic and social convergence therefore lies in the least-favoured countries themselves, which will have to promote their internal growth conditions by all available means. Indeed, in order to catch up, these countries and regions need, in the medium and

Table 1

Macroeconomic setting in the least-favoured member countries during previous catching-up periods
(volume % increase, unless otherwise stated)

	Greece	Spain	Portugal	Ireland
		1961-73		1977-81
1. GDP	7,7	7,2	6,9	5,0
2. Private consumption	6,7	7,2	6,5	4,4
3. Public consumption	6,2	4,5	8,3	4,4
4. GFCF (total economy)	10,0	10,0	7,8	8,0
5. Stocks	2,7	1,9	3,2	0,5
6. Domestic demand	7,0	7,7	7,5	5,1
7. Exports of goods and services	12,6	11,8	9,6	8,1
8. Imports of goods and services	12,7	17,2	10,6	7,7
9. Total employment	−0,5	0,7	−0,5	1,5
10. Unemployment rate[1,4]	:	1,2	:	8,6
11. Labour productivity	8,2	6.5	7,4	3,4
12. Real compensation per employee	5,5	7,1	7,7	3,3
13. Real unit labour costs	−2,5	0,6	0,3	−0,1
14. GFCF (total economy)[2]	22,7	24,2	24,1	21,7
15. GFCF, private sector[2]	17,2	21,6	21,4	17,1
16. GFCF, public sector[2]	5,4	2,6	2,7	4,4
17. Apparent MEC[3]	0,34	0,29	0,29	0,19
18. Gross national saving[2]	22,5	26,1	25,2	18,8
19. Gross private saving[2]	18,6	22,0	22,4	23,5
20. Gross public saving[2]	3,8	4,1	2,8	−4,7
21. Inflation (GDP deflator)	4,5	7,1	4,0	13,9
22. Net lending/borrowing[4] of general government[2]	:	0,4	0,6	−11,0
23. Current account[2]	−2,9	−0,2	0,4	10,4

Note: Data for gross private and public saving and investment ratios covering the 1960s should be treated with caution as older time series, sometimes based on a different methodology, had to be linked with more recent ones.

[1] Period average, % of civilian labour force.
[2] As % of GDP.
[3] Marginal efficiency of capital.
[4] For Spain, average of the period 1964-73.

long run, to generate growth rates for real national income which are significantly above the Community average and are sustainable, that is, are achieved in a context of relative price and exchange rate stability while internal and external balances are safeguarded.

These general principles are supported by historical evidence (see Graph 1). During the 1960-73 period, when the present Community as a whole experienced dynamic economic growth with a fair degree of price stability, the least-favoured countries (with the exception of Ireland) succeeded in reducing by about 20 points their per capita GDP gap with respect to the Community average. In absolute figures this represented one-half of the gap for Spain and one-third of it for the other three countries. Although history can never be rewritten, Graph 1 also shows that if this process had continued in 1974-90 Spain would have practically reached the average level for the Community and Greece and Portugal would have reached about 75-80 % of that average in 1990. [1]

[1] Ireland did not catch up during the 1960s. The only modest increase in relative per capita GDP was registered in 1976-82, in a somewhat gloomy international environment and in an unsustainable situation of high inflation and increasing macroeconomic disequilibria, both internal and external.

During the earlier catching up period, the economic conditions in the least-favoured countries were marked by fast growth of real GDP, a high investment ratio, high efficiency of capital, low inflation (except for Spain), sustainable current account positions and a balanced expansion of the public sector. Furthermore, the high growth rate of output and of labour productivity justified a catching up of real wages that remained compatible with the requirement of a high investment profitability.

The process came to a halt after 1973 when, as in other member countries, the oil-induced increased struggle over the distribution of income, the acceleration of inflation and the emergence of unsustainable internal and external imbalances severely hampered the growth process. As a consequence the 1973-85 period was marked by either a stagnation or even a regression of the relative positions (see Table 2).

Since 1985, the least-favoured countries, apart from Greece, have started to catch up again, in conditions of largely restored profitability and of wage moderation. They are still, however, as far away from the EC average as they were in 1973-75 and will therefore need a strong and sustainable resumption of the catching-up process in order to close the gap in a reasonable number of years.

GRAPH 1: **Per capita GDP relative to EUR 12 in Greece, Spain, Ireland and Portugal, 1960-90** (in PPS, index EUR 12 = 100)

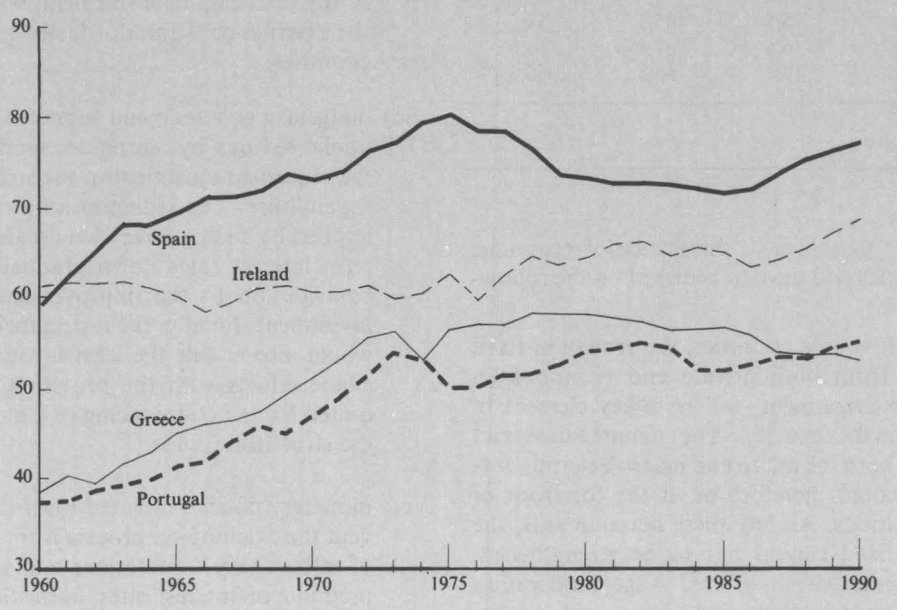


Table 2

Relative per capita GDP in the least-favoured countries
(indices in purchasing power standard, EUR 12 = 100)

	Greece	Spain	Ireland	Portugal
1960	38,4	59,2	61,4	37,3
1961	40,4	62,6	61,8	37,6
1962	39,4	65,4	61,5	38,7
1963	41,7	68,2	61,8	39,3
1964	42,9	68,3	61,1	40,0
1965	45,2	69,6	60,1	41,6
1966	46,1	71,3	58,6	41,9
1967	46,7	71,4	59,6	44,1
1968	47,5	72,0	61,2	45,9
1969	49,5	73,9	61,5	45,2
1970	51,2	73,3	60,7	47,1
1971	53,3	74,1	60,7	49,2
1972	55,7	76,6	61,4	51,5
1973	56,3	77,4	59,9	54,2
1974	53,3	79,5	60,5	53,4
1975	56,8	80,4	62,7	50,2
1976	57,2	78,6	59,9	50,3
1977	57,1	78,4	62,7	51,6
1978	58,5	76,6	64,6	51,7
1979	58,3	73,8	63,7	52,6
1980	58,2	73,4	64,5	54,2
1981	57,8	72,7	65,9	54,5
1982	57,4	72,7	66,3	55,1
1983	56,5	72,6	64,8	54,5
1984	56,5	72,1	65,7	52,2
1985	56,8	71,8	65,1	52,1
1986	56,0	72,2	63,4	52,8
1987	54,3	74,0	64,3	53,7
1988	54,0	75,5	65,5	53,5
1989	53,9	76,6	67,4	54,6
1990[1]	53,2	77,4	68,8	55,3

[1] Forecast, May 1990.
Source: Commission services.

Given the experience of the past, the stance of economic policy in those countries will have to be based on the following essential principles:

(i) in the four least-favoured countries, the growth of fixed capital, coming from both private and economically profitable public investment, will be a key element in their future growth capacity. The maintenance and strengthening of both the micro and macro determinants of investment should therefore be at the forefront of policy preoccupations. Among these determinants, the profitability of fixed capital has to be strengthened, notably by a continuation of real wage moderation relative to labour productivity and by favourable prospects for final demand. The mere accumulation of capital is not, however, sufficient by itself. It should also be accompanied by a significant improvement in the marginal efficiency of capital through, among other factors, a better allocation of resources. In this field, an appropriate level of real interest rates would restore their allocative role and avoid (as seems to be happening in Portugal) an overconcentration of investment into housing and non-residential buildings which have a low marginal efficiency and hence make a small contribution to growth. The increases in the private investment propensity to invest could also be complemented and supported by the expansion of economically profitable public investment. It should also be noted that investment in vocational training and similar labour-improving measures would have a high return in countries where the excess supply of untrained manpower is still comparatively high;

(ii) for the requisite investment effort to be sustainable in the long run, it has to be adequately financed by internal and/or external savings. In order to avoid an unsustainable build-up of external deficits, the domestic components of saving, including public saving, should be promoted. In the private sector the catching-up of standards of living would probably limit the increase in household saving but corporate savings should be favourably affected by the rise in profitability. On the external front, high return on investment and a sound macroeconomic environment would attract private foreign capital. At the same time, the structural Funds, the European Investment Bank and the other financial instruments of the Community, as well as contributing to the financing of investment, will also help to reduce the external constraint of faster growth in the recipient countries;

(iii) budgetary policies could support the need for increased public savings by strong consolidation efforts and by the requisite adjustment in the structure of receipts and expenditure. The reduction in public debt/GDP ratios implied by such a policy would also help to bring long-term interest rates down gradually, making a further contribution to the improvement in determinants of investment. Finally, the restructuring of public finances would also enable the least-favoured countries to conciliate efforts with the provision of the resources required for the co-financing of Community action under the structural Funds;

(iv) monetary policies oriented towards stability would prevent the catching-up process from leading to a build-up of inflationary expectations and would reduce the risk premium on interest rates. In the field of exchange rates, a strong currency option within the framework of the EMS would also prevent imported inflation from dis-

rupting domestic stability-oriented policies and would maintain competitive pressure on domestic producers and on wages;

(v) moderate wage increases relative to labour productivity during the period needed to reach adequate levels of capital profitability would help to avoid domestic inflationary pressures. The resultant decrease in real unit labour costs would also ensure that factor prices evolved in a manner conducive to a more labour-intensive growth pattern and a strong and rapid reduction in the presently high official or hidden unemployment levels.

It must be emphasized that wage moderation does not preclude real wage levels from catching-up, provided that they do so in a situation of faster-than-average growth of output and labour productivity as illustrated by the developments in the 1960-73 period. In the context of a fast catching-up process, real wages per employee could therefore well grow faster in the least-favoured countries than in the other member countries of the Community and ensure that standards catch up, as they need to do.

The application of these general principles of policy would enable the four least-favoured countries to consolidate and accelerate (or, in the case of Greece, initiate) the resumption of their catching-up process on the basis of the encouraging developments of the period 1985-90. The application of these policies and cooperation with the other member countries is currently more necessary than ever because of the implications of the Gulf crisis. The real per capita GDP gap is unfortunately also accompanied by an oil intensity gap for the four least-favoured countries which since 1973 have been unable to reduce their intensity of oil use to the same extent as the other Community countries. All other things being equal, the mechanical impact on inflation and the trade balance of an increase in oil prices is therefore likely to be higher. As a consequence the application of the abovementioned policy principles will meet with difficulties at least in the short run, but they remain entirely valid. Experience of the earlier oil price shocks has shown that policy coordination is fundamental in avoiding the build-up of inflation and the disruption of Community cohesion. The promotion of investment remains more crucial than ever with a particular emphasis on energy-saving technologies. This would imply that the increased price of oil imports is passed through in full to domestic prices and costs in order to provide the adequate return on energy-saving efforts. Finally, if monetary and fiscal policies as well as wages were to follow the direction proposed above, the repercussion of the oil price increase would be limited to a one-off increase in the general price level with no further build-up of inflation and the required evolution of savings, profitability and internal and external balances would be maintained.

3. Economic policy action at Community level

In accordance with Article 130b,[1] the Community should act in a synergetic way to the policies of the Member States. Its instruments of action lie in a number of fields of which a first group relates to the liberalization and transparency of domestic and international markets and the second to more specific forms of intervention. The first group can be linked to the basic institutions and evolution of the European Community. The second includes a number of sectoral policies that complement the first.

The process of European integration and the progressive realization of the internal market and of economic and monetary union are in themselves powerful factors for the release of considerable growth potential in the Community. The effective realization of this potential, together with the appropriate measures in the field of competition policy, agriculture, transport, energy, public procurement, research, etc. and the appropriate development of the Community's social dimension would provide the least-favoured countries with the supporting external environment they need.

However, as stated above, the major responsibility for the catching-up process resides in the member countries themselves, and the general principle of Community action is subsidiarity: the Community has neither the will nor the means to take the place of national measures and policies. Compared with national budgets, resources available for action at Community level are limited (although for small countries, they may represent substantial amounts). Apart from the specific field of social and economic cohesion, the structural Funds and the other financial instruments are conceived as a contribution to the corresponding country-based actions and cannot be revised or increased if, because of a lack of adequate micro and macro policies in the recipient countries, their uses do not provide the expected results. In other words, they cannot be compared to federal equalization schemes that exist in some federal States.

Nevertheless, and with this proviso, the structural Funds and financial instruments do represent a significant contribution to global saving in the recipient countries and deserve a more detailed analysis.

[1] 'The implementation of the common policies and of the internal market shall take into account the objectives set out in Article 130a and in Article 130c and shall contribute to their achievement.' (EEC Treaty as amended by the Single European Act, Article 130b, second sentence).

4. The evolution of the structural Funds

The discussions in the 1970s of the plan for an economic and monetary union, together with the first enlargement and the acute adjustment problems generated by the first oil price shock, marked a turning point in the Community's acceptance of a greater responsibility for structural and regional problems.

This prompted the creation, in 1975, of the European Regional Development Fund under Article 235 of the EEC Treaty; the reform and extension of the European Social Fund created by the Treaty itself; and the activation in the early 1970s of the Guidance Section of the European Agricultural Guidance and Guarantee Fund, which although provided for in Article 40 of the Treaty was not implemented immediately; all these instruments have since been extended and reinforced, their importance growing both in absolute terms and within the structure of EC spending (see Table 3).

The adoption of the internal market programme and the accession of Spain and Portugal in 1986 increased the importance of the Community's structural policies. On the one hand, the achievement of economic union was going to have a significant structural impact and, on the other, the economies of the new Member States clearly did not perform so well and were less robust than the EC.

The objective of fostering economic and social cohesion in the Community, then explicitly inserted in the Treaty, was underlined in a concrete way by the decision to double the structural Funds' financial allocations in real terms between 1987 and 1993, and to reform the procedures and regulations governing the action of the Funds.[1] By 1993, the money available through the structural Funds will be more than ECU 15 billion, or some 25 % of the EC budget. In cumulative terms it will amount to more than ECU 60 billion for the whole 1989-93 period. The Community was thus providing resources to promote the adjustment of the less efficient economic structures and to help those economies to make the transition to the 1992 internal market.

The Treaty's overall goal of promoting social and economic cohesion, reducing regional disparities and promoting the development of the less-favoured regions was translated, in the reform of the Funds, into five precise objectives:

Objective 1: promoting the development and structural adjustment of the regions whose development is lagging behind (development of lagging regions);

Objective 2: converting the regions, frontier regions or parts of regions (including employment areas and urban communities) seriously affected by industrial decline (correction of industrial decline);

Objective 3: combating long-term unemployment;

Objective 4: facilitating the occupational integration of young people (employment of young people);

Objective 5: (a) speeding up the adjustment of agricultural structures, (agricultural structures adjustments);
(b) promoting the development of rural areas (rural areas development).

[1] Council Regulation (EEC) No 2052/88 of 24 June 1988: OJ L 185/88.

Table 3

The structural Funds and the EC budget, 1970-90

	1970		1975		1980		1985		1990	
	million ECU	%	million ECU	%	million ECU	%	million ECU	%	million ECU	%
Regional Fund			75,3	1,2	1 126,4	7,0	2 495.3	8,8	4 704,5	10,1
Social Fund	64,0	1,2	157,9	2,5	1 014,2	6,3	2 188,5	7,8	3 321,9	7,1
EAGGF (Guidance)	:	:	158,8	2,6	624,7	3,9	852,9	3,0	1 449,0	3,1
Total Funds	64,0	1,2	392,0	6,3	2 765,3	17,2	5 536,6	19,6	9 475,4	20,2
Total EC budget	5 448,4	100,0	8 213,6	100,0	16 057,5	100,0	28 223,0	100,0	46 808,7	100,0

Sources: European Economy No 42: *Court of Auditors' Annual Report*, several issues.

Objectives 1, 2 and 5(b) have a regional dimension which implies the definition of eligibility criteria; the others have a horizontal nature applying, in principle, to the entire territory of the Community.

Objective 1 (development of lagging regions) applies in principle to all regions or countries whose per capita GDP, on the basis of purchasing power parity, is under 75 % of the Community average. This includes Greece, Ireland, Portugal, more than half of Spain and the Italian Mezzogiorno, i.e. 21,5 % of the EC's population. [1]

Objective 2 (correction of industrial decline) applies to regions suffering from industrial decline, basically defined as high unemployment regions where industrial employment is particularly important and has been decreasing. [2] They represent 16,5 % of the Community's population, and about 40 % of industrial employment.

Objective 5(b) (rural areas development) applies to low-income agricultural regions, not included in the Objective 1 list, which can be selected through a number of criteria mainly related to the agricultural sector. Objective 5(b) regions cover a considerable area, containing some 30 % of the Community's agricultural land, but only 5,1 % of its total population.

Assistance from the Funds in respect of the Objectives that have a regional nature therefore covers more than 40 % of the EC population.

These figures do not include the territory of the former GDR. After German unification, the territory of the former GDR as a whole was considered an assisted area, and allocated finance of about ECU 3 billion for the 1991-93 period.

The financial amounts allocated to each objective were decided in accordance with the regulations and, consequently, were concentrated in Objective 1 regions. As Table 4 shows,

[1] Northern Ireland in the United Kingdom and Corsica and the overseas departments in France have also been classified as Objective 1 regions.

[2] The criteria for selecting Objective 2 and Objective 5(b) regions are laid down in Articles 9 and 11 of Regulation (EEC) No 2052/88 of 24 June 1988. The lists of Objective 2 and Objective 5(b) regions were published in the Official Journal Nos L 198/89, L 112/89 and L 206/90.

Table 4

Community structural Funds, 1989-93 — Indicative breakdown by Objective[1] and by Fund

(million ECU, 1989 prices)

	ERDF	ESF	EAGGF	Total
Objective 1				60 315
CSFs 1989-93	20 960	9 813	5 427	36 200
Community initiatives				2 100
Objective 2				7 205
CSFs 1989-91	2 917	983		3 900
CSFs 1992-93				2 805
Community initiatives				500
Objectives 3 and 4				7 450
1989 appropriations				1 353
CSFs 1990-92		4 128		4 128
CSFs 1993				1 752
Community initiatives				217
Objective 5a			3 415	3 415
Objective 5b				2 795
CSFs 1989-93	1 103	436	1 068	2 607
Community initiatives				188
Transitional and new measures				1 150
Total				60 315

[1] Note: the Objectives are defined on the preceding page.

Source: EC Commission, annual report on the implementation of the reform of the structural Funds, 1989.

about 64 % of the total amount will be allocated to Objective 1 regions.

Assistance from the Funds is included in the Community support frameworks (CSFs) approved by the Commission for the period 1989-93 [1] after negotiation with the Member States according to the partnership concept. The CSFs (as a rule, one per region concerned for Objectives 1 (development of lagging regions), 2 (correction of industrial decline) and 5(b) (rural areas development), and one per country for Objectives 3 (combating long-term unemployment) and 4 (employment of young people)) include a description of the strategy adopted in relation to the objective concerned as well as an indicative financing plan in which the total cost of the measures to be undertaken is broken down by source of finance: Community structural Funds and national finance requirements (private and public, the latter largely predominating). The CSFs were approved at the end of 1989 and are currently being implemented [2] through concrete forms of assistance, mainly operational programmes, national aid schemes, global grants and large projects. [3] Naturally, their contribution to economic and social cohesion will not become apparent until they have been fully implemented. In addition to the operations included in the CSFs, Member States will also receive assistance from the Funds under Community initiatives. Under this option, the Community promotes initiatives in areas which it deems to be of priority or of crucial importance to the completion of the internal market or the strengthening of economic and social cohesion.

The Funds co-finance a very wide range of measures which, however, consist mainly in the enhancement of the capital stock, both physical and human, of the country or the region concerned. As regards physical capital formation, the structural Funds co-finance both public and private investment, with the former predominating, in particular as regards Objective 1 regions, in which the lack of basic infrastructure is a major concern. Financial support for private investment is secured mainly through the co-financing of regional aid schemes. The enhancement of the human capital stock is achieved mainly through vocational training programmes which, for Objective 1 regions, can in some cases be extended to technical secondary education. The large majority of the Funds' transfers are thus directed towards providing the less favoured (regions or people) with the necessary means to compete on the basis of economic efficiency.

Transfers of the structural Funds can therefore be said to be performing, primarily, an allocative function in the sense that they are geared to 'convey' market conditions to areas where they could not originate spontaneously, thus creating room for efficient resource allocation. Although on a much smaller scale, namely through income support to farmers and to the unemployed, the transfers from Funds also play a redistributive role between individuals within the Community.

The role of the EC budget as a stabilizing instrument (fiscal policy) is not significant on a Community-wide scale, although for some of the Objective 1 countries the transfers from the structural Funds may have a moderately expansionary impact as well as affecting their external financial constraint.

Assistance from the structural Funds may have an impact on three levels of the economies concerned (see Graph 2):

(i) micro-level: the level of individual projects of small-scale integrated assistance. Most assistance under Objectives 2 (correction of industrial decline) and 5(b) (rural areas development) fall under this category, as well as some individual interventions under Objective 1 (development of lagging regions);

(ii) meso-level: an intermediate level between micro and macro which may be constituted by a region, a market or a sector. At this level, complementary national/regional actions and measures are needed in order to allow assistance from the Funds to have a real economic impact. Some assistance under Objectives 2 (correction of industrial decline) and 5(b) (rural areas development) as well as the regional programmes under Objective 1 (development of lagging regions) may come under this category. The same is true of assistance from the Funds interventions under Objectives 3 and 4 (labour market) and 5(a) (agricultural sector);

(iii) finally the macro-level, which is the country level; at this level, the Funds' impact depends crucially on the appropriate nature of the macroeconomic policies concerned which, by and large, are laid down at national level. The macroeconomic impact will emerge in those cases where transfers from the Funds have some financial importance relative to the macroeconomic aggregates of the country concerned. Assistance from the Funds under Objective 1, in particular in countries totally or largely covered by it, falls into this.

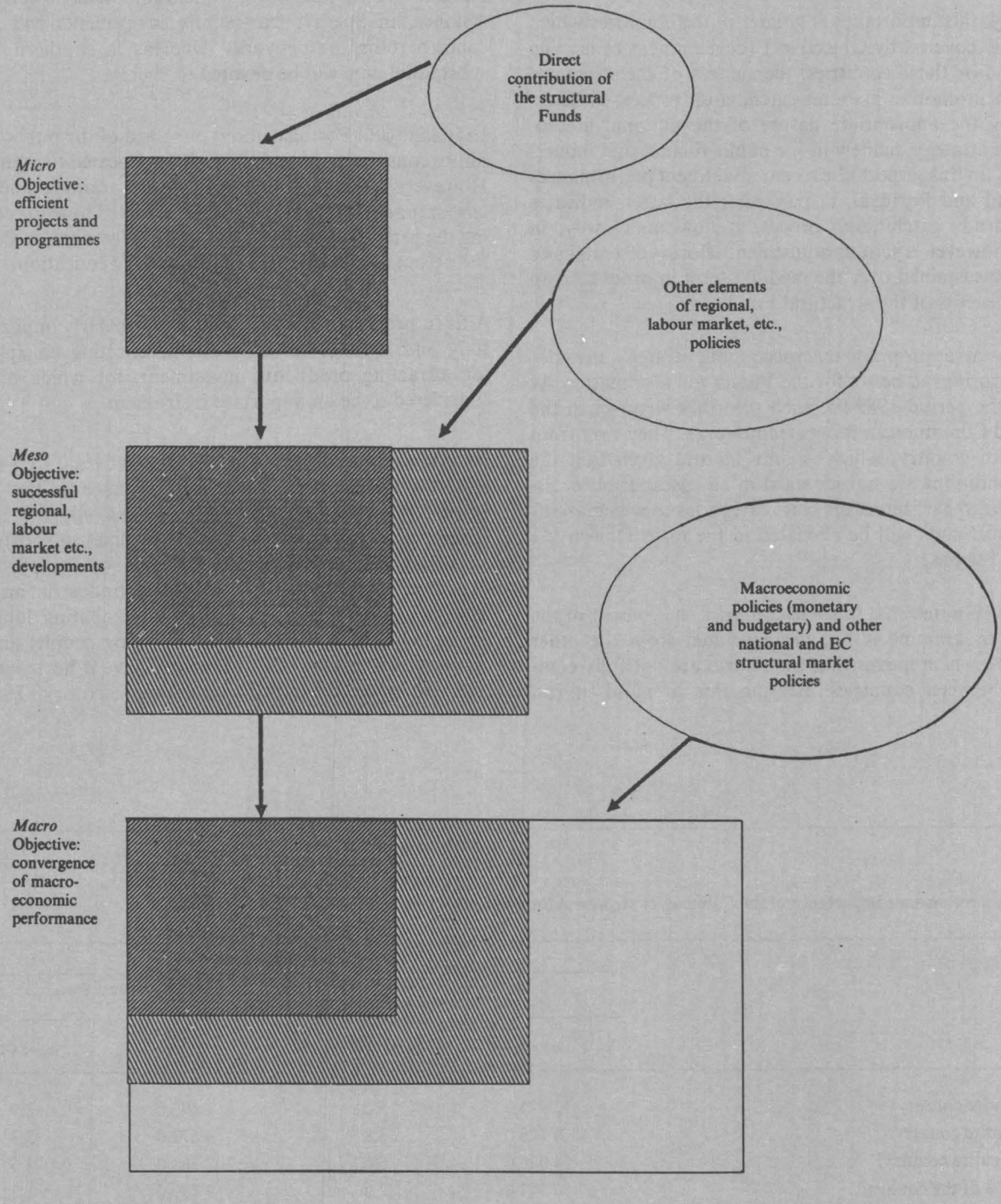
In all stages the economic impact will depend not only on the appropriate nature of the assistance and its economic soundness but also on the existence of an appropriate micro-, meso- and macroenvironment.

[1] The CSFs for Objective 2 regions were set for the three-year period 1989-91.

[2] The CSFs for Objective 5(b) were approved in the spring of 1990.

[3] For a detailed description, see the Commission's annual report on the implementation of the reform of the structural Funds in 1989.

GRAPH 2: **A three-level approach to evaluating the impact of the structural Funds**



Note: Circles represent policy actions; rectangles represent the economic impact of policy actions.

As regards Greece, Ireland and Portugal, and to a lesser extent Spain and Italy, transfers from the structural Funds have real macroeconomic importance as is shown by Table 5.

Naturally, this importance is greater in the countries which are totally covered by Objective 1 (development of lagging regions). For those countries, the success of the structural Funds in promoting a sound catching-up process is determined by the appropriate nature of the national macroeconomic strategy, namely in the public finance and monetary areas. In this respect, the recent investment performances of Ireland and Portugal, in particular the latter, indicates that a steady catching-up process is now under way; in Greece, however, a serious adjustment effort is essential and should be sustained over the medium term in order to reap the full benefits of the structural Funds.

As well as an appropriate macroeconomic strategy, the allocation priorities to be set for the Funds will also matter. As regards the period 1989-93, such priorities were set in the approved Community support frameworks. They vary from country to country, which is only natural given that the initial conditions are not identical in all cases. Table 6 displays in aggregate terms the chief categories to which assistance from Funds will be allocated in the main Objective 1 recipient regions.

It should be noted that in some countries the content of the regional programme is not disaggregated from the other categories, which means that the figures are not fully comparable between countries. Bearing this in mind, it can be seen that investment in infrastructure accounts for a significant share in all cases, except for Ireland. However, the concept of infrastructure embraces a wide range of domains which makes the conclusions less powerful: for instance, in Spain infrastructure investments will mainly concern transport networks, whereas in southern Italy a substantial part will be devoted to energy.

In Ireland and Portugal about one third of the public expenditure considered in the CSFs will be allocated to manpower. However, while in Ireland vocational training and other labour market programmes will be directed towards combating the persistently high levels of unemployment, in Portugal the accent will be on technical secondary education.

Aids to productive investment are particularly important in Italy and Ireland, to some extent reflecting an approach for attracting productive investment, for which aids are considered to be an important instrument.

Assistance from the Funds under Objectives 2 to 5 do not have the same macroeconomic importance as that under Objective 1 (development of lagging regions). As regards Objectives 2 (correction of industrial decline) and 5(b)) (rural areas development) they help to enhance the productive structures of the region/zone concerned (industrial and agricultural, respectively). Objectives 3 (combating long-term unemployment), 4 (employment of young people) and 5(a) (agricultural structures adjustments) have a horizontal nature and cover the entire Community territory. They are

Table 5

Relative macroeconomic importance of the Community structural Funds (1989-93) in some Objective 1 regions

	Public expenditure			
	Total (structural Funds + national finance requirement)		Structural Funds	
	million ECU 1989 prices	% of region GDP	million ECU 1989 prices	% of region GDP
Greece (entire country)	12 995,0	5,2	7 193,0	2,9
Ireland (entire country)	6 126,0	3,8	3 672,0	2,3
Portugal (entire country)	14 026,0	6,6	7 368,0	3,5
Spain (70% of the country)	16 507,0	2,0	9 779,0	1,2
Italy (Mezzogiorno)	14 062,0	1,5	7 583,0	0,8

Source: Public expenditure: Community support frameworks; GDP and GFCF; DG II estimates.

Table 6

Community structural Funds — Public expenditure in some Objective 1 regions (1989-93)
(Breakdown by main categories in %)

	Portugal	Spain	Italy	Ireland	Greece
Infrastructure	27,3	53,1	47,3	17,1	31,3
Aids to production investment	17,0	9,9	29,0	26,5	7,0
Agriculture	11,9	14,0	8,3	24,5	13,0
Manpower	28,0	22,7	14,8	31,2	13,7
Regional programmes	15,6	[1]	[1]	[1]	34,5
Others	0,2	0,3	0,6	0,6	0,4
Total	100,0	100,0	100,0	100,0	100,0

[1] Included in the other categories.
Source: Community support frameworks, DG II aggregations.

thus a complement to national policies not geographically delimited.

Expenditure from the Community budget on achieving the objective of economic and social cohesion is accompanied by the utilization of the other Community financial instruments, and in particular loans from the European Investment Bank (EIB). Since their nature differs from Fund transfers, the actual volume of EIB loans and the operations of the other financial instruments for the period 1989-93 is not known in advance. The amounts of the EIB loans and operations of the other financial instruments considered in the Community support frameworks are indicative in nature and do not necessarily exhaust the potential amounts available. For Objective 1 regions an indicative Community loan amount of more than ECU 8 billion was considered.

Study No 4

Economic convergence in the Community

Economic convergence in the Community

Tables

Graphs

Summary

The favourable convergence performance of the 1960s was replaced in the 1970s by years of growing divergences in the economic performances of Member States. The 1980s saw the adoption by the Community of a better and more coordinated economic policy approach and a consequent re-establishment of a much higher degree of convergence.

The present degree of economic convergence is largely due to the success of the initial narrow-band EMS countries in adapting to the discipline of a system committed to price stability and monetary cohesion. However, other Member States have been less successful and the task of Stage I of EMU will consist largely in extending to all Community countries the positive results already obtained by the first group.

The recent increase in the price of oil raised the fear that some of the progress which had been painstakingly made over the last few years could be lost. Indeed, the first oil price shock substantially amplified the divergence in the economic performance of Member States which had started to appear at the beginning of the 1970s. The second oil price shock, at the end of the same decade, was a serious setback to the efforts aimed at regaining past levels of stability and convergence. However, a third oil price shock, if it were to materialize, need not lead to a repetition of the serious effects witnessed in the 1970s.

Dependency on oil imports is now much lower, the general state of the economy is vastly improved and rates of inflation are a fraction of what they were at the time of the first and second oil price shocks. Moreover, lessons have been learnt. Greater exchange-rate discipline reduced somewhat the negative effects of the second oil price shock. Further progress towards monetary integration could similarly help the Community to weather the present and any future storms. The success of the ERM should be built upon in order to avoid a resurgence of divergent policy actions, as observed in former oil price shocks.

Introduction

The integration efforts of the Community depend crucially on the creation of broadly similar economic conditions throughout its economy. In particular, progress towards greater exchange-rate stability and, ultimately, monetary union depend on the attainment of a high degree of similarity in rates of inflation, on reaching a sustainable pattern of current account positions and on eliminating differences in many other economic areas that could put price and exchange-rate stability at risk. This process of approximation of economic performances, which will be described more precisely later on, is usually referred to as 'economic convergence'.

The concept of economic convergence covers two distinct areas. On the one hand, it refers to the long-term process of reduction in the disparities of living standards which is one of the fundamental objectives of the Community. This process is often defined as 'real convergence' and it is usually measured by the changes in the disparities in the levels of per capita GDP. More commonly, however, the phrase is employed to describe the convergence of the economic variables which are more directly responsible for price and exchange-rate stability and a successful transition to economic and monetary union. This process — which involves primarily price and cost performances, budgetary positions and balances of payments — is commonly referred to as 'nominal convergence'.

In everyday parlance, the term convergence only suggests a narrowing of the differences in policy objectives and in actual performances. But clearly, a narrowing of the gap in, for example, the inflation performance which was obtained through convergence towards a high average value would not improve the functioning of the economy and would not therefore be seen as progress in economic policy terms. As a result, the phrase 'nominal convergence' has acquired a more precise meaning. Nominal convergence is now understood to be progress towards internal (cost and price) and external (exchange-rate) stability. This implies, on the one hand, a progressive reduction in the rates of inflation towards very low levels and, on the other, maintenance of conditions conducive to exchange-rate stability.

The pursuit of nominal convergence is not in contradiction with the long-term process of real convergence if income and cost trends adjust as needed. As the analysis in Study No 3, published in this same issue of *European Economy*, makes clear, the price stability aimed at in the nominal convergence process is a prerequisite for lasting real convergence.

Throughout this study the phrase 'economic convergence' will refer only to nominal economic convergence unless otherwise specified. The first introductory section shows the complexity of the economic mechanisms at play in the process of convergence and highlights the interactions among the main variables and policy actions. Practical examples of the difficulties which these interactions may create are provided in the second section which reviews economic trends with special emphasis on the negative developments which followed the two oil price shocks and on the slow and difficult recovery during the 1980s. Finally, the third section takes stock of the present degree of convergence in the Community.

1. Progress towards nominal convergence: a complex task

Progress towards economic convergence is a complex process. It concerns many economic variables and its analysis cannot be reduced satisfactorily to a limited number of economic indicators although stability of prices (internal stability) and of exchange rates (external stability) remain the ultimate measures of success. Because of its links with monetary integration, the process has always been examined closely by policy-makers in the Community. The experience of the EMS has thrown considerable additional light on its nature. There now exists a very broad consensus on the following elements of the process of economic convergence and on the main criteria to be used in assessing it.

The main criterion by which success towards nominal economic convergence is to be judged is price stability. Rates of inflation should be as low and as equal as possible. But a clear distinction should be made between the situation that will exist after the setting up of the monetary union and the degree of convergence that is needed for a successful transition to Stages II and III of the EMU process.

In a monetary union, divergences in the rate of inflation will be extremely small, differing at most by productivity differentials (typically less than 1 % and rarely more than 1-2 % a year even in the case of catching-up countries).

The transition to monetary union, however, can take place even if price convergence has not quite reached such a high level. The degree of price convergence necessary for a successful transition to monetary union and, in particular, for the passage to Stages II and III of the Community plan for monetary union, cannot, however, be defined precisely. The commitment to exchange-rate stability, which will reach the highest degree of credibility when national currencies will have been replaced by a common currency, will exert a powerful pressure on out-of-line inflation rates. There will be, however, adjustment costs proportional to the remaining degree of divergence in the rates of inflation which suggests a need for the transition to take place when inflation rates are quite close.

Convergence of price performances, however, can be achieved and maintained on a sound basis only if parallel progress takes place in other areas. Countries may have reached an acceptable price performance without having reduced other macroeconomic disequilibria. Indeed, these disequilibria might have increased during the process of reduction of the rate of inflation. Investment profitability and competitivity might not be adequate, budgetary positions and debt levels might be excessive and the external position might not be sustainable. If this is indeed the case, price stability will not be maintained for long. Developments in these areas must therefore be monitored when assessing the convergence situation in the Community, but this does not imply that trends in these fields must necessarily show a degree of convergence similar to that achieved by the rates of inflation.

If unit labour costs increase more rapidly than GDP prices, this leads, all other things being equal, to a reduction of the profitability of investment and to an increase in the relative cost of labour. In turn, this results in a loss of investment, growth and employment which can only be avoided if the necessary medium-term equilibrium in the distribution of income is maintained. An assessment of progress towards price stability requires therefore an examination of the growth and employment performances and of the underlying cost and profitability trends.

A sound public finance situation is a necessary condition for EMU without requiring full convergence of budgetary and public debt positions. This requirement relates essentially to the trend of public debt. A deceleration of inflation in the presence of still excessive public deficits leads to a rising public debt/GDP ratio. This implies growing debt service outlays that reduce the room for manoeuvre of budgetary policy. Eventually, a more severe budget tightening will be required if the temptation to monetize the debt through an acceleration of inflation is to be resisted.

The need for convergence towards a sustainable external equilibrium is less apparent since the external current account disequilibria might be financed without difficulty once capital markets are completely integrated. In a full monetary union, current account balances lose much of their disciplinary impact. In the transition, however, the control of disequilibria that could threaten exchange-rate stability will remain an important economic policy task even if the progressive

integration of capital markets eases substantially the financing constraints.

An examination of the current account positions of Member States still constitutes another important element of any convergence analysis. Large disequilibria are a prime target for analysis, but positions of near equilibrium may also disguise economic policy problems. For instance, if wages have not adjusted sufficiently, growth will suffer, but the competitive position of the country will also suffer and the government might have to resort to further depressing internal demand to maintain the external equilibrium. Large external debts, with their negative consequences on current account positions, will also have to be examined as well as their causes.

Lack of parallel progress in all the necessary areas leads therefore to high economic costs and sows the seeds for medium-term failure of the convergence strategy. But lack of parallel progress can also lead to short-term difficulties in the implementation of other policies.

Monetary policy, for instance, constitutes the first line of defence against inflation and it obviously plays a great role in bearing down on inflationary pressures to achieve greater convergence. But at the same time, progress towards exchange-rate stability reduces the margin of manoeuvre of monetary policy. To the extent that the political commitment to exchange-rate stability becomes credible in the eyes of the markets, risk premiums will be reduced and short-term capital will move in response to smaller interest rate differentials. This will introduce limits on the possibility for a given central bank to increase interest rates as much as internal conditions would warrant and raises difficult coordination problems.

The relationship between budgetary policy and inflation is also multi-faceted. On the one hand, budgetary policy is an important instrument in bearing down on inflationary pressures. On the other hand, success in reducing the rate of inflation changes the environment in which budgetary policy operates. A rapid deceleration in the rate of growth of nominal aggregates can lead to higher budget deficits, to the extent that the elasticity of tax receipts is higher than that of government expenditure, and to a slower reduction of the stock of public debt as a percentage of GDP. If, in spite of the good initial results, the continuation of the anti-inflationary policy is not judged credible, real interest rates may become very high and thus increase the burden of servicing the debt.

How is convergence measured ?

Given the complexity of the process, economic convergence in the Community can only be appreciated by reference to various economic indicators. Attempts have been made on various occasions to develop synthetic measures, one or more 'convergence indicators', but the results have not been convincing.

The most important indicators used in the analysis of economic convergence are those relative to its ultimate goal of internal stability. To this end, the usual range of price indicators are used: typically the deflator of private consumption and the deflator of gross domestic product.

Since durable progress towards price and exchange-rate stability depends on the reduction of other economic disequilibria, other indicators are also used. They include measures of wage costs, profitability, current account positions, competitiveness, budgetary positions, public debt levels relative to GDP, etc.

Very few of these indicators allow the use of synthetic dispersion measures. For instance, there is little point in measuring the dispersion of current account positions since the target for this variable need not be equilibrium. The right current account position of a country depends on its level of development; it is quite appropriate for a catching-up country to run a deficit as long as this corresponds to the financing of high rates of investment which will generate the future income eventually needed to service the debt. Equally, a dispersion measure of budgetary positions or public debt levels conveys little meaningful information.

The indicators that best lend themselves to the use of synthetic measures are those relating to price and cost trends. The dispersion measures are usually related to the average value or to the lowest one depending on the emphasis placed on convergence towards the best results. When using statistical dispersion measures for these indicators the question arises of whether these measures ought to be weighted for the relative sizes of the countries or not. The answer depends on the purpose for which the measure is used. If the goal is an assessment of the situation in the Community as a whole, then weighted measures are more appropriate. If, as is more often the case, price and cost indicators are analysed to assess their effect on exchange-rate stability, then unweighted measures should be used because each bilateral exchange-rate relationship is important in itself.

The measures of dispersion that are used in this study are the simple gap between extreme values and the unweighted arithmetic mean of each country's absolute deviation from the respective reference value. This measure is referred to in the tables simply as 'dispersion'. The reference values for the calculation are either the weighted average or the lowest figure to stress the need for a downward convergence of these variables. It has been occasionally felt that the 'lowest' result should be replaced by a 'target' value to avoid taking into account abnormally low values. The results of these dispersion measures are very often compared to those of the 1960s when the Bretton Woods system was guaranteeing a situation very close to that of a monetary union.

2. Economic convergence 1960-89

The convergence performance of the Community has gone through three distinct phases which correspond broadly to the three decades since 1960.

(i) An initial period during the 1960s marked by a high degree of internal (price and cost) and external (exchange-rate) stability. The similarity in the performances of the Member States and, hence, the degree of economic convergence were very high. This was also a period of strong economic growth and low unemployment.

(ii) This favourable period came to an end at the end of the 1960s. The disequilibria which had started to appear in numerous countries were magnified in 1973 by the first oil price shock and the different subsequent policy responses. The years that followed were characterized by frantic and uncoordinated efforts aimed at avoiding, minimizing or delaying the income consequences of the shock. Just when some stability was being regained, the second oil price shock put back the stabilization efforts by many more years. The differences in the economic policies implemented and, to a lesser extent, the asymmetric nature of the shocks that affected some countries more severely than others, led to very different economic results. Rates of inflation became very high and substantially different, exchange rates became extremely unstable: the degree of economic convergence deteriorated considerably.

(iii) The 1980s witnessed a gradual and painstaking effort aimed at improving the conditions for sound economic growth. This included the search for greater exchange-rate stability and a determined effort to bring down rates of inflation to the lowest possible levels. A broadly-based consensus on the economic policies to be implemented ensured that progress was made, albeit to different degrees, throughout the Community. At the end of the 1980s, the degree of economic convergence within the Community had improved remarkably.

While the three phases present very distinct features that set them apart, fixing precise dates is difficult as there were lags between the turning points in individual countries. For statistical purposes, the first phase is defined in this study as the period 1960-69.[1] The second phase starts in the year

GRAPH 1: **Dispersion of private consumption deflators, EUR 12**

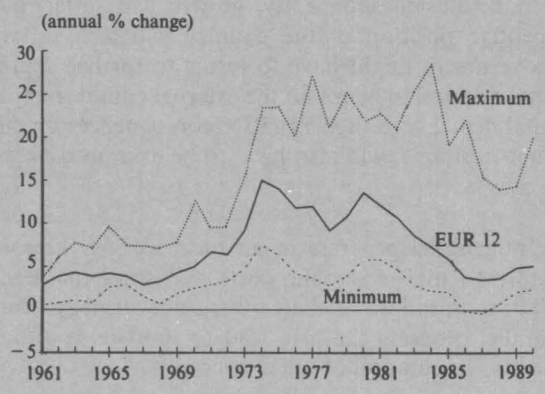


Table 1

Instability of exchange rates of the countries of the Community

	Nominal effective exchange rate relative to member countries		Nominal effective exchange rate relative to 19 industrial countries	
	EUR 7[1]	EUR 12[2]	EUR 7[1]	EUR 12[2]
1961-69	0,9	1,0	0,8	0,9
1970-71	2,5	2,0	2,2	1,6
1972	1,6	2,4	2,0	2,3
1973	4,9	5,9	2,0	2,3
1974	4,0	3,8	3,6	3,6
1975	4,0	5,1	4,1	4,7
1976-78	4,4	6,6	3,8	6,6
1979-80	1,8	4,6	1,7	4,4
1981	2,0	3,3	6,8	7,0
1982-85	2,9	4,8	3,2	6,0
1986	3,2	6,6	6,4	7,3
1987	2,9	4,3	3,9	3,9
1988	1,0	2,9	1,4	3,0
1989	0,3	1,8	1,4	2,5
1990[3]	2,0	3,2	5,4	4,7

[1] Unweighted average of the absolute annual percentage change of the currencies originally participating in the narrow band of the exchange rate mechanism (i.e. Belgian franc, Danish krone, German mark, French franc, Irish punt and Dutch guilder).
[2] Unweighted average of the absolute annual percentage change of the currencies of the countries of the Community.
[3] Effective changes in exchange rates up to the end of September 1990; the exchange rate is assumed to remain constant until the end of the year.

Source: Eurostat, Ameco.

[1] Although the EEC came into existence in 1958, homogeneous statistical data have only been available since 1960.

1970 (when inflation started accelerating and other disequilibria became apparent) and covers the two oil price shocks and their immediate aftermath : 1970-81. The period from 1982 until 1989 constitutes the third phase.

The analysis covers the 12 Member States throughout the three phases although enlargements to the present Community took place during the second and third phases. The most important economic mechanisms at work result simply from the growing economic interdependence among countries. This does not depend on the legal status of being a member of the Community, although joining the Community is certainly a powerful stimulus to greater integration (as the recent experience of Spain and Portugal has shown). Equally, the most important factors explaining the convergence or divergence of performance — the discipline imposed by the Bretton Woods system, the oil price shocks, the experience drawn from the economic policy errors of the 1970s — are also not Community-specific. Indeed, most industrialized countries, and certainly those of the rest of Europe, have experienced trends very similar to those of the Community.

This does not imply that membership of the Community does not matter. The differences in the degree of economic convergence among Member States are clearly correlated with participation in the Community system for greater exchange-rate stability, the exchange-rate mechanism of the EMS. Furthermore, membership of the Community has certainly contributed to the emergence of a convergence of economic policies which is a prerequisite for a convergence in performance.

2.1. The 'golden age of Bretton Woods' : external and internal stability, good convergence and strong growth

The international institutional arrangements (the system of Bretton Woods) in force during this period guaranteed a high degree of exchange-rate stability. Exchange rates could only be used as an instrument of adjustment in exceptional cases. As long as the United States of America acted as a stability anchor for the system, by following a prudent monetary policy which allowed no room for inflation, other countries had no option but to keep in step. During this period very few Member States resorted to parity changes, the main exception being Germany with two revaluations of the DM over the period. The variability of nominal exchange rates was very small relative both to other Member States of the Community and to the latter's main industrial partners (see Table 1).

Table 2

Balance on current transactions with the rest of the world

(percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 7	EUR 12	USA	J
1961-69	0,4	−2,0	0,7	−3,1	−0,8	0,2	−2,1	1,8	4,5	0,2	−0,8	−0,2	0,3	0,3	0,6	0,2
1970-71	2,4	−3,1	0,5	−2,3	1,2	0,8	−3,9	1,1	10,6	−0,9	2,2	1,5	0,5	0,8	0,2	1,8
1972	3,6	−0,4	0,4	−1,2	1,5	1,0	−2,2	1,6	10,1	2,8	5,5	0,1	1,0	1,0	−0,3	2,2
1973	2,0	−1,7	1,3	−3,8	0,8	0,6	−3,5	−1,6	16,1	3,8	3,0	−1,9	1,2	0,3	0,7	0,0
1974	0,4	−3,1	3,1	−2,8	−3,5	−1,3	−9,9	−4,2	26,1	3,1	−6,2	−4,5	1,2	−0,9	0,5	−1,0
1975	−0,1	−1,5	1,2	−3,7	−2,9	0,8	−1,5	−0,2	16,5	2,5	−5,5	−2,0	1,0	0,0	1,4	−0,1
1976-78	−0,7	−3,9	1,1	−1,7	−1,5	0,2	−5,8	0,7	20,5	0,9	−7,7	−0,5	0,4	0,1	−0,1	1,3
1979-80	−3,6	−4,2	−1,2	−0,7	−1,0	0,2	−12,6	−0,3	20,0	−1,3	−3,8	0,8	−1,1	−0,7	0,2	−0,9
1981	−3,8	−3,0	−0,7	−0,7	−2,7	−0,8	−14,7	−2,2	21,2	2,2	−12,2	2,4	−0,9	−0,7	0,3	0,5
1982-85	−1,2	−3,7	1,3	−5,4	−0,2	−0,7	−6,8	−0,7	39,0	3,6	−6,2	0,7	0,4	0,1	−1,6	2,3
1986	2,0	−5,5	4,4	−5,3	1,7	0,5	−2,9	0,5	39,4	2,7	2,4	−0,8	2,3	1,4	−3,2	4,3
1987	1,2	−3,0	4,1	−3,1	0,1	−0,3	1,3	−0,2	31,6	1,4	−0,4	−1,9	1,8	0,7	−3,4	3,7
1988	1,0	−1,8	4,1	−1,7	−1,1	−0,4	1,8	−0,6	34,3	2,4	−4,4	−4,1	1,9	0,2	−2,4	2,8
1989	1,0	−1,3	4,7	−4,8	−2,9	−0,2	1,6	−1,3	31,5	3,6	−1,2	−3,7	2,4	0,2	−1,9	2,2
1990[1]	0,3	0,0	2,6	−5,1	−3,8	−0,3	1,2	−1,3	27,3	3,3	−1,2	−2,8	1,4	−0,3	−1,7	1,5

EUR 7: ECU; B, DK, D, F, IRL, L, NL.
EUR 12: ECU.

[1] Forecast, November 1990.

Source: Eurostat, Ameco, DG II autumn forecasts.

The deflator of private consumption for the Community as a whole rose on average by 3,7 % a year during the years 1961/69. The high rate of economic growth and the discipline imposed by the exchange-rate regime eased the distributional problems. Real wages per head rose on average by about 4,4 % a year during this period while real unit labour costs (nominal unit labour costs deflated by the deflator of GDP), a prime determinant of investment profitability, remained stable.

The current account positions of most countries remained close to equilibrium. Greece, Ireland, Spain and Portugal experienced deficits which matched their need for foreign investment to finance faster growth while the current account deficits of Denmark were the reflection of a structural problem that the country has not yet fully corrected (see Table 2).

Budgetary positions, which had been brought back to broad balance during the immediate post-war period remained in broad equilibrium. On average, the general government balance of the nine countries for which statistics are available (i.e. excluding Greece, Spain and Portugal) showed a very small surplus.

The most striking feature of this period is the similarity in the economic performances of Member States. Indeed, the Bretton Woods system had created in many respects the conditions for a unified currency area. Inflation rates were very close. The average measures of dispersion (related to the average for EUR 12) were in this period 1,41 for the deflator of private consumption and 2,45 for nominal unit labour costs (see Table 12).

In addition, the relative performances of individual countries were significantly different from the pattern which was to emerge during the 1970s. The countries which experienced rates of inflation slightly higher than the Community average were Denmark, Spain, France, Ireland and the Netherlands. In most cases these differences were justified by higher productivity growth. Greece and Portugal, the two Member States that are now experiencing the largest disequilibria, performed better than the rest of the Community. Their average inflation rates (2,4 % for Greece and 2,8 % for Portugal) were even lower than those of the countries that were to participate in the ERM narrow-band from 1979: 3,5 %. This result was not achieved through sacrificing economic growth. On the contrary, a significant catching-up took

Table 3

Gross domestic product at constant market prices

(national currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 7	EUR 12	USA	J
1961-69	4,8	4,7	4,4	7,6	7,7	5,5	4,4	5,8	3,7	5,0	6,3	2,9	4,9	4,8	4,3	10,4
1970-71	5,0	2,3	4,0	7,5	4,3	5,2	3,1	3,4	2,2	5,0	7,1	2,1	4,5	3,9	1,6	7,5
1972	5,3	5,3	4,2	8,9	8,0	4,1	6,5	2,7	6,6	3,3	8,0	3,5	4,2	4,3	5,1	8,4
1973	5,9	3,6	4,7	7,3	7,7	5,4	4,7	7,1	8,3	4,7	11,2	7,2	5,0	6,1	4,8	7,9
1974	4,1	−0,9	0,3	−3,6	5,3	2,7	4,3	5,4	4,2	4,0	1,1	−1,7	1,8	1,9	−0,7	−1,2
1975	−1,5	−0,7	−1,6	6,1	0,5	−0,3	5,7	−2,7	−6,6	−0,1	−4,3	−0,8	−0,9	−1,0	−1,0	2,6
1976-78	2,9	3,2	3,7	5,5	2,6	3,8	5,6	4,5	2,7	3,3	5,1	2,9	3,7	3,6	4,8	5,1
1979-80	3,2	1,5	2,7	2,7	0,5	2,3	3,1	5,1	1,6	1,6	5,1	0,3	2,5	2,4	0,9	4,8
1981	−1,0	−0,9	0,2	0,1	−0,2	1,2	3,3	1,0	−0,6	−0,6	1,6	−1,3	0,4	0,2	2,3	3,9
1982-85	1,2	3,6	1,4	1,7	1,8	1,6	2,2	1,8	3,3	1,4	0,7	2,8	1,8	1,8	3,0	3,9
1986	1,6	3,1	2,3	0,8	3,3	2,1	−0,3	2,5	4,4	2,0	4,1	3,5	2,2	2,6	2,8	2,5
1987	1,9	−0,7	1,8	−0,1	5,5	1,8	4,9	3,0	2,8	1,1	5,3	4,7	1,7	2,9	3,7	4,2
1988	4,3	−0,4	3,7	4,0	5,0	3,3	3,7	3,9	4,3	2,7	3,9	4,1	3,4	3,8	4,6	5,7
1989	4,0	1,3	3,3	2,6	4,9	3,6	5,9	3,2	6,1	4,0	5,4	2,2	3,4	3,3	3,0	4,8
1990[1]	3,5	0,9	4,3	1,2	3,5	2,5	4,5	2,6	3,2	3,4	4,2	1,5	3,3	2,9	1,0	6,0

EUR 7: PPS EUR 7; B, DK, D, F, IRL, L, NL.
EUR 12: PPS EUR 12.

[1] Forecast, November 1990.

Source: Eurostat, Ameco, DG II autumn forecasts.

place with real GDP per person rising in this period by 7,0 % and 6,5 % in Greece and Portugal respectively, whereas the respective figure for the whole of the Community was only 3,8 %.

2.2. 1970-81: exchange rate instability, high inflation rates, poor convergence and low growth

The end of the 1960s saw the gradual appearance of serious macroeconomic disequilibria which became very pronounced with the arrival of the oil price shock. The final demise of the system of fixed exchange rates was brought about as much by these disequilibria as by the belief that floating rates would increase the choice of instruments available for the conduct of economic policy.

The 1973 oil price shock hit the Community when it was particularly vulnerable to an acceleration of inflation. Economic growth was strong, capacity utilization was very high and unemployment was, in 1973, at less than 3 % of the civilian labour force. Many years of strong growth had led to tensions in the labour market and wage increases had started accelerating at the end of the 1960s. Furthermore, liquidity had increased sharply since 1969. The price of raw materials was increasing fast. The Community rate of inflation (deflator of private consumption) had already risen to 6,4 % in 1972 and 9,2 % in 1973.

The shock, which was very large (the recorded oil bill as a percentage of GDP increased by 2,4 points between 1973 and 1974), hit the Community asymmetrically since the degree of dependence on oil was rather different. In some countries, the relative weight of net oil imports was more than double those of other countries (see Study No 2). In addition, the differences in the institutional arrangements for wage formation in individual Member States reinforced the asymmetric nature of the shock. The sharing out of the loss of income resulting from the transfer of resources to oil-producing countries led to serious distributional conflicts with different outcomes in each country.

Far more important, these structural differences were reinforced by different policy responses. Some countries, such as Germany and the Netherlands, maintained the priority they had given to the fight against inflation. Monetary policy was tightened and its effectiveness was reinforced by the ensuing appreciation of the currencies. This policy achieved the desired objective since rates of inflation accelerated only moderately: the deflator of private consumption rose by only 1,2 percentage points between 1972 and 1974 in the Netherlands and by 1,7 in Germany compared to 8,6 points for the Community as a whole (see Table 4).

Other countries, such as Italy and the United Kingdom, where the policy response was dominated by concern for the deflationary effect of the shock, sought to ease the distributional problems by attempting to maintain a strong rate of growth. This was pursued through highly accommodating monetary policies which led to rapidly rising labour costs, to a strong depreciation of their currencies and, eventually, to much higher rates of inflation : real long-term interest rates (deflator of GDP) dropped in 1974 to near zero in the United Kingdom and became negative by 8 percentage points in Italy; the nominal effective exchange rate depreciated between 1972 and 1974 by over 13 percentage points in the United Kingdom and by as much as 19 points in Italy; the rates of increase in consumer prices went over the 20 % mark in Italy in 1974 and in the United Kingdom in 1975 (see Tables 4 and 10).

This divergence in the policy response was not peculiar to the Community. Similar differences can be found in the economic policy reactions and performances outside the Community: the 1974 inflation rates in the other industrialized countries were as high as 21 % in Japan and falling to 10,6 % in the USA and 9,8 % in Switzerland (see Graph 2).

Real growth in the Community dropped from 6,3 % in 1973 to just 1,9 % in 1974 and, in 1975, the economy went into recession (real GDP fell by about 1 %). The average rate of inflation in the Community jumped from just below 9 % in 1973 to more than 14 % in 1974 and 1975. Nominal unit labour costs, which had been increasing by more than 9 % in 1973 nearly doubled in 1974 and 1975 (16,3 % and 18,9 % respectively). Budget deficits deteriorated sharply, partly as a result of policies aimed at attenuating the consequences of the shock via budgetary policy and partly because of the recession of 1975. The general government borrowing requirement of the Community deteriorated by four points of GDP between 1973 and 1975 (from $-1,3$ % of GDP to $-5,3$ %).

The oil price shock brought about a large deterioration of the current account of the balance of payments of the Community which moved from a surplus of about 1 % of GDP in 1972 to a deficit of 1,5 % of GDP in 1974. This deterioration corresponds more or less to the increase in the oil bill.

The differences in the price and cost performances increased dramatically. The gap of 6,4 points between the lowest (Greece) and the highest (Ireland) rates of inflation in the Community in 1972 rose to over 16 points in 1974 with the

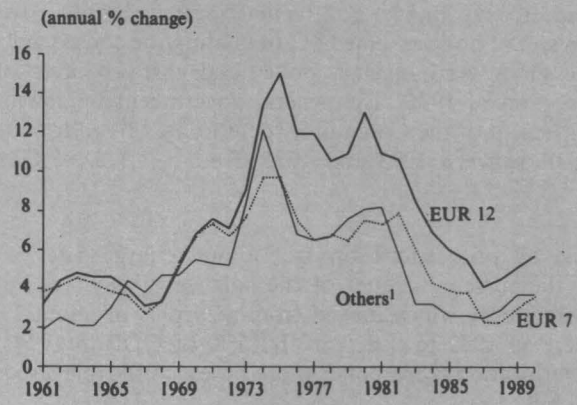
Table 4

Acceleration and divergence of inflation during the two oil price shocks of 1973 and 1979

	Deflator of private consumption (annual % change)							Cumulated inflation differential relative to member countries[1]	
	1972	1974	Difference 1974/1972	1978	1981	Difference 1981/1978	1990[4]	1974/1972	1981/1978
B	5,5	12,7	7,2	4,3	8,6	4,3	3,6	0,3[2]	−12,4[2]
DK	8,2	15,0	6,8	9,2	12,0	2,8	2,8	9,6	−10,9
D	5,8	7,5	1,7	2,8	6,0	3,2	2,8	7,7	−14,8
GR	3,3	23,5	20,2	12,8	22,7	9,9	20,5	6,9	−0,6
E	7,6	17,8	10,2	19,0	14,3	−4,7	6,8	9,4	9,1
F	6,4	15,1	8,7	9,0	13,4	4,4	3,4	−3,1	1,5
IRL	9,7	15,7	6,0	7,9	19,6	11,7	2,8	−6,3	9,1
I	6,3	21,4	15,1	13,2	18,2	5,0	6,1	−9,8	4,9
L	5,1	9,7	4,6	3,4	8,7	5,3	3,5	—	—
NL	8,3	9,5	1,2	4,5	5,8	1,3	2,4	5,2	−11,3
P	6,3	23,5	17,2	21,3	20,2	−1,1	13,2	10,4	9,5
UK	6,5	17,0	10,5	9,1	11,2	2,1	7,0	−15,1	38,8
EUR 12	6,4	15,0	8,6	9,2	12,1	2,9	5,1	1,3[3]	5,9[3]

[1] GDP deflator relative to member countries, double export weights.
[2] B/L.
[3] Unweighted average of the absolute differences to the unweighted average of EUR 12.
[4] Economic forecasts, November 1990
Source: Eurostat, Ameco, DG II autumn forecasts.

GRAPH 2: **Comparison of GDP deflators, EUR 12, EUR 7 and other countries[1]**



[1] CH, A, N, S, SF, USA, CDN, J, AUS.

German rate of increase in consumer prices at 7,5 % and those of Portugal and Greece at 23,5 %. The increase in the divergence of labour costs was also large. The gap between the lowest and highest rates of increase in nominal unit labour costs rose from less than 5 points in 1972 to about 15 in 1974 (excluding Portugal where other factors were at play).

Large current account disequilibria appeared which persisted in spite of significant exchange-rate changes. The current account positions of Member States moved in very different directions. Germany improved its surplus significantly, from 0,4 % of GDP in 1972 to 3,1 % in 1974, while in most other countries the current balance weakened considerably. The deterioration of the current account over the period 1972-74 exceeded 4 % of GDP in several cases (Spain, Ireland, Italy, Portugal and the United Kingdom). This was principally due to the large fluctuations of nominal exchange rates. The resulting large changes in the terms of trade led to significant J-curve effects which more than offset other trends. The unexpected continued deterioration of the current account positions of the depreciating countries and the equally unexpected improvement of those of the appreciating ones, led to further fluctuations in the respective currencies. Exchange-rate instability remained high during most of the decade.

Table 5

Evolution of budget balances during the two oil price shocks of 1973 and 1979

	Net lending (+)/borrowing (−) of general government (% of GDP)						Budget balance corrected for the effects of changes in economic activity (% of GDP)					
	1972	1975	Difference[1] 1975/1972	1978	1982	Difference[1] 1982/1978	1972	1975	Difference[1] 1975/1972	1978	1982	Difference[1] 1982/1978
B	−3,7	−4,8	−1,1	−6,1	−11,0	−4,9	−4,0	−3,0	1,0	−6,5	−10,9	−4,4
DK	3,9	−1,4	−5,3	−0,3	−9,1	−8,8	3,1	1,9	−1,2	0,0	−7,2	−7,2
D	−0,5	−5,6	−5,1	−2,4	−3,3	−0,9	−1,0	−2,9	−1,9	−3,1	−1,9	1,2
GR	—	—	—	—	−7,7	—	—	—	—	—	−8,5	—
E	0,3	0,0	−0,3	−1,8	−5,6	−3,8	0,0	0,3	0,3	−2,2	−3,4	−1,2
F	0,8	−2,2	−3,0	−2,1	−2,8	−0,7	0,5	0,1	−0,4	−2,5	−3,3	−0,8
IRL	−4,1	−12,5	−8,4	−9,7	−13,8	−4,1	−3,5	−12,2	−8,7	−12,3	−15,6	−3,3
I	−7,0	−10,6	−3,6	−8,5	−11,3	−2,8	−6,0	−8,0	−2,0	−8,5	−11,4	−2,9
L	2,0	1,1	−0,9	5,3	−1,0	−6,3	0,4	2,0	1,6	5,6	3,7	−1,9
NL	−0,4	−2,9	−2,5	−2,8	−7,1	−4,3	−0,5	−0,7	−0,2	−4,2	−4,5	−0,3
P	—	—	—	—	−10,4	—	—	—	—	—	−11,9	—
UK	−1,3	−4,5	−3,2	−4,4	−2,5	1,9	−1,7	−3,6	−1,9	−5,1	1,2	6,3
EUR 10	−1,5	−4,8	−3,3	−3,9	−5,4	−1,5	−1,6	−2,9	−1,3	−4,4	−4,2	0,2

[1] A positive value indicates a reduction in general government borrowing or an increase in net lending; a negative value indicates an increase in general government borrowing or a decrease in net lending.

Source: Eurostat, Ameco.

Table 6

Evolution of labour costs during the two oil price shocks of 1973 and 1979

	Nominal compensation per employee in national currency (annual % change)								Nominal unit labour costs in national currency (annual % change)							Real unit labour costs in national currency (index 1972 = 100)				
	1972	1974	Diff. 1974/ 1972	1978	1980	Diff. 1980/ 1978	1989	1990[1]	1972	1974	Diff. 1974/ 1972	1978	1980	Diff. 1980/ 1978	1989	1972	1975	1978	1981	1989
B	14,0	18,2	4,2	7,2	9,6	2,4	3,9	6,2	8,2	15,2	7,0	4,4	5,0	0,6	1,2	100,0	107,4	109,6	111,7	97,7
DK	8,0	18,4	10,4	9,2	10,0	0,8	3,5	3,3	4,7	19,2	14,5	8,7	10,0	1,3	1,7	100,0	106,0	102,1	101,9	95,8
D	9,9	11,5	1,6	5,6	6,9	1,3	2,8	4,7	5,3	9,7	4,4	3,3	6,6	3,3	0,9	100,0	103,8	100,4	101,4	92,7
GR	13,4	20,0	6,6	23,3	16,1	−7,2	18,8	18,0	4,7	24,8	20,1	16,0	15,6	−0,4	16,3	100,0	97,6	107,3	113,1	113,4
E	17,7	21,3	3,6	24,8	17,3	−7,5	5,8	8,2	9,3	16,0	6,7	20,9	12,3	−8,6	5,0	100,0	102,5	103,4	102,2	87,6
F	10,1	18,1	8,0	12,6	15,3	2,7	4,9	5,4	6,4	15,9	9,5	9,4	13,8	4,4	2,4	100,0	107,3	107,0	109,4	98,2
IRL	15,8	18,0	2,2	15,5	21,1	5,6	2,3	4,3	9,0	14,7	5,7	10,4	18,6	8,2	−2,3	100,0	108,8	100,1	104,6	88,0
I	10,6	22,6	12,0	16,5	21,5	5,0	9,2	8,9	7,1	18,6	11,5	13,0	18,8	5,8	6,0	100,0	104,6	100,3	101,3	96,9
L	9,7	22,9	13,2	5,9	9,0	3,1	3,9	6,2	5,7	21,2	15,5	1,2	8,9	7,7	1,5	100,0	118,7	117,8	119,5	108,0
NL	12,8	15,7	2,9	7,2	5,5	−1,7	0,5	4,7	8,3	11,5	3,2	5,3	5,3	0,0	−1,8	100,0	105,6	101,7	99,5	88,8
P	16,4	35,5	19,1	18,7	25,6	6,9	13,0	16,9	7,1	33,0	25,9	13,7	19,7	6,0	9,1	100,0	129,7	111,8	110,0	89,1
UK	13,0	18,7	5,7	13,4	19,7	6,3	8,8	10,4	9,1	21,2	12,1	10,0	22,1	12,1	9,4	100,0	110,1	99,6	100,7	97,4
EUR 12	11,7	18,0	6,3	12,7	15,0	2,3	6,0	7,5	7,1	16,3	9,2	9,5	13,9	4,4	4,3	100,0	106,3	102,1	103,1	94,8
Memorandum item on profitability of capital stock, EUR 12																100,0	68,8	78,7	67,8	95,1

[1] Forecasts, November 1990.

Source: Eurostat, Ameco, DG II autumn forecasts.

Table 7

Evolution of exchange rates during the two oil price shocks of 1973 and 1979

(%)

	Units of USD per unit of national currency		Nominal effective exchange rate (relative to 19 industrial countries)	
	Cumulated change 1974/1972	Cumulated change 1980/1978	Cumulated change 1974/1972	Cumulated change 1980/1978
B	13,1[1]	7,8[1]	2,8[1]	0,7[1]
DK	14,1	−2,1	6,6	−8,6
D	23,3	10,5	16,6	5,2
GR	0,0	−13,7	−7,7	−18,3
E	11,4	6,9	4,6	1,8
F	4,9	6,8	−3,6	1,1
IRL	−6,5	7,2	−9,2	−2,0
I	−10,3	−0,8	−18,9	−6,8
L	—	—	—	—
NL	19,5	8,9	8,6	1,7
P	6,3	−12,2	0,4	−18,0
UK	−6,5	21,2	−13,5	16,7
EUR 12	7,2[2]	9,3[2]	0,8[3]	8,3[3]

[1] Exchange rate for BLEU.
[2] Units of USD per ECU.
[3] Against 9 industrial non-member countries.
Source: Eurostat, Ameco.

During 1974-78, some consolidation took place: the Community's annual rate of inflation measured by the deflator of private consumption decreased over the period from 15,0 % to 9,2 % and the rate of increase in nominal unit labour costs dropped from 16,3 % to 9,5 %. The convergence of these variables, however, did not improve as can be seen in Tables 10 and 12.

The 1979/80 oil price shock hit the Community when its economy was again reaching the peak of a business cycle generated also by deliberate expansionary policies ('concerted action'). In fact, the strong level of demand for oil in the consuming countries was a significant factor behind the two oil price shocks.

If the degree of capacity utilization in manufacturing industry had reached levels in 1979 very close to those of 1973, this was not reflected in economic growth and also unemployment was double its 1973 level. Inflation and budget deficits were also higher: the deflator of private consumption of the Community was 9,2 % in 1978 against 6,4 % in 1972; budget deficits as a percentage of GDP were almost three times as high as those of 1972 (3,9 % of GDP in 1978 against 1,5 % in 1972 for the Community excluding Portugal and Greece). The overall Community current account had slowly returned to a global surplus similar to that existing at the time of the first shock. The dependency on oil, however, had been substantially reduced. Its consumption per unit of GDP had been reduced by 15 % since 1972 while oil imports per unit of GDP had been cut by about 25 % (see Study No 2). The Community oil bill, however, at 2,4 % of GDP, was exactly double its 1972 level creating the conditions for higher vulnerability to a new price increase.

Following the second oil price shock, the oil bill of the Community measured as a percentage of current GDP increased between 1978 and 1981 by 1,5 points against 2,4 points between 1973 and 1974. This result, however, is entirely due to the coming on stream of North Sea oil production. The increase in the oil bill for the Community excluding the United Kingdom over the period 1978-81 was 2,4 points, just the same as during the first oil price shock: the higher price increase was offset by a substantial reduction in the volume of oil imports. A significant difference between the two periods was that the price increase was spread over a longer period the second time around.

The main reason why the second oil price shock proved less disruptive than the first was probably the improved economic policy response. In particular, the growing dissatisfaction with the functioning of freely floating exchange rates, heightened by fears about the negative effects of the fall in the value of the dollar, had led to the setting up of the EMS at the end of 1978. At the same time a broad consensus had begun to appear on policies aimed at price stability and at improving the functioning of the economies. A sign of this difference in the policy response can be seen in the smaller deterioration of the budgetary positions between 1978 and 1982 than that between 1972 and 1975, even allowing for the effects of changes in economic activity (0,2 % of GDP instead of 1,3 % for the Community as a whole; see Table 5).

The average rate of inflation in the Community increased from 9,2 % in 1978 to 13,5 % in 1980, a smaller acceleration than during the first shock. The output loss was also less pronounced. The Community current account moved from a surplus of about 1 % of GDP in 1978 to a deficit of 1,2 % in 1980: a deterioration much larger than the increase in the oil bill (1,3 points of GDP between the two years; see Table 5). The additional deterioration is essentially explained by a high level of internal demand in the Community relative to its main trading partners and by a large loss of competitiveness. The average real effective exchange rate of the Community relative to its main industrial partners increased by more than 16 % between 1978 and 1980 under

Table 8

Evolution of interest rates during the two oil price shocks of 1973 and 1979

	Nominal short-term interest rates (%)							Nominal long-term interest rates (%)							Real long-term interest rates[2] (%)						
	1972	1974	Diff. 1974/ 1972	1978	1981	Diff. 1981/ 1978	Oct. 1990	1972	1974	Diff. 1974/ 1972	1978	1981	Diff. 1981/ 1978	Oct. 1990	1972	1974	Diff. 1974/ 1972	1978	1981	Diff. 1981/ 1978	Oct. 1990
B	4,2	10,6	6,4	7,3	15,6	8,3	8,9	7,0	8,8	1,8	8,5	13,8	5,3	10,0	0,8	−3,4	−4,2	3,9	8,7	4,8	6,5
DK	7,3	10,0	2,7	15,4	14,8	−0,6	9,9	11,0	15,9	4,9	16,8	19,3	2,5	11,0	1,6	2,5	0,9	6,3	8,4	2,1	7,8
D	5,7	9,8	4,2	3,7	12,3	8,6	8,5	7,9	10,4	2,5	5,7	10,4	4,7	9,1	2,4	3,1	0,7	1,4	6,1	4,7	5,2
GR	—	—	—	—	16,8	—	13,8[1]	—	10,5	—	10,0	17,6	7,6	—	—	−8,6	—	−2,6	−1,8	0,8	—
E	—	—	—	17,6	16,2	−1,4	15,0	—	—	—	12,0	15,8	3,8	14,8	—	—	—	−7,1	3,4	10,4	6,9
F	5,3	13,0	7,7	7,8	15,3	7,5	10,0	8,0	11,0	3,0	10,6	15,8	5,2	10,3	0,6	−1,1	−1,7	0,5	4,0	3,5	6,6
IRL	7,1	14,5	7,4	9,9	16,7	6,8	11,1	9,1	14,6	5,5	12,8	17,3	4,5	10,2	−3,8	8,0	11,8	2,1	−0,2	−2,3	7,9
I	5,2	14,9	9,7	11,5	19,3	7,8	11,5	7,5	9,9	2,4	13,7	20,6	6,9	13,2[1]	0,9	−8,3	−9,2	−0,3	1,7	2,0	5,7
L	—	—	—	—	—	—	—	—	7,3	—	6,6	8,7	2,1	—	—	−8,3	—	1,4	1,4	0,0	—
NL	2,7	10,4	7,7	7,0	11,8	4,8	8,5	6,7	10,7	4,0	8,1	12,2	4,1	9,4	−2,5	1,4	3,9	2,5	6,4	3,9	6,3
P	4,4	5,3	0,9	15,5	16,0	0,5	13,5	—	—	—	—	—	—	15,5	—	—	—	—	—	—	1,4
UK	6,8	13,4	6,6	9,4	14,1	4,7	14,0	9,0	15,0	6,0	12,6	14,8	2,2	11,0	0,7	0,1	−0,6	1,2	3,1	1,9	3,1
EUR 12	5,5	12,3	6,8	8,9	15,1	6,2	11,3	8,0	11,5	3,5	10,4	15,1	4,7	11,2	0,9	−1,6	−2,5	−0,1	3,8	3,9	5,2

[1] August 1990.
[2] Deflated by GDP deflators of 1990, autumn 1990 economic forecasts.

the impact of faster increases in unit labour costs, but also to some extent, due to the appreciation of Community currencies *vis-à-vis* the dollar.

An improved economic policy reaction to the second oil price shock resulted in a less serious deterioration of the degree of economic convergence in the Community than that which had followed the first shock. This new deterioration, however, while less serious, came on top of an already poor degree of convergence and left the Community in a very unsatisfactory state.

The average rate of inflation increased, but, while the dispersion measures do not show an additional significant deterioration, the gap between the rates of inflation increased (see Table 10). The current account divergences among the Member States widened substantially. Between 1978 and 1980, Greece and the United Kingdom improved their position while the external accounts deteriorated seriously in Belgium, Germany, and, especially, Ireland and Italy.

2.3. 1982-89: policy reorientation leading to much improved convergence

At the beginning of the 1980s, the Community's economy was in a poor state. Economic growth had almost halted, unemployment was high and rising, the productive apparatus needed wide-ranging restructuring and the degree of economic convergence was very poor.

The average rate of inflation in the Community (13,5 % in 1980 and 12,1 % in 1981, deflator of private consumption) was almost as high as after the first oil price shock and about three times the average level of the 1960s. The divergence among the rates of inflation was very high. The dispersion measure relative to the lowest was more than three times the value of the 1960s. The gap among the highest and lowest rates was around 17 points (see Table 10). Budget deficits were very high: over 5 points of GDP for the Community as a whole with four countries in 1981 having a general government borrowing requirement in excess of

Table 9

Convergence of GDP deflators

(annual percentage change)

	1961-69	1970-71	1972	1973	1974	1975	1976-78	1979-80	1981	1982-85	1986	1987	1988	1989	1990[3]
B	3,3	5,1	6,2	7,2	12,6	12,1	6,5	4,1	4,7	6,0	3,5	2,1	2,0	4,5	3,3
DK	6,2	8,0	9,2	0,7	13,1	12,4	9,5	7,9	10,1	7,0	4,7	5,1	4,9	4,5	3,0
D	3,3	7,8	5,3	6,4	7,0	6,0	3,9	4,4	4,0	3,0	3,1	2,0	1,5	2,6	3,7
GR	3,1	3,6	5,0	19,4	20,9	12,3	13,8	18,2	19,8	20,5	17,8	14,2	14,5	15,5	20,8
E	6,3	7,4	8,6	13,0	16,3	16,8	20,1	15,6	12,0	11,2	10,9	5,9	5,7	6,9	7,4
F	4,3	6,0	7,4	8,5	12,3	13,0	10,0	10,9	11,4	8,7	5,2	3,0	3,3	3,4	3,5
IRL	5,0	10,1	13,4	15,3	6,1	20,1	14,9	14,2	17,4	9,3	6,1	2,0	2,9	5,1	2,1
I	4,3	6,9	6,5	13,2	19,8	16,5	17,0	17,6	18,6	13,0	7,5	6,1	6,0	6,3	7,1
L	2,9	7,2	5,8	12,2	17,0	−0,9	6,1	7,1	7,2	6,2	1,7	0,9	2,2	3,8	3,1
NL	5,1	7,2	9,4	9,0	9,2	10,2	7,0	4,8	5,5	2,9	0,5	−0,4	1,9	1,5	2,9
P	2,9	4,3	7,8	9,4	18,9	16,2	21,6	20,2	17,6	22,9	20,5	11,2	11,6	12,5	13,9
UK	3,8	8,4	8,2	7,1	14,9	27,1	13,4	17,0	11,4	5,8	3,5	4,8	6,6	7,0	7,7
							Weighted average								
EUR 12	4,1	7,2	7,1	9,1	13,4	15,0	11,4	12,0	10,9	8,0	5,5	4,1	4,5	5,1	5,7
EUR 7[2]	3,9	7,0	6,7	7,7	9,7	9,7	6,9	7,1	7,3	5,5	3,8	2,3	2,3	3,0	3,5
							Measures of dispersion related to average[1]								
EUR 12	1,5	2,1	1,7	3,0	4,0	5,1	4,8	5,3	4,6	4,6	4,3	3,1	3,0	2,7	3,9
EUR 7[2]	1,5	2,4	2,2	2,7	3,3	4,8	3,3	2,9	3,5	2,3	1,6	1,2	0,9	1,2	0,4
							Measures of dispersion related to lowest[1]								
EUR 12	3,2	5,5	2,7	4,5	7,9	14,4	9,0	8,1	7,6	7,3	6,6	5,2	3,8	4,7	4,4
EUR 7[2]	2,5	5,4	2,8	3,5	4,9	11,3	5,3	3,8	4,6	3,7	3,1	2,6	1,2	2,1	0,9

[1] The dispersion index is an unweighted arithmetic mean of each country's absolute deviation from the respective reference value.
[2] EUR 7: ERM countries excluding Spain, Italy and the United Kingdom, i.e. Germany, Belgium, the Netherlands, Luxembourg, Denmark, France and Ireland.
[3] Forecasts, November 1990.

Sources: Eurostat, Ameco, DG II autumn forecasts.

10 % of GDP. Current account positions were also giving cause for concern with many countries showing very large deficits. In 1981, the deficits reached 14,7 % of GDP in Ireland, 12,2 % in Portugal, 3,8 % in Belgium and 3,0 % in Denmark (see Table 2).

The 1980s saw a significant re-orientation of economic policies that has been described in various Commission documents and particularly in the Annual Economic Reports of the last few years. From the point of view of progress towards convergence, two aspects were particularly important:

(i) the clear priority given to the fight against inflation and its acceptance, in most countries, by the two sides of industry;

(ii) the gradual commitment to more exchange-rate stability within the EMS by the countries participating in the exchange-rate mechanism.

Consumer prices (as measured by the private consumption deflator) in the Community dropped on average from 13,5 % in 1980 to 5,9 % in 1985 notwithstanding the depreciation of the European currencies against the dollar. The subsequent reversal of the exchange-rate movement and the 1986 drop in oil and other commodity prices allowed a further reduction in the average deflator of private consumption to 3,4 % in 1987: less than the average rate in the 1960s (3,9 %). The reduction in the average deflator of GDP was slightly less pronounced; nevertheless its average value was cut from 13 % in 1980 to 4,1 % in 1987.

Table 10

Convergence of private consumption deflators

(annual percentage change)

	1961-69	1970-71	1972	1973	1974	1975	1976-78	1979-80	1981	1982-85	1986	1987	1988	1989	1990[3]
B	3,2	3,9	5,4	6,1	12,8	12,3	6,4	5,1	8,6	6,7	0,3	1,8	1,8	3,4	3,6
DK	5,7	7,5	8,2	11,7	15,0	9,9	9,9	10,6	12,0	6,9	3,5	4,4	4,9	5,0	2,8
D	2,7	5,0	5,8	6,6	7,5	6,3	3,6	4,9	6,0	3,1	−0,2	0,8	1,3	3,2	2,8
GR	2,4	3,0	3,3	15,0	23,5	12,7	12,7	19,2	22,7	18,7	22,0	15,6	14,0	14,4	20,5
E	5,9	7,2	7,6	11,4	17,8	15,5	19,7	16,5	14,3	11,5	8,7	5,4	5,1	6,6	6,8
F	4,2	5,6	6,4	7,6	15,1	12,1	9,5	12,2	13,4	8,8	2,9	3,3	3,0	3,3	3,4
IRL	4,4	10,9	9,7	11,6	15,7	18,0	13,9	16,7	19,6	9,1	4,0	2,6	2,5	3,9	2,8
I	3,7	5,3	6,3	13,9	21,4	16,5	16,2	17,4	18,2	13,2	5,7	5,0	4,8	6,0	6,1
L	2,3	4,4	5,1	4,8	9,6	10,3	6,0	6,3	8,7	7,6	1,2	1,5	2,6	4,0	3,5
NL	4,0	6,1	8,3	8,5	9,5	10,1	6,5	5,6	5,8	3,2	0,2	−0,4	0,7	2,1	2,4
P	2,8	5,1	6,3	8,9	23,5	16,0	22,2	23,4	20,2	23,4	13,8	10,0	10,0	12,8	13,2
UK	3,7	7,3	6,5	8,6	17,0	23,6	13,2	14,9	11,2	6,0	4,4	3,9	5,0	6,1	7,0
							Weighted average								
EUR 12	3,7	5,9	6,4	9,2	15,0	14,0	11,0	12,2	12,1	8,1	3,8	3,5	3,7	4,9	5,1
EUR 7[2]	3,5	5,4	6,3	7,3	11,1	9,5	6,6	8,0	9,3	5,7	1,2	1,8	2,0	3,2	3,0
							Measures of dispersion related to average[1]								
EUR 12	1,4	1,7	1,2	2,6	4,2	3,7	4,8	5,4	4,7	4,4	4,2	2,9	2,7	2,6	3,5
EUR 7[2]	1,2	1,7	1,4	2,1	3,0	2,7	2,9	3,7	3,6	2,3	1,4	1,2	1,0	0,7	0,4
							Measures of dispersion related to lowest[1]								
EUR 12	2,3	3,3	3,3	4,8	8,2	7,4	8,1	7,9	7,6	6,9	5,8	4,9	4,0	3,8	3,8
EUR 7[2]	1,9	2,7	1,8	3,3	4,7	5,0	4,4	4,0	4,8	3,5	1,9	2,4	1,7	1,5	0,6

[1] The dispersion index is an unweighted arithmetic mean of each country's absolute deviation from the respective reference value.
[2] EUR 7: ERM countries excluding Spain, Italy and the United Kingdom, i.e. Germany, Belgium, the Netherlands, Luxembourg, Denmark, France and Ireland.
[3] Forecasts, November 1990.

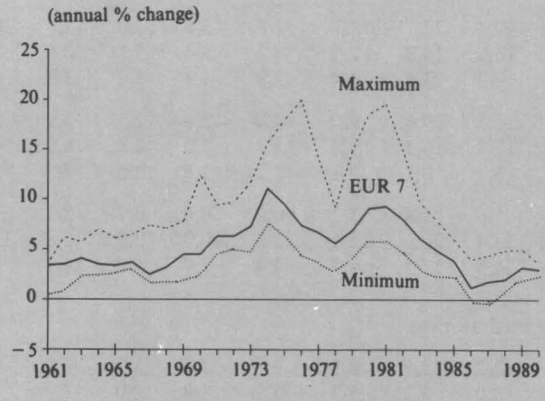
Sources: Eurostat, Ameco, DG II autumn forecasts.

The performance of the countries participating in the narrow band of the EMS from the start was particularly impressive. Indeed the contribution of the EMS to the reduction in inflation rates was substantial. Participants accepted the discipline which resulted from maintaining stable exchange rates with countries such as Germany and the Netherlands that were following a resolute anti-inflationary policy. Even if realignments were relatively frequent during the first years of the functioning of the system, they never fully accommodated inflation differentials and continued pressure was thus exerted on inflation.

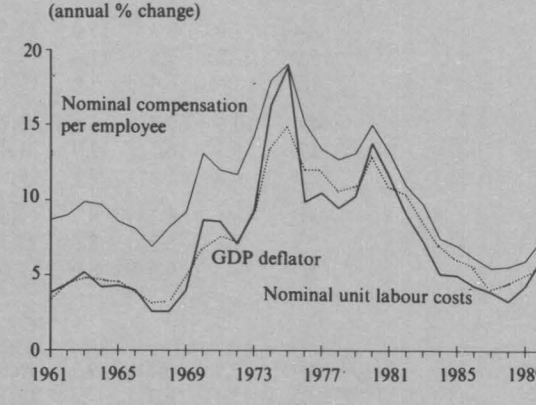
Monetary policy became tighter in response to the need for maintaining the agreed parities. As a result, the average private consumption deflator of these countries dropped from 9,1 % in 1980 to only 3,9 % in 1985. Over the 1982-89 period the gap between the highest and lowest figures in this group was reduced from 10,2 % to 2,9 %. The 1989 dispersion figures for this group of countries were better than those for the average of the 1961-69 period (see Table 10).

The results in the area of inflation were also made possible by the turnaround in wage policies and wage behaviour. Governments and the two sides of industry became more aware of the direct links between wage costs and inflation (see Graph 5) and of the consequences of excessive wage increases on investment profitability and international competitivity. This change of policy took place against a background of high and increasing unemployment and, in many

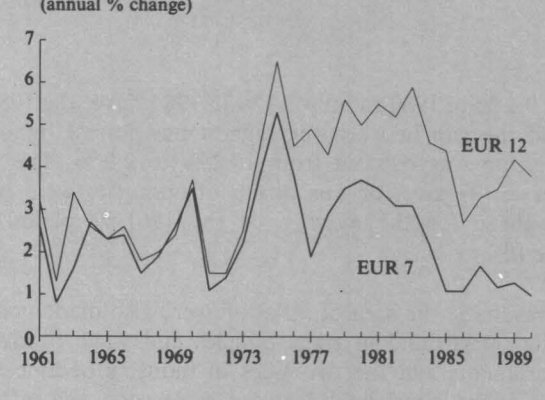
GRAPH 3: **Dispersion of private consumption deflators, EUR 7**



GRAPH 5: **Nominal compensation per employee, nominal unit labour costs, GDP deflator, EUR 12**



GRAPH 4: **Nominal unit labour costs, measures of dispersion related to average**



countries, it was encouraged by government intervention and an effective social dialogue between the two sides of industry.

The quest for exchange-rate stability has been one of the main economic policy themes in the Community during the 1980s. Although the EMS had been set up in 1978, its inherent logic was only accepted gradually by the participants. It is only from 1982-83 that all participants could be said to be following policies consistent with the logic of the system. From this period onwards, however, the system proved to be a haven of stability (see Table 1). The last general realignment took place in January 1987, and 1989-90 has seen Spain and the United Kingdom join the exchange-rate mechanism, albeit with a 6 % band, while Italy moved to the narrow band.

This remarkable exchange-rate stability has been accompanied by price stability (which has just been described) and patchy results in reducing current account and budgetary disequilibria. During the 1980s, some countries have managed to reduce current account deficits which had reached worrying proportions, but other imbalances appeared in the second half of the decade. The greater integration of capital markets has eased the financing of the imbalances which will, in any case, gradually lose their

significance in a monetary union. The general government borrowing requirement of the Community was reduced from a level equal to 5,5 % of GDP in 1982 to 2,9 % in 1989. This average result, however, is due more to an improvement in those countries which already had a comfortable position than to a reduction in the highest deficits.

The improvement in economic convergence in the Community during the 1980s was largely due to the success of the efforts made by France, Belgium, Ireland and Denmark to adapt to the good stability performance of Germany and of the Netherlands. The task of Stage I of EMU will be to extend this area of stability to the rest of the Community.

The most spectacular results were achieved in Ireland. Its convergence process can be viewed in terms of two distinct phases. The first, between 1981 and 1986, involved a sharp disinflation using fiscal restraint and exchange-rate stability within the ERM to purge demand pressures from the economy. Over this period, inflation fell from 19,6 % to about 4 % and the current deficit on the balance of payments was reduced from a level equal to 14,7 % of GDP in 1981 to near zero. The success of the adjustment hinged on fairly rigorous exchange-rate discipline provided by membership of the ERM narrow band. The absence of a nominal adjustment mechanism imposed a competitivity constraint on the traded sectors and, combined with falling internal demand, necessitated a real adjustment in the economy. The consequent rationalization of the labour force exerted downward pressure on wages and boosted productivity so that the rising trend in unit labour costs moderated significantly. A sounder public finance position, however, remained elusive. Despite a very significant reduction in the primary deficit, high international interest rates led to a significant increase in debt servicing costs. Total net borrowing by the government remained stubbornly above 10 % of GDP and the public debt/GDP ratio spiralled upwards.

The persistent disequilibria in the public finances were the target of the second phase of adjustment. Once again, exchange-rate discipline within the anti-inflationary framework given by the EMS provided the reference for a further tightening of the budgetary stance and a social consensus on wage moderation. Aided by unanticipated buoyancy in the economy, the final element in Ireland's nominal convergence was achieved by a rapid decline in net borrowing by government towards the Community average (3,5 % of GDP in Ireland in 1989 against 3,0 % for the Community as a whole; see Table 11) and the initiation of a steady downward trajectory in the debt/GDP ratio.

Table 11

Net lending (+) or net borrowing (−) of general government

(percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 7	EUR 12	USA	J
1961-69	−1,5	1,3	0,4	:	:	0,3	−3,6	−2,2	1,7	−0,9	:	−1,0	0,2	:	:	
1970-71	−2,7	4,0	0,0	:	0,1	0,8	−4,2	−4,1	2,5	−1,1	:	2,2	0,1	:	−1,7	1,6
1972	−3,7	3,0	−0,5	:	0,3	0,8	−4,1	−7,0	2,0	−0,4	:	−1,3	−0,1	:	−0,6	0,2
1973	−3,3	5,2	1,2	:	1,1	0,9	−4,6	−6,5	3,3	0,8	:	2,7	0,9	:	0,4	0,5
1974	−2,7	3,1	−1,3	:	0,2	0,6	−8,2	−6,4	4,7	−0,2	:	−3,8	−0,5	:	−0,3	0,4
1975	−4,8	−1,4	−5,6	:	0,0	−2,2	−12,5	−10,6	1,1	−2,9	:	−4,5	−4,0	:	−4,3	−2,8
1976-78	−5,8	−0,3	−2,8	:	−0,9	−1,1	−8,6	−7,9	3,4	−2,4	:	−0,2	−2,3	:	−1,3	−4,3
1979-80	−8,2	−2,5	−2,7	:	−2,1	−0,4	−12,1	−8,4	0,4	−3,9	:	−3,3	−2,4	:	−0,6	−4,6
1981	−12,8	−6,9	−3,7	−11,0	−3,9	−1,9	−13,4	−11,4	−3,4	−5,5	−9,3	−2,6	−4,0	−5,3	−1,1	−3,8
1982-85	−9,9	−5,7	−2,2	−10,0	−5,7	−2,9	−11,6	−11,5	2,4	−6,1	−10,4	−3,1	−3,5	−5,3	−4,2	−0,5
1986	−9,1	3,4	−1,3	−12,7	−6,1	−2,8	−11,1	−11,7	3,3	−6,0	−7,2	−2,4	−2,7	−4,8	−4,4	−1,0
1987	−7,1	2,5	−1,9	−12,0	−3,2	−1,9	−9,1	−11,1	1,3	−6,6	−6,8	−1,3	−2,6	−4,2	−3,5	0,6
1988	−6,6	0,2	−2,1	−14,3	−3,2	−1,7	−5,3	−10,9	2,1	−5,2	−5,4	1,1	−2,5	−3,7	−2,0	1,2
1989	−6,6	−0,8	0,2	−18,4	−2,7	−1,5	−3,5	−10,2	3,4	−5,2	−3,8	0,9	−1,4	−3,0	−2,0	1,8
1990	−5,8	−1,4	−3,2	−18,4	−3,1	−1,2	−3,4	−10,1	3,3	−5,4	−6,0	−0,3	−2,7	−3,9	−2,3	2,7

EUR 7: PPS EUR 7; B, DK, D, F, IRL, L, NL.
EUR 12: PPS EUR 12.
Sources: OECD, Eurostat, Ameco, DG II autumn forecasts.

The policies implemented in Ireland have certainly had a transitory cost in terms of economic growth and employment, but since 1987 the Irish rate of growth has been substantially higher than that of the rest of the Community and employment has started increasing again. If price convergence with the rest of the Community appears to have been reached, further efforts aimed at improving the cost performance of the country are necessary: the rate of unemployment is still extremely high and the current account is burdened by the high cost of servicing the foreign debt.

France did not present disequilibria of the order of magnitude of those of Ireland, but its rate of inflation in 1982 (11,5 %) was much higher than that of its closest trading partners and its current account showed a certain fragility. After a few unsuccessful attempts at easing the current account constraint via exchange-rate adjustments, the country switched to a firm anti-inflationary policy resting on a strong commitment to exchange-rate stability *vis-à-vis* Germany and the other EMS countries. The rate of inflation was thus reduced to 5,8 % in 1985. This policy was accompanied by efforts aimed at moderating the rate of increase of wage costs. This involved setting ambitious, but realistic, objectives for the rate of inflation, determining a consistent monetary policy and persuading the two sides of industry to strike wage deals compatible with these objectives. Over the four-year period 1986/89, nominal unit labour costs rose on average by 2 % per year against more than 10 % at the beginning of the 1980s. As a result, the rate of increase of consumer prices dropped to 2,9 % in 1986 and remained slightly above 3 % thereafter.

Table 12

Convergence of nominal unit labour costs

(annual percentage change)

	1961-69	1970-71	1972	1973	1974	1975	1976-78	1979-80	1981	1982-85	1986	1987	1988	1989	1990[3]
B	3,4	5,5	8,2	8,1	15,2	16,7	7,2	4,8	5,2	4,4	3,7	0,6	−1,0	1,2	3,6
DK	6,7	9,5	4,7	10,5	19,2	13,2	8,1	8,5	8,8	5,1	4,4	9,7	4,4	1,7	2,1
D	3,3	10,4	5,3	7,9	9,7	5,8	2,7	4,8	4,3	1,5	2,5	2,1	0,1	0,9	2,8
GR	0,8	1,1	4,7	11,0	24,8	14,3	17,4	17,6	27,3	22,6	12,3	11,2	14,5	16,3	17,3
E	7,1	7,5	9,3	12,1	16,0	19,8	20,4	14,7	12,6	8,3	8,5	6,2	4,3	5,0	7,3
F	4,2	6,3	6,4	7,9	15,9	18,1	9,9	11,7	12,3	7,6	2,3	1,9	1,3	2,4	4,1
IRL	4,6	11,5	9,0	15,1	14,7	21,0	11,7	18,8	13,3	7,5	5,3	1,8	0,8	−2,3	1,4
I	3,7	10,6	7,1	12,2	18,6	24,2	15,4	16,8	21,4	12,2	5,5	6,8	6,1	6,0	7,1
L	2,4	11,8	5,7	4,8	21,2	21,7	5,8	6,8	9,4	3,1	3,4	3,7	1,9	1,5	5,3
NL	6,4	8,6	8,3	10,3	11,5	12,7	5,7	5,1	2,6	0,5	1,6	1,8	−0,1	−1,8	2,9
P	1,8	12,0	7,0	5,1	32,8	40,5	15,8	17,9	20,3	19,5	13,6	12,6	9,1	9,1	12,9
UK	3,7	9,1	9,3	8,1	21,2	31,6	9,7	17,9	11,0	4,5	4,1	3,6	6,3	9,4	10,9
							Weighted average								
EUR 12	3,9	8,7	7,1	9,3	16,3	18,9	10,0	12,1	11,6	6,6	4,3	3,9	3,3	4,3	6,2
EUR 7[2]	4,0	8,5	6,2	8,3	12,9	12,0	6,2	7,6	7,4	4,1	2,5	2,2	0,6	1,2	3,3
							Measures of dispersion related to average[1]								
EUR 12	2,4	2,6	1,5	2,5	4,5	6,5	4,6	5,3	5,5	5,0	2,7	3,3	3,5	4,2	3,8
EUR 7[2]	2,0	2,3	1,4	2,2	3,8	5,3	2,9	3,6	3,5	2,4	1,1	1,7	1,2	1,3	1,0
							Measures of dispersion related to lowest[1]								
EUR 12	5,8	7,6	2,4	4,6	8,6	14,1	8,8	8,1	9,8	8,0	4,0	4,6	5,0	6,4	5,1
EUR 7[2]	3,6	4,6	2,1	4,4	5,6	9,8	5,3	4,6	5,4	4,2	1,7	2,5	2,1	2,8	1,8

[1] The dispersion index is an unweighted arithmetic mean of each country's absolute deviation from the respective reference value.
[2] EUR 7: ERM countries excluding Spain, Italy and the United Kingdom, i.e. Germany, Belgium, the Netherlands, Luxembourg, Denmark, France and Ireland.
[3] Forecasts, November 1990.

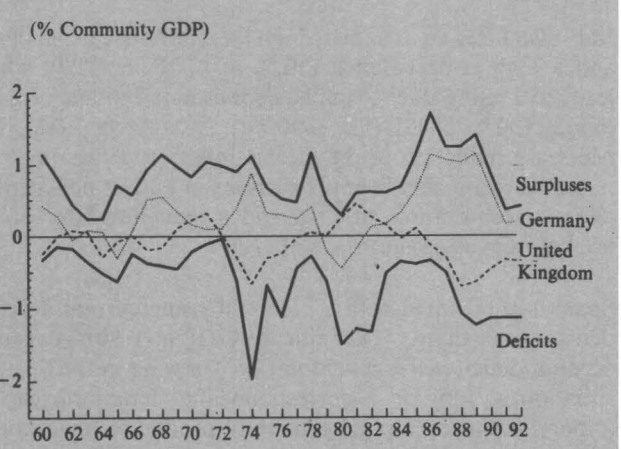
Source: Eurostat, Ameco, DG II autumn forecasts.

The adjustment path of Denmark was more complex. From 1982 both fiscal and exchange-rate policy were geared towards stability. The most spectacular result obtained by these policies was the turnaround in the budgetary position: a general government borrowing requirement exceeding 9 points of GDP in 1982 was replaced by a surplus equal to 3,4 points of GDP in 1986. The reduction was accompanied, and helped, by a strong rate of economic growth in 1984 and 1985. Unfortunately, the buoyancy of internal demand (more than 5 % a year in real terms in 1984 and 1985, a rate of growth which exceeded by more than 3 points that of the rest of the Community) was what initiated a set-back in the adjustment efforts.

The current account deteriorated rapidly reaching a deficit of 5,5 points of GDP in 1986. Policy was tightened again, but a breakdown in the social consensus on wage moderation led to substantial wage increases in 1987 when the economy was already in a recession. As a result of these increases, real unit labour costs rose in 1987 by about 5 %.

The continued implementation of tight fiscal and monetary policies and a firmer exchange-rate policy within the EMS managed to keep a lid on the rate of inflation, but the failure of wages to adjust as required has led to a long period of near zero growth and declining investment which is expected to continue well into 1991. By 1990, the rate of inflation had again reached the levels of the other narrow band countries. The current account position had also improved.

GRAPH 6: **Current account surpluses and deficits of EC Member States**



In the early 1980s Belgium had current account deficits of about 4 % of GDP. In 1982, the Belgian Government took determined remedial action: the wage indexation mechanism was suspended, the currency was devalued and budgetary policy became more restrictive. Particular attention was paid to wage policy: a social dialogue between the government and the two sides of industry was set up with the aim of preserving the country's external competitivity. These measures produced a return to a surplus in the external accounts by 1985. With the contribution of the drop in oil prices, the increase in the deflator of private consumption was reduced to only 0,3 % in 1986.

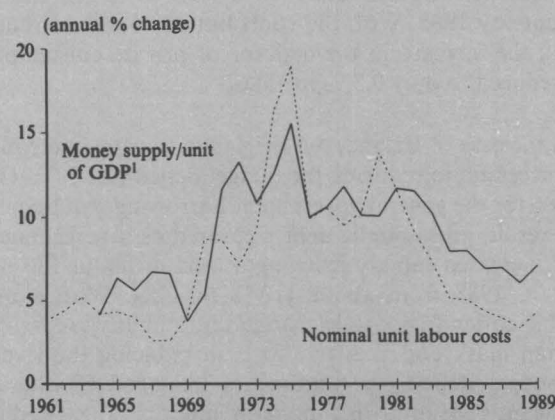
As in the case of Ireland, the Belgian authorities were much less successful in reducing the budget deficit (9,1 % of GDP in 1986 for the general government borrowing requirement). As a result, gross public debt measured as a percentage of GDP increased rapidly reaching a level of about 130 % of GDP in 1988 from about 110 % in 1984. With a more credible commitment to exchange-rate stability *vis-à-vis* the German mark and greater efforts in reducing the level of the budget deficit, the authorities managed to obtain a significant reduction in long-term interest rates. Reduced interest rates, and the phase of economic expansion which they helped initiate, allowed a further reduction of the budget deficit. These reductions, however, have led only to a stabilization of the public debt as a percentage of GDP. As a result, the Belgian budgetary situation is highly vulnerable to variations in the rate of economic growth and in the level of interest rates. The experiences of Ireland and Belgium highlight the difficulties that countries such as Italy, Greece and, to a lesser degree, Portugal will face in reducing their rates of inflation unless public deficits are also simultaneously curtailed.

3. Economic convergence of the Community in 1990

While the Community has significantly improved its economic convergence performance since the beginning of the decade, serious problems remain in some countries and in some areas. The significant progress that has taken place constitutes a testimony both to the positive effects of the discipline imposed by the exchange-rate mechanism of the EMS and to the policies followed by Germany, the country

that has up until now played the role of stability anchor of the system. In fact, the present convergence positions of Member States are closely correlated with their degree of exposure to this discipline.

GRAPH 7: **Money supply per unit of GDP and nominal unit labour costs, EUR 12**



1 Money supply/GDP 1964-68: EUR 12 excluding Spain and Portugal.

As noted in the previous section, the degree of economic convergence is very good among those countries which respected the narrow band of fluctuation from the outset. The average rate of inflation in this group of countries has been around, or below, the 3 % mark since 1986. The dispersion in the individual rates of inflation is lower than in the 1960s and the gap between the highest (3,6 % in Belgium) and the lowest (2,4 % in the Netherlands) rates of inflation for 1990 is just over one point. The situation of these countries broadly corresponds to what might be required for the transition to Stage II of EMU.

This convergence in the rate of inflation has been accompanied by a clear deceleration in the rates of increase in nominal and real unit labour costs. Real unit labour costs (unit labour costs divided by the GDP deflator) have declined by more than 7 points since 1982 thus improving investment profitability. Further improvements in the profitability positions and additional structural adjustment efforts could be needed, however, in those countries where unemployment levels are particularly high or where, as in Denmark, economic growth had to be slowed down to fight inflation and reduce the external deficit.

Belgium, Ireland and, to a lesser extent, the Netherlands still experience budgetary problems. It is desirable to obtain a reduction in the level of debt as a percentage of GDP especially in Belgium where the high level of public debt renders the budgetary situation very vulnerable to fluctuations in interest rates.

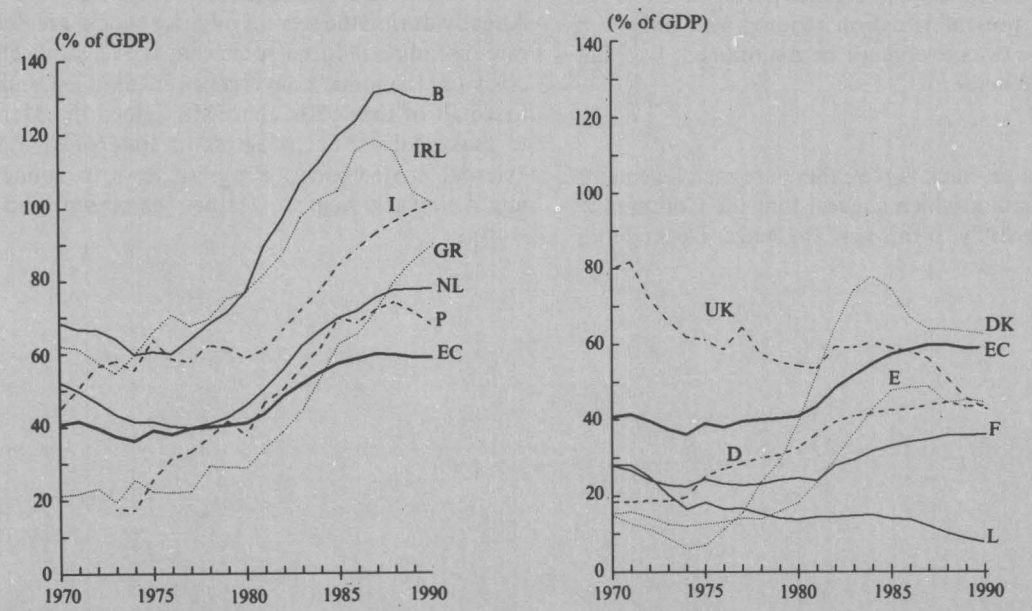
The current account positions of the initial narrow-band countries appear broadly sustainable. The German surplus, which had given cause for concern in the recent past, is being reduced as a consequence of the redirection of trade resulting from the unification process. Further progress has to be made in Denmark where the trade surplus only slightly offsets the negative investment income flows resulting from the high level of external debt. A further improvement in the competitive position, to be obtained through a moderation of nominal and real wage increases, is necessary.

Italy, which has recently joined the narrow band, and Spain, which joined the wider band last year, have also made significant progress, but they still show much less favourable convergence positions. According to the latest forecasts, the rates of inflation for these countries in 1990 (6,1 % and 6,8 % respectively, deflator of private consumption) are more than double the figures for the previous group. Both countries face strong wage pressures with nominal unit labour costs rising by 7 % or more in 1990 against less than 2,5 % for the original participants in the narrow band.

Italy also faces an extremely high level of public expenditure and a high budget deficit (10 % of GDP in 1990), which leads to a rising level of public debt as a percentage of GDP (about 100 % of GDP in 1990 against 66 % in 1982). The necessary reduction in the rate of inflation will have to go in tandem with significant reductions in budget deficits that allow a stabilization, at first, and a reduction later of the level of debt as a percentage of GDP.

Spain is confronted with a high and rising current account deficit (more than 3,5 % points of GDP in 1990). A current account deficit *per se* would not be worrying in the Spanish situation as long as it corresponded to long-term capital imports financing a rapid growth of productive investment. What gives cause for concern, however, especially if high oil prices were to persist in the months to come, is the rapidity of the deterioration of the current account position which was still in equilibrium in 1987. If exchange-rate stability is to be maintained, the rate of growth of unit labour costs in

GRAPH 8: **Trends in gross public debt**



Spain must be brought rapidly below that of its main trading partners so as to improve its competitive position. This would also create the conditions for continued strong growth which is needed both to reduce the still very high levels of unemployment and to allow the catching-up process to continue.

The United Kingdom, which has recently joined the wider band of the exchange-rate mechanism, is experiencing a very high rate of inflation (about 7 % in 1990 for the deflator of private consumption) and a large current account deficit (about 3 % of GDP in 1990). The expected slowdown of the economy will bring some improvements on both fronts. The main problem for the United Kingdom economy is the excessive increase in wage costs. Unit labour costs for the whole economy are expected to increase by nearly 11 % in 1990. This is more than three times the rate for the narrow-band countries. What is even more worrying is that wage settlements are still running at a high rate and are not showing signs yet of reacting to the slowdown in the economy.

This implies that investment profitability will be reduced (real unit labour costs are expected to increase in 1990 by 3 %, whereas they are forecast to remain stable in the rest of the Community) and that the economy will take much longer to recover from the present situation thereby entailing a high employment price.

The main convergence problem in Portugal is the still very high rate of inflation (about 13 % in 1990) which renders problematic its participation in the ERM. It must not be forgotten, however, that in 1982 and 1983 when exchange-rate policy in the EMS became tighter, Ireland had rates of inflation comparable to that now experienced by Portugal. Unit labour costs are still growing too rapidly. As in Italy, the reduction in the rate of inflation will have to be accompanied by significant reductions in the budget deficit to prevent public debt as a percentage of GDP from increasing.

The Greek economy is characterized by serious disequilibria in many areas which call for radical measures. The rate of inflation is very high (about 20 % in 1990) and the budget deficit, at more than 18 % of GDP in 1990, has reached levels never experienced in the Community. Gross public debt is presently approaching a level equal to 90 % of GDP, which is almost three times the level at the beginning of the decade. A serious adjustment programme extending over many years is unavoidable.

It is feared that the Gulf crisis might significantly affect the picture just presented and put at risk the continued progress towards EMU. The two oil price shocks of the 1970s led to serious deteriorations in the convergence performance of the Community. The present situation requires not only that the existing degree of convergence be maintained, but that further progress be made.

While the risk of a set-back is real, there are many elements in the present situation which suggest that the Community may face up successfully to this new challenge. Dependency on oil imports is now much lower than in the 1970s, the general state of the economy is vastly improved and rates of inflation are a fraction of what they were in the 1970s. Most importantly, the lessons of the 1970s have been learnt. Already during the second oil price shock, greater exchange-rate discipline reduced somewhat the negative effects of the crisis on economic convergence in the Community. In the first half of the 1980s, the EMS helped the Member States to make substantial progress in spite of an unfavourable external environment. Progress towards monetary union might similarly help to weather the present and any future storms.

Study No 5

Budgetary policies in Stage I of EMU

Budgetary policies in Stage I of EMU

Tables

Graphs

Summary

On 1 July 1990 the European Community embarked upon Stage I of European Economic and Monetary Union (EMU). For this stage to be a success and thus pave the way for further steps to full EMU, a high degree of convergence of economic policies and performances will have to be achieved. As to public finances, convergence basically requires the pursuit of sound budgetary policies without necessarily requiring full convergence of fiscal parameters. More specifically, the major objective in this field during Stage I is to achieve greater budgetary discipline. In the absence of binding rules or sanctions to enforce corrective actions in Stage I of EMU, this objective has to be attained on the basis of voluntary coordination in the framework of multilateral surveillance. The starting point of the study is a discussion of the institutional and economic environment associated with Stage I. The major emphasis is on the principles, rules and procedures that should govern the surveillance of budgetary policies in Stage I. Section 2 reviews broad trends in budgetary divergence and convergence over the last 30 years and analyses to what extent the Iraq/Kuwait crisis and the German unification constitute new challenges for the pursuit of sound budgetary policies. Finally, Section 3 examines firstly the actual degree of budgetary discipline and then spells out a desirable evolution of budgetary policies in the Member States in the years ahead. Monetary financing of budgetary deficits, though being reduced or abandoned, is still operative in six Member States and excessive levels of budget deficits or high public debt/GDP ratios prevail in Greece, Italy, Belgium, the Netherlands, Portugal and Ireland, in descending order of gravity. Three of these countries are still confronted with high rates of inflation. Their required convergence towards the lowest possible level has to be matched by corresponding efforts to reduce budget deficits in order to avoid a strong growth of the public debt/GDP ratio. This is particularly the case in Greece, where the overall economic situation is very worrying, and in Italy, given the very size of its economy. In both countries, a credible medium-term fiscal adjustment programme is required. Although the budgetary situation in Portugal is markedly less difficult than in the former two countries, further improvements are needed in parallel with the disinflation process. A reduction of the extremely high public debt/GDP ratio remains a matter of major concern in the other three countries. This is particularly the case in Belgium where the debt/GDP ratio has just stabilized but remains fragile at just below 130 %. In Ireland, there is a need to maintain the present momentum of fiscal consolidation, despite a substantial fall during recent years in the debt/GDP ratio. In the Netherlands, the debt/GDP ratio though markedly lower than in Belgium and Ireland is not fully stabilized, so that the budgetary position warrants close scrutiny.

1. A new institutional and economic environment

1.1. Legal framework

As decided by the Madrid European Council in June 1989, Stage I of the process leading towards a European Economic and Monetary Union (EMU) began officially on 1 July 1990. Apart from the completion of the internal market programme, the major goal of Stage I is to bring about greater convergence of economic policies and performances in the Community, particularly in the monetary and budgetary field.

Convergence of economic performance calls for sustained and cogent efforts in all areas of economic policy. It is widely recognized, however, that the stated final objectives of Stage I, namely price stability — i.e. price increases at the lowest possible level — and exchange rate stability, could be undermined by untenable budgetary positions. Hence, the success of Stage I is highly contingent on whether and at what pace progress can be made in implementing adequate budgetary policies and in narrowing budgetary divergences in the Community.

Since Stage I does not entail major changes in the general institutional setting or in national sovereignty, greater economic convergence in the Community will have to be achieved through closer and more efficient coordination of all aspects of economic policies. To this end, the Council of Finance Ministers adopted the Decision on the attainment of progressive convergence of economic policies and performances during Stage I of EMU[1] on 12 March 1990. Among other things, the new convergence decision puts in place a framework for multilateral surveillance, which is considered an appropriate and essential instrument to improve and intensify the coordination of economic policies between Member States. While establishing a general legal framework for the gradual achievement of the convergence objective, the operational content of this framework remains largely unspecified and needs to be developed. An attempt in this regard is undertaken in the next two subsections, dealing with the building blocks and the form of the coordination of budgetary policies in Stage I of EMU, respectively.

[1] Decision 90/141/EEC, OJ L 78, 24.3.1990, pp. 23 and 24. The new Decision replaces the 1974 Council Decision on Economic Convergence (74/120/EEC) and its associated Directive on Stability, Growth and Full Employment (74/121/EEC). For more details, see *European Economy*, Supplement A, No 3, 1990.

1.2. Principles, rules and procedures

In the transition towards EMU, the convergence of price performances to the lowest possible level can be achieved on a sound basis only if it is accompanied by parallel though not identical progress in other areas.[1] In the field of public finance, this basically requires the pursuit of sound budgetary policies without systematically striving for identical outcomes with respect to fiscal policy parameters, such as the size of the public sector, budget balances or public debt. The requirement of greater budgetary convergence fully takes into account the specific economic situation of each Member State, the existence of structural differences and the uneven results achieved so far in the consolidation of public finances. More specifically, the objectives of budgetary policy during Stage I are essentially twofold: (i) greater budgetary discipline and (ii) a better contribution to the achievement of macroeconomic goals at the national and Community level. The pursuit of these objectives is at least as much in the self-interest of the Member States as it is a condition for further progress towards EMU.

If there is virtually no ambiguity over the nature of budgetary convergence in the Community during Stage I, consensus is more lacking on the question of how to ensure that national budgetary policies play their part in the necessary convergence process.

In accordance with the principle of subsidiarity,[2] national sovereignty over budgetary policy remains unimpaired during Stage I (except for instance with respect to subsidies). Consequently, budgetary convergence will have to be attained through coordination at the Community level of those policies designed and conducted at the national level. Such coordination will only be effective to the extent that it is conducive to budgetary discipline and macroeconomic stability. To this end, it is necessary to condition national budgetary policies to some extent in the context of multilateral surveillance. Without a transfer of sovereignty and taking heed of the guiding principle of subsidiarity, this can be done by introducing and applying a set of incentives and constraints. In this respect, a consensus is emerging on some basic budgetary principles and rules. The nature of these principles and rules is such that their adherence would facilitate greater economic convergence and the achievement of macroeconomic objectives at the national and Community level.

(i) *Budgetary discipline* — The rationale underlying the need for budgetary discipline is twofold: to avoid pressures impairing a stability-oriented monetary policy and to avoid negative spill-over effects from inappropriate fiscal stances in individual Member States.[3] To ensure budgetary discipline, the consensus emerging in the Community rests on the respect of three rules. However, in some areas the stringency in the application of these rules remains very much a matter for debate.

(a) *No monetary and compulsory financing of public deficits* — This means that governments should have no automatic access to central bank financing and that any compulsion on commercial banks or institutional investors to lend to the government should be excluded. This rule basically attempts to minimize the potential threat of budget deficits and their financing to monetary stability and to subject borrowing by governments to market conditions. Other methods of financing, which may have important monetary consequences — e.g. governments' external borrowing, are also a matter of Community concern and should therefore be monitored in the framework of multilateral surveillance.

(b) *No bailing-out* — This rule is closely linked to that at (a) and implies that in the case of budgetary difficulties a Member State could not benefit from an unconditional guarantee concerning its public debt either from the Community or from another Member State. Without the possibility of assistance in cases of public-sector insolvency, financial markets will enforce budgetary discipline on Member States by differentiating the costs of borrowing and credit ratings according to the budgetary and financial situation of countries. It is then hoped that in cases of governments pursuing unsound budgetary policies, effective market discipline would trigger the required fiscal adjustment. Even assuming the ability of financial markets to evaluate correctly the creditworthiness of countries, their disciplining force on governments may be weakened by various elements (for instance, the possibility that governments would not respond appropriately to a worsening of their credit rating, the expectation of ultimate Community relief in case of debt default by a single Member State).

The weaknesses of the pure market discipline rule, on the one hand, and concerns about weaker incentives to budgetary discipline on the road towards

[1] See in this respect Study No 4 of this volume on 'Economic convergence in the Community'.

[2] The principle of subsidiarity states that the functions of higher levels of government should be as limited as possible and should be subsidiary to those of lower levels. Thus the attribution of competences to the Community would have to be confined specifically to those areas in which national governments cannot be expected to act optimally.

[3] For more details on the analytics of the need for budgetary discipline, see *One market, one money*, Chapter 5, 'Implications for public finance', *European Economy*, No 44, October 1990.

monetary integration, on the other, have strengthened the case of a more directly constraining principle, namely the avoidance of excessive budget deficits.

(c) *Avoidance of excessive budget deficits* — Excessive budget deficits are likely to confront the monetary authorities with the policy dilemma of either crowding out private demand by raising interest rates —which may be costly in terms of growth and employment — or accommodating the fiscal stance by monetary policy at the expense of price stability. An immediate priority for Stage I is therefore the reduction and avoidance of excessive budget deficits.

In order to monitor and ensure the observance of this principle in the framework of multilateral surveillance, it is necessary to define what is understood by an 'excessive' budget deficit. In practice, the definition has to take account of the required downward convergence of inflation rates and the narrowing of interest rates during Stage I. The necessary deceleration of inflation makes the principle more stringent as declining rates of inflation imply lower budget deficits consistent with a stable debt/GDP ratio. Or otherwise stated, to avoid that the disinflation process gives rise to a soaring public debt to GDP ratio — as happened in Belgium and Ireland during the first half of the 1980s — it has to be accompanied by an appropriate budgetary adjustment. Hence, the determination of whether a budget deficit is excessive or not is a function of the required reduction in inflation during Stage I. On the other hand, long-term interest rates will tend to come down as a result of capital market liberalization and the fading of realignment expectations during the progress towards EMU, easing somewhat the degree of restraint implied by this principle.

On the basis of the above considerations, a budget deficit can be defined excessive when it entails a rapidly rising public debt/GDP ratio. In this sense, avoiding excessive budget deficits boils down to keeping public debt/GDP ratios under control. A first indicator is thus the trend of the ratio of public debt/GDP.[1] However, not only the trend but also the level of the ratio of public debt/GDP is of importance in assessing budget deficits. A high public debt/GDP ratio imposes a considerable burden on the budget, limits the freedom of budgetary action and may demand a high burden of taxation. Beyond a certain level of public debt, these adverse effects become so serious that the public debt/GDP ratio is judged to be too high, implying that policy priority should be given to curbing it. In the absence of an absolute rule, a pragmatic consensus is emerging on the idea that public debt expressed as a percentage of GDP warrants close attention when it significantly exceeds the Community average and is clearly too high when it is moving towards or going beyond 100 %.

Another possible yardstick is the 'golden rule of public finance'. It is a simple and easily quantifiable rule which is moreover widely used in existing federations. According to this rule, a budget deficit is excessive when it exceeds investment expenditure. The underlying rationale is that net borrowing by government is economically justified only when it adds to the public capital stock. This capital may yield revenue returns adequate to meet the associated interest payments and help in improving the growth potential of the economy. Respect of this rule ensures that private saving is not absorbed by the financing of current expenditure of governments. It also means that the public sector should contribute positively to national saving. In a context of low or zero inflation, both indicators — the trend and level of public indebtedness and the golden rule — are bound to produce fairly similar outcomes in terms of the ratio of public debt/GDP over the long term.

The above indicators relate to budgetary discipline *stricto sensu* and take into consideration inflation performance and levels of interest rates. In addition to that, given the variety of factors at work, the assessment of whether or not a budget deficit is excessive must also be judged in each individual case with reference to other economic criteria, such as growth performance, relative strength of domestic demand, current account position, the adequacy of saving and investment, etc.

(ii) *Improvement of the structure of government receipts and expenditure and control of the share of the public sector* — These principles aim essentially at enhancing the flexibility, efficiency and productivity of the economy. As such, they relate to aspects of structural policies which are primarily a matter for the Member States. In this context, it should be stressed that disparities in the level and structure of public spending and revenue

[1] As such, this indicator is related to the quantitative measurement of the sustainability of fiscal positions by means of the 'primary gap'. On the basis of the arithmetic of the government budget constraint, the primary gap is defined as the change in the primary deficit required to stabilize the public debt to GDP ratio at its current level.

largely reflect different sets of political, cultural and social preferences between the Member States. The respect of the subsidiarity principle and the concern to allow Member States a maximum degree of budgetary freedom and flexibility, argue in favour of diversity of public finances in the Community. However, to the extent that these disparities affect other Member States' situations or policies, they can not be disregarded in the surveillance process.

The completion of the single European market adds a specific dimension to the pursuit of these principles and to the coordination process. The abolition of fiscal and other frontiers will have repercussions on the level and structure of tax revenues and will require the approximation of certain types of taxation (particularly indirect taxation, but probably also some other taxes). These impacts will, however, significantly differ among the Member States. It is feared that the progressive integration of product and factor markets may spur an iterative, revenue-eroding process of tax competition between the Member States. In order to avoid such a 'competitive de-fiscalization', the challenging task facing the Community is to establish a fiscal environment which:

(a) attains efficiency and neutrality in the taxation of transfrontier economic activities;

(b) guarantees as much national fiscal sovereignty as possible;

(c) secures an efficient provision of public services;

(d) preserves standards of intra- and interjurisdictional taxpayers equity.

(iii) *Appropriate medium-term policy-mix* — The thrust of budgetary policy should be pursued as steadily as possible and framed in a medium-term perspective. Its coordination in the surveillance process should be embedded in wider cooperation on macroeconomic policy in order to ensure a budgetary stance that in aggregate is consistent with a sound overall policy-mix in the Community. This means an appropriate interaction of budgetary, monetary, wage and other economic developments at the national level, on the one hand, and mutually consistent policy mixes among Member States on the other. With further progress towards monetary and economic integration, the importance of an appropriate role for budgetary policy in the policy-mix will increase particularly with respect to sustained non-inflationary growth, the common exchange rate *vis-à-vis* third countries and the aggregate current account position.

1.3. Form of coordination and multilateral surveillance

During Stage I, the major task of multilateral surveillance in the budgetary field is to ensure that the growing consensus on principles and rules in the Community is gradually reflected in an increasing adherence in practice. In the existing legal framework of Stage I, there is no provision for binding rules or sanctions to enforce corrective actions. Consequently, a sufficient degree of budgetary convergence will have to be achieved through voluntary coordination.

Coordination will take place through periodic horizontal and vertical examinations of Member States' budgetary situations and policies, preferably ahead of national budgetary planning. Genuine cooperation among national policy-makers requires that Member States are ready to commit themselves to budgetary objectives consistent with the pursuit of sound public finances, accept a multilateral review of their performance and discuss the compatibility of policies at national and Community levels.

In this context, peer pressure should be exerted upon Member States which implement policies that are clearly incompatible with further process towards sound budgetary positions or that jeopardize the pursuit of sustainable non-inflationary growth in the Community. With a view to subsequent stages of the EMU plan, peer group pressures should induce Member States to set themselves medium-term fiscal adjustment paths. If credible, such self-commitments will speed up budgetary convergence and facilitate the passage to the final stage of EMU.

2. Budgetary divergence and convergence in the European Community: 1960-90

2.1. Origins of divergence and beginning of convergence

Over the last 30 years public finances in the Community have undergone major changes, basically reflecting shifts in the prevailing view on the appropriate design of budgetary policy and changes in the economic environment. Three fairly distinct phases can be identified:[1]

(i) *Phase of balanced expansion of the public sector* — An initial period, starting in 1960 and continuing to the beginning of the 1970s, was characterized by a rapid

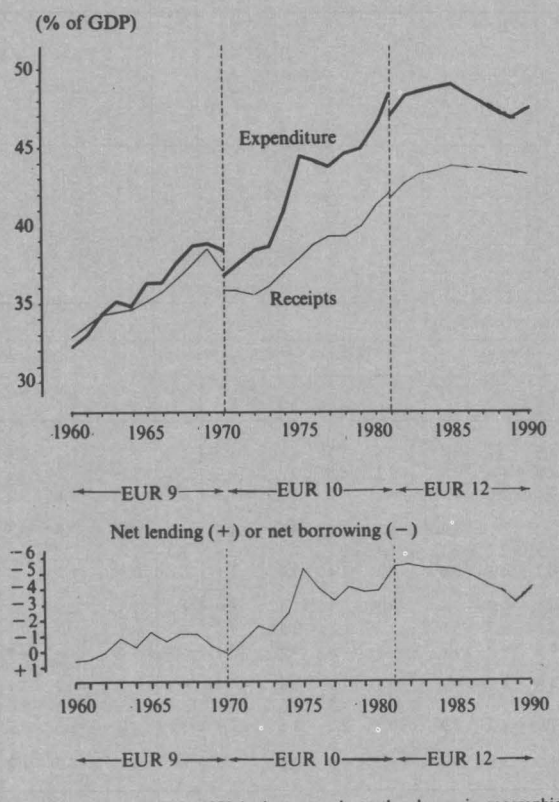
[1] See Study No 3 on 'Public finances and fiscal policy in the Community', *European Economy*, No 42, November 1989.

growth of the share of public expenditure in economic activity. Since government receipts expanded at a fairly similar pace, budget balances remained broadly in equilibrium (see Graph 1 and Table 1). The balanced expansion of the public sector was a reflection of the acceptance of its growing role and the belief in the effectiveness of government involvement in the economy. Adding to this, was the stable international economic environment and the exceptionally strong growth performance in the Community in the 1960s.

(ii) *Phase of strongly deteriorating budgetary positions* — The period 1970-82 saw the emergence of large and sharply widening budget deficits which led to rapidly rising public debt/GDP ratios. The deterioration in budgetary positions was due to an explosion in public expenditure which, in contrast to the previous phase, was not met by a corresponding increase in taxes and social security contributions. Admittedly, the contraction in economic growth and the rise in unemployment, which characterized this period, contributed to the worsening of budgetary positions. During this phase a vicious circle was established between budgetary developments and economic growth as a result of the inappropriate policy responses to the forced reallocation of resources generated by the two oil price shocks. The theoretical expression of this was the 'inverted Haavelmo effect'. It is the contention that even a balanced expansion of the revenue and expenditure side of the budget is detrimental to economic growth, [1] as the stiffening of the tax burden exerts upward pressures on wage costs which in turn adversely affect profitability and investment.

(iii) *Phase of corrective steps towards sound public finances* — Following a fundamental reorientation of policy stance towards sound public finances, the pace of the expansion of government expenditure slowed down in the first half of the 1980s and was even reversed from 1985 onwards as measures to contain the growth of the public sector were reinforced by an upswing in economic growth. This shift has been accompanied by a significant improvement in budgetary positions and a less pronounced reduction in the tax burden (establishment of a virtuous circle between budget trends and growth). The reassessment of the role and the design of budgetary policies was prompted by many factors. Among others, it was inspired by growing concerns about the adverse economic effects on growth and employment of too large a public sector, about the sustainability of budgetary positions in many countries and about the increasing inflexibility of budgets due to the growing relative share of interest payments and current transfers.

GRAPH 1: Trend in general government expenditure, receipts and net lending (+) or net borrowing (−) in the Community, 1960-90



Note: The break recorded in 1970 is due not only to the change in geographical coverage but mainly to a switch to a different statistical source and methodology (OECD prior to 1970, Commission services after that date).

Source: Commission services and OECD.

While the above broad trends in the Community as a whole were also discernible in most Member States, budgetary positions tended to show less convergence at the end of this 30-year period than at the beginning. This was mainly due to two factors: divergent responses to the two oil price shocks of the 1970s and differences in intensity and timing of consolidation efforts in the 1980s.

(a) Table 2 suggests that the origin of the deterioration in the degree of convergence of fiscal positions lay to a large extent in divergences in economic policy reactions to the oil shock of 1973. In an effort to cushion its allocative and distributional impact, in the years follow-

[1] According to this theoretical argument, the growing public expenditure shares in the 1960s have laid the ground for the supply-side difficulties of the 1970s.

Table 1

Long-term trends in public finances[1] in the Community, 1960-90
(as % of GDP)

	Current receipts						Total expenditure						Net lending (+) or borrowing (−)					
	1960	1970	1982	1985	1988	1990[2]	1960	1970	1982	1985	1988	1990[2]	1960	1970	1982	1985	1988	1990[2]
Belgium	27,5	37,0	47,8	48,3	46,8	45,4	30,3	39,2	58,8	56,9	53,4	51,2	−2,8	−2,2	−11,0	−8,5	−6,6	−5,8
Denmark	27,9	46,2	52,0	57,3	60,5	57,5	24,8	42,1	61,2	59,3	60,2	58,9	3,1	4,1	−9,1	−2,0	0,2	−1,4
Germany	35,5	38,9	46,1	46,4	44,5	43,7	32,5	38,7	49,4	47,5	46,6	46,8	3,0	0,2	−3,3	−1,1	−2,1	−3,2
Greece	21,1	26,5	32,0	34,2	33,9	33,7	:	:	39,7	48,1	49,5	52,1	:	:	−7,7	−13,8	−15,6	−18,4
Spain	:	22,8	32,3	35,5	37,8	38,9	:	22,0	38,0	42,6	41,1	41,9	:	0,7	−5,6	−7,0	−3,2	−3,1
France	35,5	39,3	47,6	49,3	48,9	48,9	34,6	38,4	50,3	52,1	50,6	50,1	0,9	0,9	−2,8	−2,9	−1,7	−1,2
Ireland	25,6	33,2	40,7	42,4	43,9	39,4	28,0	37,5	54,6	53,7	49,2	42,8	−2,4	−4,3	−13,8	−11,3	−5,3	−3,4
Italy	29,2	28,8	36,1	38,2	40,1	42,6	30,1	32,1	47,4	50,8	51,0	52,7	−0,9	−3,3	−11,3	−12,5	−10,9	−10,1
Luxembourg	33,6	35,8	54,8	57,0	56,6	54,8	30,5	33,1	55,8	51,7	54,5	51,4	3,1	2,7	−1,0	5,3	2,1	3,3
Netherlands	34,5	41,1	54,2	54,9	54,3	51,4	33,7	42,3	61,3	59,6	59,5	56,8	0,8	−1,2	−7,1	−4,8	−5,2	−5,4
Portugal	:	:	33,4	33,4	37,6	37,4	:	:	43,8	43,5	43,0	43,3	:	:	−10,4	−10,1	−5,4	−6,0
United Kingdom	31,4	39,8	42,3	41,5	39,8	38,8	32,4	36,8	44,8	44,3	38,7	39,0	−1,0	3,0	−2,5	−2,8	1,1	−0,3
Community	32,8[3]	37,4[3]	42,8	43,9	43,6	43,5	32,3[3]	37,2[3]	48,3	49,1	47,2	47,4	0,6[3]	0,2[3]	−5,5	−5,2	−3,7	−4,0

[1] General government. There is a break in the series in 1970 due to a different statistical source and methodology (OECD prior to 1970, Commission services after that date).
[2] Economic forecasts, autumn 1990.
[3] Community excluding Greece, Spain and Portugal.
Source: Commission services.

Table 2

Budget balances and impact of economic activity
(as % of GDP)

	Changes over the period[1]																				
	1971-73			1974-75			1976-78			1979-82			1983-85			1986-88			1989-90		
	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c	a	b	c
Belgium	−1,1	0,3	−1,4	−1,5	−2,8	1,3	−1,3	2,2	−3,5	−4,8	−0,4	−4,4	2,5	−1,7	4,1	1,9	1,6	0,3	0,8	2,6	−1,8
Denmark	1,2	−0,3	1,5	−6,6	−3,8	−2,8	1,0	2,9	−1,9	−8,8	−1,6	−7,2	7,1	4,4	2,7	2,3	−2,7	5,0	−1,6	−1,1	−0,5
Germany	1,0	−0,5	1,5	−6,8	−3,5	−3,3	3,2	3,4	−0,3	−0,8	−2,0	1,2	2,1	0,2	1,9	−1,0	1,2	−2,2	−1,0	2,2	−3,2
Greece	:	:	:	:	:	:	:	:	:	:	:	:	−6,1	−0,4	−5,6	−1,8	−1,2	−0,6	−2,8	−0,5	−2,3
Spain	0,4	0,3	0,1	−1,1	−1,0	−0,1	−1,8	0,7	−2,5	−3,9	−2,7	−1,1	−1,4	−0,1	−1,2	3,8	4,0	−0,2	0,2	2,3	−2,1
France	0,0	−0,7	0,7	−3,1	−3,0	−0,1	0,1	3,2	−3,1	−0,7	−0,1	−0,6	−0,1	−1,4	1,4	1,1	0,8	0,4	0,5	1,3	−0,8
Ireland	−0,3	0,3	−0,6	−8,0	0,3	−8,2	2,8	3,0	−0,1	−4,1	−0,8	−3,3	2,5	−2,1	4,6	6,0	−1,3	7,3	1,9	2,0	−0,1
Italy	−3,2	−1,7	−1,5	−4,1	−2,4	−1,7	2,0	2,5	−0,5	−2,8	0,2	−3,0	−1,3	−0,8	−0,5	1,6	0,7	0,9	0,8	0,1	0,7
Luxembourg	0,6	3,7	−3,1	−2,2	−5,1	2,9	4,2	0,5	3,7	−6,3	−4,5	−1,8	6,3	3,4	2,9	−3,1	3,1	−6,2	1,2	2,9	−1,7
Netherlands	2,0	−1,8	3,7	−3,6	−2,0	−1,6	0,1	3,6	−3,5	−4,3	−4,1	−0,2	2,3	1,7	0,6	−0,4	0,7	−1,1	−0,2	3,1	−3,3
Portugal	:	:	:	:	:	:	:	:	:	:	:	:	0,3	−4,2	4,5	4,7	2,3	2,3	−0,6	2,0	−2,6
United Kingdom	−5,6	2,4	−8,0	−1,9	−3,6	1,8	0,2	1,6	−1,5	1,9	−4,3	6,2	−0,3	2,2	−2,5	3,9	3,8	0,0	−1,3	−0,2	−1,1
Community[2]	−1,3	−0,1	−1,2	−3,7	−2,9	−0,8	0,9	2,5	−1,6	−1,5	−1,8	0,3	0,3	0,0	0,3	1,5	1,7	−0,2	−0,3	1,2	−1,5

[1] a: Actual change in budget balances: A plus sign indicates an improvement, a minus sign indicates a deterioration.
b: Impact of change in economic activity: The impact of the change in economic activity on the budget balance is measured by reference to a medium-term growth trend.
c: Residual change: A plus sign indicates an improvement, a minus sign indicates a deterioration.
[2] Community excluding Greece and Portugal up to 1982.
Source: Commission services.

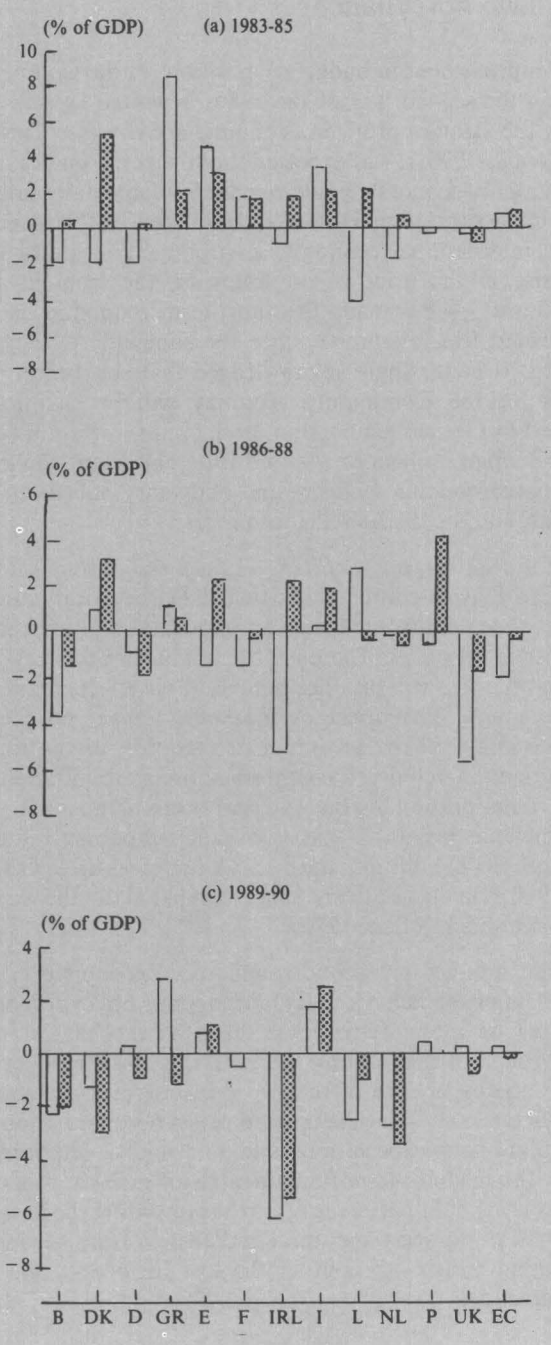
ing the first oil price hike, many countries adopted a strategy of lax budgetary policies. This was characterized by an explosion in public expenditure and widening budget deficits. As indicated in Table 2, the expansionary stance of fiscal policy was notable in France (period 1976-78) and Germany (1974-75) and very significant in Denmark (1974-78), the Netherlands (1976-78) and particularly Ireland (1974-75). In other countries, such as Italy and the United Kingdom, the response was characterized by accommodating monetary policies and sharply rising nominal unit labour costs. This policy stance led to runaway inflation which masked to some extent the deterioration in budgetary policies. Lack of coordination of policies in the Community also contributed to growing disparities in budgetary performances among the Member States.

After the second oil price shock — which hit less severely the Community economy than the first one — policy reactions were less accommodating and somewhat better coordinated. Table 2 shows that over the period 1979-82, the increase in actual net borrowing was considerably lower than the mechanical impact of the contraction in economic activity in Germany and the United Kingdom. In contrast to that were developments in Belgium, Denmark, Ireland and Italy where a new relaxation of fiscal policies was apparent.

(b) As mentioned above, the 1980s witnessed a fundamental change of policy orientation in the direction of budgetary consolidation. However, efforts at consolidation differed widely among Member States in timing and intensity (see Graph 2). Early and significant improvements in budgetary positions were realized in Denmark and Luxembourg. In most other countries, it was only when the upturn in economic activity got under way after 1985, that governments succeeded in reducing their budget imbalances. A certain correlation seems to exist between the disciplining force of the EMS and budgetary positions. The link is tenuous, however, as countries like Spain and the United Kingdom — which only recently joined the ERM — performed much better than Belgium and Italy for instance.

As a result of these two factors, budgetary positions are very disparate in the Community at present. This situation threatens to deteriorate as the consolidation efforts remains weakest in those countries where budgetary imbalances are most serious. The current degree of the disparity can be gauged by a brief examination of the spread in some fiscal parameters: in 1990, the ratio of public debt/GDP ranges from almost 130 % in Belgium to 36 % in France; net borrowing is close to 18½ % of GDP in Greece and 10 % in Italy whereas the United Kingdom has only a slight net borrowing requirement; and gross saving by general govern-

GRAPH 2: **Change in general government expenditure and receipts, 1983-90**



Source: Commission services

ment ranges from almost −15 % of GDP in Greece and −5½ % in Italy to almost +3 % in Spain.

2.2. Two new challenges

The improvement in budgetary positions in the Community during the second half of the 1980s benefited considerably from the strong upturn in economic activity (see Table 2). Up to mid-1990, it was expected that the performance of the Community economy would remain fundamentally satisfactory in the short term. However, the influence of the deteriorating international economic environment — particularly the rise in the price of oil following the Iraqi invasion of Kuwait — has made the short-term economic outlook somewhat less favourable since the summer. At the same time, it is increasingly acknowledged that short-term prospects for the Community economy will be significantly shaped by German unification. Both events — the Gulf crisis and German unification — constitute important challenges for macroeconomic policies, and budgetary policies in particular, and for the surveillance process.

(i) *The Iraq/Kuwait conflict* [1] — Since the outbreak of the Iraq/Kuwait conflict in August 1990, the world economy has been confronted with an important and unexpected rise in oil prices. There is little doubt that this new hike in oil prices will produce unfavourable effects on the EC economy. The direct or mechanic impact on the EC economy will be an initial deceleration in the rate of growth in activity, a cost-push stimulus to inflation and a deterioration in the external account position. This impact is inevitable, but essentially temporary and manageable. In addition, the oil price increases up to October 1990 remain relatively small compared to the two oil price shocks of the 1970s.

The indirect or second-round macroeconomic effects, arising from behavioural and economic policy responses, may be more detrimental than the mechanical pass-through of the oil price increase; this was clearly taught by the experience of the two previous oil price shocks. Therefore, to limit the upward pressures on inflation and inflationary expectations and to avoid a deterioration in the medium-term fundamentals of growth, economic policy should particularly aim at preventing the development of a price-wage spiral and abstain from accommodating policies to counter the loss in income and real demand.

Through the working of automatic stabilizers, lower economic growth and higher interest rates may induce an initial deterioration in government accounts. Nevertheless, budgetary policy should not be diverted from its medium-term objectives of budget consolidation, flexibility and improving the conditions for growth. As shown in the past, it should certainly not try to alleviate the constraint on income and private demand by compensatory actions or by postponing required adjustments.

The rise in oil prices will hit the Community countries in an uneven way. Obviously, given the different positions as regards oil and energy dependence and differences in conjunctural situations, the economic and budgetary impact will differ among Member States. Countries like Greece and Portugal, which display a high oil and energy intensity per unit of GDP, are bound to be more severely affected than the other Member States.

(ii) *German unification* [2] — The rapid integration of the former East German economy into the new German economy, and by extension into the Community, undoubtedly presents the major new challenge for the conduct of economy policy in the years ahead. While German unification will generate a considerable medium-term impetus to economic growth in Germany, and to a lesser extent in the Community as a whole, the transformation of a centrally planned economy into a market-oriented economic system will involve tremendous economic and budgetary costs, requiring well-designed macroeconomic management.

As regards public finances, the magnitude of the budgetary costs of German unification is such that it will change the budgetary situation in Germany overnight. Economically, these budgetary costs can be divided into different categories:

(a) transfers to cover budget deficits in the former GDR; [3]

(b) transfers necessary to improve living standards in the GDR, including those to cushion the inevitable rise in unemployment;

(c) transfers to modernize and widen the private and public capital stock;

(d) interest payments on outstanding GDR debt.

[1] For a more in-depth treatment of this topic, see Study No 2 of this volume, 'Analysis of the potential economic consequences for the EC of the Iraq/Kuwait crisis'.

[2] See Study No 7 of this volume on 'Integration of the East German economy into the Community'.

[3] The tax and social security system of the FRG has been implemented in the former GDR. The purpose of these transfers is to bridge the gap between the immediate expenditure requirements and the lagged and insufficient collection of tax revenues and social security contributions.

The overall magnitude of the budgetary cost is currently expected to amount to around DM 70 billion in 1990, perhaps nearly doubling in 1991. Part of these costs will be financed through extra tax revenues generated by the unification growth bonus which is estimated at 2 % of western Germany's GDP in 1990. Consequently, the budgetary situation in Germany will swing from a relatively balanced stance prior to unification to an overly expansionary stance thereafter (net borrowing is forecast at more than 3 % of western Germany's GDP in 1990).

The option of financing a large part of the costs of unification through recourse to capital markets is likely to exert upward pressures on interest rates. On the other hand, the strong demand from the former GDR may strain production capacity in western Germany, putting tensions on inflation and the exchange rate. To guard against these dangers and to avoid an overburdening of monetary policy, a tightening of the fiscal stance would be appropriate. Given the largely irreducible nature of the costs arising from unification, this would require at first cuts in other government expenditure or in the last resort increases in taxation.

As a result of German unification, general government borrowing for the Community as a whole will increase by 0,5 to 1 % of GDP in 1990. On the other hand, the macroeconomic impact of German unification on the rest of the Community will be positive and significant. Growth of Community GDP may be 0,5 percentage point higher than without the unification. The distribution of this growth bonus over the Member States will be determined by the degree of trade linkage with the German economy. In those Member States where the unification will exert a pull effect through higher external demand, public finances will benefit from additional tax receipts. This favourable impact on their government accounts may, however, be partly offset by a rise in the debt service burden, following a rise in interest rates. As the counterpart of the stimulus to growth and tax revenues might be increased inflationary pressures and rising interest rates, adequate policy responses will be required at both the national and Community level.

The large capital requirements for restructuring the former GDR and the other Eastern European countries also militate in favour of fiscal policy restraint. The huge investment demand in Germany and Eastern and Central Europe, added to these still existing in the Community, cannot be accommodated unless national savings are substantially increased. Hence, it will be particularly important for the public sector to contribute more to national saving. This will require continued and even strengthened consolidation efforts.

3. Actual degree of budgetary discipline and desired evolution

3.1. Actual degree of budgetary discipline and short-term prospects

Monetary financing of budget deficits, narrowly defined as automatic access to central bank credit or obligations on the banking system to purchase government securities, is still operative in one form or another in six Member States: in Belgium, Greece, Spain and Italy, the government has still automatic though limited access to central bank credit; obligations on banks to invest in government paper exist in Greece, Spain, Ireland and Portugal. During recent months, such facilities have been curtailed in Belgium, Spain and Portugal. In view of the decision to proceed to Stage II of EMU on 1 January 1994, further substantial progress in removing the facility of monetary financing is necessary in all these countries.

Budgetary problems persist in six Member States (see Tables 3 and 4). In Greece and Italy, budget deficits are excessive and the public debt to GDP ratio is on a rapidly rising trajectory as net borrowing in proportion to GDP is, and is expected to stay, at unreasonably high levels (around 18½ % and 10 % respectively). Thanks to high levels of inflation (see Table 5), the impact on the public debt ratio of the perennial budget deficits is significantly disguised. Nevertheless, in these countries, the level of public debt is nearing (in the case of Greece) or breaching (Italy) the threshold of 100 % of GDP. In Belgium and Ireland, the level of public debt is still in excess of the size of GDP. While Belgium has just managed to stabilize its public debt ratio at just below 130 % of GDP, Ireland has put the debt ratio on a steeply declining path, probably falling below 100 % in 1991. Public debt in relation to GDP is high but still considerably below the level of GDP in the Netherlands and Portugal. In Portugal, however, the fall in the public debt ratio, which started in 1989, is largely attributable to the implementation of the privatization programme and the very high levels of inflation. In all of the six Member States mentioned, the golden rule is being violated as they continue to experience general government dissaving; limited in Ireland and the Netherlands, more appreciable in Portugal and Belgium and very sizeable in Italy and Greece. Forecasts based on unchanged policies show that only limited headway will be made in improving budgetary positions in the short run. These forecasts also indicate that further and more determined consolidation efforts are desirable in these Member States.

Table 3

Budget balances, interest payments and public debt
(as % of GDP)

	Net lending (+) or net borrowing (−) (a)			Interest payments (b)			Primary balance (c) = (a) + (b)			Gross public debt[2] (d)			Assessment of public debt/GDP ratio with a view to budgetary discipline
	1988	1989	1990[1]	1988	1989	1990[1]	1988	1989	1990[1]	1988	1989	1990[1]	
Belgium	−6,6	−6,7	−5,8	10,4	10,7	11,1	3,8	4,1	5,3	132,2	129,9	129,4	Ratio stabilized but vulnerable and still too high
Denmark	0,2	−0,7	−1,4	8,1	7,5	7,6	8,3	6,8	6,2	64,0	63,3	62,8	Ratio clearly declining
Germany	−2,1	0,2	−3,2	2,8	2,7	2,6	0,7	2,9	−0,6	44,5	43,6	43,7	Ratio stabilized, but risk of temporary rise due to unification
Greece	−15,6	−18,4	−18,4	8,2	8,1	11,1	−7,5	−10,3	−7,3	79,7	85,1	89,5	Unsustainable, tremendous consolidation efforts needed
Spain	−3,2	−2,7	−3,1	3,4	3,5	3,6	0,1	0,7	0,5	44,5	45,2	44,7	Ratio clearly declining
France	−1,7	−1,5	−1,2	2,8	2,9	3,0	1,1	1,4	1,8	35,9	36,0	36,1	Ratio stabilized
Ireland	−5,3	−3,5	−3,4	9,4	9,1	8,5	4,1	5,6	5,1	115,4	104,7	101,4	Ratio clearly declining, but still too high
Italy	−10,9	−10,2	−10,1	8,2	9,0	9,7	−2,7	−1,2	−0,4	96,1	98,9	100,9	Unsustainable, important efforts needed in context of reduced inflation
Luxembourg	2,1	3,2	3,3	1,0	0,8	0,7	3,1	4,0	4,0	10,2	8,8	7,8	Ratio low and declining
Netherlands	−5,2	−5,2	−5,4	6,0	5,9	5,9	0,8	0,7	0,5	77,4	77,6	77,8	Ratio stabilized but vulnerable, further decline desirable
Portugal	−5,4	−3,8	−6,0	7,8	7,3	8,6	2,4	3,5	2,6	74,0	71,5	67,8	Ratio declining, important efforts needed in context of reduced inflation
United Kingdom	1,1	0,9	−0,3	3,9	3,7	5,0	5,0	4,6	3,1	51,0	45,7	43,0	Ratio clearly declining
Community	−3,7	−3,0	−4,0	4,8	4,8	5,0	1,1	1,8	1,0	59,7	59,0	58,9	Ratio stabilized

[1] Economic forecasts, autumn 1990.
[2] General government, except: Belgium and the Netherlands: excluding social security systems; Greece and Ireland: central government only; Italy: public sector.
Source: Commission services.

Table 4

General government saving, investment and net lending/borrowing
(as % of GDP)

	Gross saving (a)				Capital transfers and gross capital formation (b)				Net lending (+) or borrowing (−) (c) = (a) − (b)			
	1980	1985	1989	1990[1]	1980	1985	1989	1990[1]	1980	1985	1989	1990[1]
Belgium	−4,4	−5,7	−4,5	−3,8	4,8	2,8	2,1	2,0	−9,2	−8,5	−6,6	−5,8
Denmark	0,8	0,9	2,0	0,9	4,0	2,9	2,7	2,3	−3,3	−2,0	−0,7	−1,4
Germany	2,5	2,7	3,8	0,3	5,4	3,8	3,5	3,5	−2,9	−1,1	0,2	−3,2
Greece	−0,1	−9,1	−14,2	−14,7	:	4,7	4,2	3,7	:	−13,8	−18,4	−18,4
Spain	0,6	−1,4	3,0	2,8	3,2	5,6	5,8	5,9	−2,6	−7,0	−2,7	−3,1
France	3,8	0,5	2,0	2,3	3,8	3,4	3,5	3,5	0,0	−2,9	−1,5	−1,2
Ireland	−5,4	−6,9	−1,4	−1,2	7,3	4,4	2,1	2,2	−12,7	−11,3	−3,5	−3,4
Italy	−4,5	−6,9	−5,7	−5,6	4,1	5,6	4,5	4,5	−8,6	−12,5	−10,2	−10,1
Luxembourg	8,3	11,6	9,9	10,3	8,7	6,3	6,7	7,0	−0,4	5,3	3,2	3,3
Netherlands	1,5	0,2	−1,1	−1,4	5,5	5,0	4,1	4,0	−4,0	−4,8	−5,2	−5,4
Portugal	−2,3	−6,3	0,6	−2,4	:	3,8	4,4	3,6	:	−10,1	−3,8	−6,0
United Kingdom	−0,5	−0,5	2,6	2,5	2,8	2,3	1,7	2,8	−3,4	−2,8	0,9	−0,3
Community	0,3[2]	−1,2	0,5	−0,2	4,1[2]	4,0	3,5	3,8	−3,8[2]	−5,2	−3,0	−4,0

[1] Economic forecasts, autumn 1990.
[2] Community excluding Greece and Portugal.
Source: Commission services.

For the Community as a whole, following an improvement in the budgetary position over the period from 1985 to 1989, the short-term forecasts imply *de facto* a relaxation of budgetary policies. Mainly due to the worsening of the German budgetary position following the unification and to a lesser extent due to a deceleration in economic activity, net borrowing by general government is expected to widen again in 1990. No further widening of the budget deficit is expected in 1991 at the Community level as the impact of the expected further rise in the German deficit and the marked slowdown of economic growth is likely to be offset by moderate budgetary improvements in some Member States, particularly Greece, Spain, Italy, the Netherlands and Portugal. Over the short term, the public debt/GDP ratio in the Community is expected to stabilize at around 59 %.

3.2. Desirable budgetary developments in the Member States

There are two countries — Greece and Italy — whose budgetary positions pose problems of sustainability. In these countries, there is a vital need to reduce immediately excessive budget deficits. This will firstly help to halt the rise in the public debt/GDP ratio and subsequently to reduce it. Both countries will form an interesting case for testing the Community's capacity to monitor and coordinate budgetary policies in Stage I of EMU.

In Greece, the budgetary situation has deteriorated dramatically since 1988. With budget deficits at excessively high levels of around 18,5 % of GDP in 1989 and 1990, the ratio of public debt is clearly on an explosive trajectory (see Graph 3). It will be about 90 % in 1990, implying more than a tripling or a rise by more than 60 percentage points over the last 10 years. In the absence of a determined fiscal adjustment, debt accumulation will take place at an even more rapid pace. The coexistence of budgetary imbalances, very high inflation and a large and widening current account deficit suggests that Greece's adjustment difficulties are very serious and give cause for concern at the Community level. The implementation during recent months of fiscal adjustment measures aimed at a reduction in public expenditure and a rise in taxation may help in halting the sharp deterioration in the public finances. However, in the light of the serious disequilibria characterizing the Greek economy, further and more incisive budgetary corrections must be implemented.

Table 5

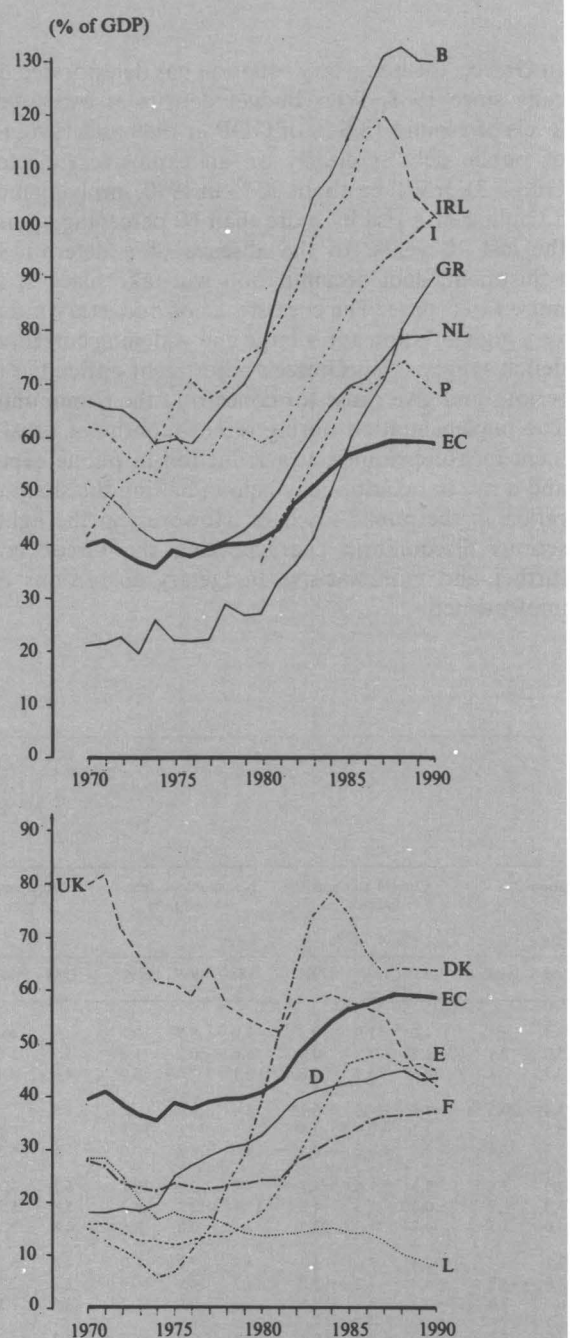
Key macroeconomic variables

	Real GDP growth (% p.a.)			Growth of real demand[1] (% p.a.)			Inflation[2] (% p.a.)			Current account balance (% of GDP)			Nominal long-term interest rates			Real long-term interest rates[3]		
	1988	1989	1990[4]	1988	1989	1990[4]	1988	1989	1990[4]	1988	1989	1990[4]	1988	1989	1990[4]	1988	1989	1990[4]
Belgium	4,3	4,0	3,5	4,0	4,8	4,1	1,8	3,4	3,6	1,0	1,0	0,3	7,9	8,7	10,1	5,8	4,0	6,6
Denmark	−0,4	1,3	0,9	−2,0	−0,4	−0,3	4,9	5,0	2,8	−1,8	−1,3	0,0	10,6	10,2	11,0	5,3	5,5	7,8
Germany	3,7	3,3	4,3	3,3	2,3	5,0	1,3	3,2	2,8	4,1	4,7	2,6	6,1	7,0	8,9	4,6	4,4	5,1
Greece	4,0	2,6	1,2	4,9	3,8	1,8	14,0	14,4	20,5	−1,7	−4,8	−5,1	16,6	:	:	1,8	:	:
Spain	5,0	4,9	3,5	6,6	7,4	5,2	5,1	6,6	6,8	−1,1	−2,9	−3,8	11,8	13,8	14,8	5,8	6,5	6,9
France	3,3	3,6	2,5	3,4	3,4	3,0	3,0	3,3	3,4	−0,4	−0,2	−0,3	9,0	8,8	10,0	5,5	5,3	6,3
Ireland	3,7	5,9	4,5	1,2	4,9	4,4	2,5	3,9	2,8	1,8	1,6	1,2	9,4	9,0	10,1	6,3	3,7	7,8
Italy	3,9	3,2	2,6	4,2	3,6	2,8	4,8	6,0	6,1	−0,6	−1,3	−1,3	12,1	12,9	13,3	5,8	6,2	5,8
Luxembourg	4,3	6,1	3,2	2,3	5,3	5,2	2,6	4,0	3,5	34,3	31,5	27,3	7,1	7,7	8,6	4,8	3,7	5,3
Netherlands	2,7	4,0	3,4	2,8	2,4	3,2	0,7	2,1	2,4	2,4	3,6	3,3	6,3	7,2	9,0	4,4	5,7	5,9
Portugal	3,9	5,4	4,2	8,3	4,3	5,2	10,0	12,8	13,2	−4,4	−1,2	−1,2	14,2	14,9	15,4	2,3	2,2	1,4
United Kingdom	4,1	2,2	1,5	6,7	3,5	1,8	5,0	6,1	7,0	−4,1	−3,7	−2,8	9,3	9,6	11,2	2,5	2,5	3,3
Community	3,8	3,3	2,9	4,4	3,6	3,4	3,7	4,9	5,1	0,2	0,2	−0,3	9,4	9,9	11,2	4,7	4,6	5,2

[1] Final uses excluding stockbuilding.
[2] Price deflator of private consumption.
[3] Nominal interest rates adjusted for annual changes in the GDP deflator.
[4] Economic forecasts, autumn 1990. With respect to interest rates, data for 1990 are assumptions underlying the forecasts.

Source: Commission services.

GRAPH 3: **Trends in gross public debt**



Source: Commission services.

In Italy, despite a favourable economic climate and efforts to consolidate public finances, little progress has been made in recent years in reducing general government deficits (at around 10 % of GDP in 1990) and stabilizing public debt (tending to breach the psychological ceiling of 100 % of GDP). Compared with Greece, the budgetary situation in Italy is less dramatic from a domestic viewpoint, but more worrying from a Community perspective, given the very size of its economy and its recent entry in the ERM narrow band. The objective of an unchanged lira parity against the other EMS currencies necessitates a reduction in the rate of inflation which in the presence of unchanged budget deficits will lead to an even stronger rise in the already high public debt/GDP ratio. A determined implementation of a stringent medium-term fiscal adjustment programme is thus required in order to reduce the budget deficit to a level that permits a stabilization at first, and a reduction later in the level of public debt in relation to GDP. This implies a significant increase in the primary surplus. Such a reorientation of budgetary policy, if viewed as credible by financial markets, would in addition lend the necessary support to monetary policies geared at bringing down inflation.

In a number of countries, such as Belgium, Ireland, the Netherlands and Portugal, public indebtedness remain high to very high. Despite success in reducing budget deficits to a level markedly below that of only some years ago, apart from Ireland, net borrowing by general government is still significantly above the Community average. In these countries, measures to reduce the level of public debt should be reinforced, continued or initiated.

In Belgium, the ratio of public debt to GDP remains stubbornly high at approximately 130 % of GDP, by far the highest ratio in the Community. A sustained reduction, though most desirable, is very difficult as the size of Belgium's public debt makes its budgetary situation highly vulnerable to rising interest rates and decelerating economic growth. Given the expected slowdown in economic activity and the possible rise in long-term interest rates, there is a clear risk of a resumed increase in the public debt ratio in 1991, after two years of slight reduction. Budgetary policy should nevertheless seek to cut the debt ratio and therefore strive more vigorously to lower budget deficits (seemingly stuck at 6 % of GDP) by means of a strict application of the double budget norm actually in force. The two-target strategy implies no rise in real non-interest expenditure and no rise in the nominal budget deficit. To reinforce consolidation efforts, it would be appropriate to extend the application of this double norm to all levels of government instead of applying it just to central government.

In Ireland, a remarkable degree of fiscal consolidation has been achieved in recent years. Of the Member States in this

group, it was the only one which succeeded in putting the debt ratio on a steadily declining trend, though it still remains at nearly 100 % of GDP in 1990. For that reason, budgetary policy should continue to seek a reduction of the debt ratio. Further improvements with respect to the level and structure of public expenditure and receipts are also needed, not least to generate the required scope for coping with the adverse revenue effects of tax approximation in the Community.

In the Netherlands, where the decline in the share of public expenditure in recent years has been accompanied by a corresponding reduction in the tax burden, the budget deficit remains broadly unchanged at a rather high level (about 5¼ % of GDP) while the public debt ratio is still on a gradually rising trend (reaching almost 78 % of GDP in 1990). To reduce further the high public expenditure share and to lower gradually the budget deficit and public debt, strict control of government spending remains important.

In Portugal, where there has been a moderate but steady improvement in budgetary positions over the last three years, consolidation efforts seem to be marking time in 1990 as net borrowing is expected to widen by 2 points to 6 % of GDP. The public debt of around 68 % of GDP in 1990 is being alleviated by the privatization of publicly-owned enterprises. In contrast to Belgium, Ireland and the Netherlands, where there are at present no major problems of convergence outside the budgetary field, Portugal is still confronted with a very high rate of inflation. In view of the adverse impact of the rise in wages of civil servants and higher interest payments on the budget deficit, on the one hand, and in view of strong demand pressure and high inflation, on the other, due attention should be given to tight control on government expenditure in order to reduce net borrowing by the government as a percentage of GDP over the next few years. Such a budgetary improvement in parallel with the necessary reduction in inflation is also necessary with a view to joining the ERM and to coping with the obligations which EMU will bring.

In a third group of countries — such as Denmark, Spain, France, Luxembourg and the United Kingdom — the budgetary position is reasonably sound. In terms of net lending or borrowing and public debt, the situation seems to be under control and does not present the Community with a convergence problem. This assessment does not detract, however, from the need to adjust their budgets in order to improve the supply-side of the economy, to prepare for the single market of 1992 and to increase budgetary flexibility as required by a better policy-mix. This will particularly involve improving the structure of expenditure and receipts, winding down the share of expenditure in GDP and lessening the tax burden. To the extent that the budgetary imbalances associated with unification will be corrected in the medium term, unified Germany also belongs to this group.

On the other hand, a few of these countries continue to suffer from strong inflationary pressures and large external deficits, such as the United Kingdom and Spain, or from high foreign debt, such as Denmark. Hence, there is a need to maintain a cautious budgetary policy in these countries.

In Denmark, remarkable progress has been made in reducing general government net borrowing during the 1980s, but at the expense of a significant increase in the tax burden. Peaking at more than 60 % of GDP in 1988, the tax burden has shown a declining trend since then, but at almost 58 % of GDP it is still the highest in the Community. The impact of the completion of the internal market on tax receipts and the need to promote private saving and increase flexibility of labour and other markets will put further downward pressure on the tax burden. Measures to improve the tax structure are therefore necessary in the coming years; not only to face the challenge of tax harmonization but also to improve private sector saving and to enhance external competitiveness. In addition, strict expenditure restraint and structural adjustments of expenditure are highly desirable.

In Spain, public finances are generally on a sound footing. However, policy should continue to be directed towards making budgetary management more efficient and conducive to a better functioning of the economy. This is all the more necessary to improve the country's infrastructure and the quality of the public services. The need to increase domestic saving, to stop the deterioration of the current account, to reduce inflation and to bring unemployment to a more acceptable level equally demands an appropriate budgetary stance.

In France, thanks to the determined pursuit of the objective of sound policies, net borrowing by government has been reduced continuously. This policy stance has also enabled gradual tax reductions, particularly of VAT rates in view of the completion of the internal market. To improve flexibility it is desirable to further adjust the tax structure, to restrain government spending and to monitor closely the social security system.

In the United Kingdom, a reassessment of the thrust of budgetary policies in the early 1980s has produced a swing in the budget balance towards a moderate surplus in 1988 and 1989, although this has been somewhat eroded in 1990 by the slowing of the economy. This turnaround was re-

flected in a marked cut in the expenditure ratio and in the tax burden which — in combination with wide-ranging market-oriented tax and social security reforms — have contributed to improved flexibility in the economy. In view of the UK's recent entry into the ERM, a tight fiscal stance should be maintained in the coming years in order to assist monetary policy in combating macroeconomic disequilibria, particularly the persistently strong inflationary pressures, the worrying current account position and the saving-investment imbalance in the economy.

In Germany, tight control of government expenditure growth in recent years had led to a balanced general government budget, while permitting at the same time a considerable reduction in the tax burden. The unification, which is involving substantial transfers to the former GDR, has swung the budget into deficit again. It is important that the authorities limit the expansionary effects of the unification through compensatory measures on the expenditure and/or receipts side and do their utmost to avoid the adverse effects on interest rates and public debt (see for more details Section 2.2 (ii).

Study No 6

Monetary coordination in Stage I of EMU

Monetary coordination in Stage I of EMU

Summary

The economic and institutional framework in which the EMS has — very successfully — operated in the 1980s is rapidly changing. The formulation of European monetary policy in the first half of the 1990s will have to face a multiform challenge:

(i) to maintain convergence and monetary stability amongst the narrow-band countries in the new context created by German monetary unification;

(ii) to strengthen the nominal convergence of the lower-income countries which are facing a period of rapid growth of income and demand;

(iii) to prevent the liberalization of capital flows from resulting in unsustainable pressures on interest rates and exchange rates;

(iv) to design monetary policies which, consistently with other policy instruments, will allow country-specific shocks to be tackled in an optimal way;

(v) to foster the harmonization of monetary instruments and aggregates amongst the Member States, so as to proceed rapidly towards the establishment of a coherent monetary policy at the European level.

In order to achieve these objectives, the traditional EMS framework might not provide the optimal framework for policy coordination among national monetary authorities.

The study analyses two rules for monetary coordination: an EMS-like asymmetric rule in which the centre country sets its money supply target and the others peg their exchange rates to that of the centre by adopting a domestic credit target and a symmetric rule in which each country targets credit and abstains from sterilizing capital flows. The effects of a global versus country-specific demand shock under the two rules are explored.

The analysis shows that, even under highly simplified assumptions, no coordination rule can be singled out unambiguously as providing the most desirable outcome under different types of shocks.

As a result, it is likely that no rule could be applied consistently and decisions on the policy reactions to shocks may have to be the outcome of a continuous process of strengthened monetary (and fiscal) policy coordination within the new procedures for multilateral surveillance established in Stage I.

1. New challenges for the EMS

Since 1979, monetary policy coordination has been importantly affected by the — very successful — experience of the EMS. However, the conditions in which the EMS has operated are in the process of major change, both as regards economic circumstances and the institutional framework. Thus, Stage I of economic and monetary union, which began on 1 July this year, creates a new challenge for monetary policy coordination and for the working of the EMS.

Through the 1980s, monetary policy coordination within the EMS essentially involved acceptance of the key currency standard by the other ERM members: via this exchange-rate commitment, other members expected to reduce inflation towards low levels at a somewhat reduced cost in below-trend economic activity.

The EMS in the 1980s could thus be characterized as an asymmetric system in which the 'centre', by and large, managed its own money supply path, while the others, given unchanged bilateral rates, accepted the centre's monetary stance. Evidence of the asymmetric working of the EMS can be found in foreign exchange market intervention data (most of the intra-marginal intervention was carried out by partner countries), while the 'centre' played the role of 'representing' the whole system *vis-à-vis* the rest of the world (by carrying out US dollar intervention) and systematic sterilization policies (the centre systematically sterilized capital inflows, while peripheral countries, by and large, attempted to control their foreign reserves by avoiding the sterilization of capital flows).

Such an arrangement has performed remarkably well: the system has enjoyed an effective anti-inflationary anchor.

Given the weight of the anchor country's economy and the priority in policy-making given to convergence towards the lowest inflation rate, the exchange-rate constraint represented a suitable option for the other ERM members, whose disinflationary credibility was initially less strong. Convergence on low inflation rates has, for the original narrow-band members (Belgium, Denmark, France, Ireland, Luxembourg, Netherlands), largely been achieved. And, as a result, the credibility of the narrow band has increased significantly over the past two or three years.

The challenge for the first half of the 1990s looks rather different, for at least two reasons:

(i) Capital liberalization

Capital movements have already been completely liberalized in most Community countries and remaining controls will disappear during the course of Stage I. This implies that exchange rates and interest rates are now closely linked to fundamentals.

Together with the rapid development and modernization of financial markets within a number of member countries, this development strengthens the system against shocks of certain kinds. For instance, greatly increased arbitrage opportunities now mean that fluctuations in the US dollar, or to a lesser extent the pound sterling, are much less likely than in the past to lead to unmanageable policy problems with consequent strains on the exchange rates of these two currencies *vis-à-vis* those of other Community countries.

But, combined with the greater susceptibility to asymmetric shocks capital liberalization implies, unless measures are taken in other areas of policy, a more active use of changes in interest-rate differentials. When short-term fundamentals — essentially given the fiscal stance, the relative strength of demand — have been strong, countries which have liberalized capital movements have tended to find their currencies rising. At times during the early summer, this gave rise to a situation in which the currencies of overheated economies were at the top of the ERM fluctuation bands. The strong capital inflows exerted pressure on the monetary authorities to reduce interest rates at a time when domestic considerations dictated rather more the contrary.

And if and when fundamentals weaken, the absence of controls means that potential pressures on the exchange rate may be stronger than in the past.

The new situation is in sharp contrast with the 1980s, when the currencies of high-inflation countries were often (although not, of course, shortly after realignments) in the lower part of the EMS fluctuation band, so that the pattern of differentials required to avoid exchange-market pressure was consistent with the major policy aim of disinflation, even at some potential short-term cost in lower economic activity.

In summary, liberalization of capital flows impedes the asymmetric system and calls for more deliberate coordination.

(ii) German unification

Following German unification, in contrast with the situation in the 1980s, a monetary stance analogous to that which would safeguard price stability in Germany might not be the preferred choice by some of the other Community countries (notably the original narrow-band members).

On most forecasts, German inflation in 1991 is likely to be no longer lower than most of the other original narrow-band members. Indeed, demand pressures appear to be strong enough that inflation in Germany may erode its former stability lead unless this is compensated by a further US dollar depreciation or a monetary tightening. If there were no such depreciation, German leadership within the EMS could contribute to more inflationary pressures. If, by contrast, there were a tightening in which monetary policy, as opposed to budgetary policy, had the greater weight, the monetary stance might be tighter than appropriate for those low-inflation ERM countries whose economies, unlike that of Germany, appear to be decelerating.

In sum, with low inflation rates, at least relative to those in Germany, already achieved in the original narrow-band economies, with the strong probability of asymmetric real shocks, as between narrow-band members and other Community economies and turbulence in the German economy, the model of EMS monetary policy coordination that was so successful in the 1980s may have to be questioned. It is now necessary, in the context of progress towards EMU, for monetary policy in Stage I to be determined explicitly in terms of the appropriate stance for the EMS area as a whole. At the same time, control over national monetary policies in Stage I will be retained by national monetary authorities. Reconciling these two principles will require more explicit coordination among the national monetary authorities. The rest of this study is devoted to analysing alternative rules for monetary policy determination in a setting of coordination among national monetary authorities.

2. Stylized models of monetary coordination in the presence of shocks

In a medium-term perspective, several rules for the coordination of monetary policy can be devised. The following sections will focus on two 'extreme' and highly simplified cases:

(i) Asymmetric rule: the centre sets its money supply target and sticks to it by sterilizing capital flows, while the other member countries peg their exchange rates to the centre's currency by adopting a domestic credit target (DCE) and abstaining from sterilizing capital flows.

(ii) DCE rule: this involves domestic credit targets for each member of the system, accompanied by non-sterilization within the system. This rule implies a joint decision by the monetary authorities about the overall growth of the money supply and the share of it created via external sources (extra-ERM foreign exchange reserves). The remaining part is the aggregate DCE which should then be distributed amongst the countries.

The hypothesis of sticking to the original money targets either for the centre (under EMS rule) or for the whole of Europe (under DCE rule) implies that monetary fine tuning is ruled out.

The intermediate case between the asymmetric rule and DCE rule of *ex-ante* setting, through a process of consultation, of national economy money supply targets which could ensure exchange rate stability and convergence on low inflation is not examined. Such a rule might cause instability as countries simultaneously tried to meet their monetary targets by sterilizing capital flows. Furthermore, smaller countries who up to now have had little or no control over monetary aggregates, will have serious troubles in pursuing monetary targets and interpreting their significance. It would also be extremely difficult to set monetary targets that would bring about exchange rate stability: asymmetry would very quickly re-emerge if, as must be considered likely, unforeseen disturbances or forecasting errors meant that money supply and exchange rate targets became incompatible.

The framework within which the various shocks are analysed employs the following assumptions. Within the EMS, exchange rates are fixed but adjustable while the exchange rate *vis-à-vis* the rest of the world is fully floating. [1] Increases in demand are biased towards home goods. The speed at which the various effects take place depends on the degree of capital mobility (which is assumed to be high). The continued possibility of realignments implies that interest rates are not equalized amongst countries. As currencies are not perfectly interchangeable, national money supplies continue to affect national economic developments. Other policies (e.g. budgetary policies) are assumed to be exogenous. Money demand functions are assumed not to differ much across countries and reserve coefficients to be harmonized. The objective of the authorities is to offset disturbances — in either direction — to output and prices as far as possible.

3. Effects of a demand shock under different coordination regimes

A symmetric demand shock of the type experienced in the Community in the years 1987-89 (Euro-optimism giving rise to higher investment demand) has different monetary implications according to which coordination rule is in place.

Under the asymmetric monetary rule, as aggregate demand rises, interest rates go up all over Europe. The resulting appreciation of the European currencies damps the rise in output and inflation. Given the assumption of uniform money demands, no capital flows will take place between European countries; thus, overall money supply does not change. In the final equilibrium, income and inflation and interest rates will be higher world wide. Under the DCE rule too, overall money supply does not change. As a consequence, the effects are the same as under the asymmetric rule. [2]

However, the two rules give different results in the face of an asymmetric demand shock, e.g. rise in the budget deficit in one of the members or surge in demand, relative to current potential output, caused by a perceived rise in future potential output.

Under the asymmetric monetary rule the effects will differ according to whether the shock takes place in Germany or in another EMS member.

A demand rise in Germany puts upward pressure on German interest rates which gives rise to capital inflows. As the Bundesbank is assumed to follow a full sterilization policy, the overall European money supply declines. The consequent

[1] Under the simplified assumption of a pure floating *vis-à-vis* third currencies, the external counterpart of money supply is zero. Therefore, under DCE rule, monetary authorities have to set a target for the aggregate DCE only.

[2] The equivalence result rests fundamentally on the assumption of similar money demands in the different countries. If such assumption is relaxed money will flow in or out of Germany. Hence, the sterilization policy will allow European money supply to fall or rise. As a consequence, the initial shock may be counteracted or reinforced.

rise in interest rates causes an appreciation of the EMS currencies. Thus, the loss of competitiveness tends to offset the initial demand rise. In this case, the EMS rule acts as a sort of 'automatic monetary stabilizer' for the EMS area as a whole. But while the output shock is damped for the area as a whole — a desirable feature — the distribution of the shock among countries is uneven. In Germany output rises, but the rise is damped by an increase in interest rates. In the other countries, external demand may rise or fall (German demand for their exports increases but there is a loss of competitiveness *vis-à-vis* the rest of the world). Furthermore, the money supply in these other countries is reduced. The net impact on output is ambiguous: a recession is possible. Short-term interest rates could rise even more than in Germany — which would be consistent with expectations of a downward realignment against the DM. Nominal long-term rates, however, would tend to rise by less than in Germany as inflation expectations in the other countries reacted less, and perhaps even to decline.

If the demand shock takes place in a country other than Germany, the overall money supply will expand (as the Bundesbank raises DCE to offset capital outflows), adding a further expansionary effect: output and inflation will be higher all over Europe. The rule now works as an 'automatic monetary destabilizer' for the area as a whole; but once again, the degree of disturbance to output differs: in Germany, there is an increase in export demand, damped by a rise in rates with the money supply unchanged; in the shock-originating country, the initial demand increase is accommodated by a rise in the domestic money supply, so that there is no damping of the disturbance. In other EMS member countries, however, outflows will reduce the money supply, again creating the possibility of recession.

Under DCE rule, the overall money supply will be unchanged. Consequently, increased interest rates and an appreciation against non-EMS currencies damp the increase in output and inflation. Assuming that the rise in demand by the government is biased towards domestically produced goods, output goes up unambiguously in the originating country, where the money supply rises. In the other countries the net effect is ambiguous since the positive trade linkage effect tends to be offset by the appreciation of the exchange rate *vis-à-vis* the rest of the world and by the reduction in domestic money supply. [1]

[1] It is possible to show that output goes up unambiguously in the originating country and goes down in other countries if: (a) the rise in government spending is entirely directed to domestically produced goods; and (b) the jointly floating area is small (i.e. the world interest rate is exogenous).

4. The need for strengthened coordination and multilateral surveillance and the rapid transition to a unified European monetary policy

The foregoing analysis, which is relevant only in a medium-term perspective, shows that, even under highly simplified assumptions, no coordination rule can be singled out unambiguously as providing the most desirable outcome. This conclusion would be strengthened by the analysis of the effects of other types of shocks (e.g. monetary or supply side disturbances). The situation would become even more complicated if the parameters of national money demand or reserve coefficients were allowed to vary across countries. In such a case it is not clear whether targeting DCE would be easier than meeting monetary objectives. Furthermore, if the assumption of fully flexible rates *vis-à-vis* third currencies is relaxed, the problem of sterilizing external capital flows arises.

The results of the two rules are strikingly different when the shocks affecting the economies are asymmetric. But, if the simplifying assumptions of uniform money demands and equal reserve coefficients are relaxed, even symmetric shocks may produce different effects under the two alternative rules.

The ultimate choice will depend on:

(a) the types of shock more likely to occur in future;

(b) the (a)symmetric character of the shock;

(c) the initial point on the economic cycle;

(d) the subjective preference of Member States for output and inflation;

(e) the degree of flexibility in using instruments other than monetary policy to counteract the shock (fiscal and income policies and/or realignments, especially in the case of asymmetric shocks).

In summary, one can note that (with the assumption of exchange rate floating *vis-à-vis* the rest of the world) the DCE rule is equivalent to a 'monetarist' rule for the EMS area as a whole: money supply is invariant to demand shocks. In contrast, for the area the asymmetric rule acts either as a 'monetary stabilizer' (money supply movements counteracting aggregate demand movements) or as a 'monetary destabilizer' (money supply movements accentuating aggregate demand movements), depending on where the shock takes place.

Unfortunately, matters are, as has been shown, even more complicated when individual country developments are

taken into account. It is widely accepted that, in a fixed-rate system, asymmetric shocks (and, as has been stressed above, certain symmetric shocks when structures differ across countries) will require either the acceptance of periods of divergence in output and price performance among the members of the system or a more active use of budgetary policy as a short-term stabilizer. Both alternatives involve costs. Those of disturbances to output and prices are obvious. But, especially in countries with structurally unbalanced public finances, flexibility of fiscal policy is necessarily limited.

As the preceding analysis has made clear, the alternative rules can thus have very different implications, again depending on the type and source of the shock, for the distributions among Member States of the costs (whether these take the form of output and price disturbances or of a requirement to adjust budgetary policy) of shocks. This will be so even if the monetary rule has the effect of counteracting the area-wide impact of a particular kind of shock. As a result, it may well be that no single rule can be applied consistently. Instead, decisions on the burden of adjustment to shocks may have to be the outcome of a continuous process of strengthened monetary and fiscal policy coordination. The new procedures for multilateral surveillance established in Stage I, which prefigure the design of a single monetary policy conducted by the European central bank, thus assume an extremely important role. This is perhaps the key difference between monetary policy coordination and the future working of the EMS on the one hand and the rather automatic, asymmetric rule-based EMS of the 1980s on the other hand.

Study No 7

Integration of the East German economy into the Community

Integration of the East German economy into the Community

Summary

The German economic unification together with the introduction of the DM has facilitated two of the three major tasks of transforming a centrally planned economy into a market economy. First, without any time lag, it has introduced the legal framework of a market economy. Second, it has facilitated macroeconomic management, since in particular inflationary problems will not emerge to the same extent as in other Central and Eastern European countries. However, it might have made considerably more difficult the third essential, i.e. microeconomic adjustment. In this respect, the introduction of the DM has shortened the transition period and the pressure to apply immediately market economic behaviour is enormous. Appropriate economic policies have to be followed so as to achieve a successful integration of the East German economy into the German and European economy. In the medium term there is the prospect of economic prosperity in Central Europe increasing the benefits of the European internal market.

In the economic field, the Community dimension of integrating the East German economy results from its implications for the overall macroeconomic policy mix and the application of specific Community policies. The integration of the East German economy into the German economy will imply a major relaxation of fiscal policy affecting the overall fiscal-monetary policy mix in the Community, while there is the issue as to whether the reduction of the German current account surplus may affect the financing of investment in other Community countries with development needs. As regards specific Community policies, existing Community regulations are being applied in East Germany fairly rapidly, with relatively few and temporary derogations. Major adjustments are required especially in the structure of industry, agriculture and trade and there are serious problems to be overcome in improving the environment.

1. Introduction

The integration of the East German economy into a unified Germany and the Community presents many important challenges. First of all, it is a rapid and drastic way of transforming a centrally planned economy into a market economy. Therefore, the future economic development in East Germany will affect the adjustment problems of the other Central and Eastern European countries. The first part of this chapter deals with the adjustment problems now facing the East German economy. In the short term, the adjustment process in the East German economy will lead to major macroeconomic disequilibria in the unified German economy; meanwhile, medium-term prospects suggest a potential for a successful catching up, depending upon the introduction of appropriate policy measures. The second part of this chapter evaluates the implied challenges for German economic policies.

The integration of the East German economy is different compared to other countries which have joined the Community. The integration of the East German economy into the overall German economy already solves major adjustment needs as the West German legal and institutional setting is consistent with Community regulations. Nevertheless, Community macroeconomic policies are affected to the extent that the German fiscal and monetary policy mix will have repercussions on the conduct of economic policies in partner countries. Preserving a high degree of convergence points to the European dimension of German unification. The integration of the East German economy is similar as regards specific Community policies, e.g. trade, internal market, structural Funds. Part 3 concentrates on those areas which are economically significant.

2. Adjustment problems in the East German economy

2.1. Recent developments

Although the present economic situation remains uncertain, the first months of unity have unveiled the large adjustment needs the former GDR is facing. So far, the implications for the real economy have been much more important than the monetary consequences. Political discussions primarily centre on the question of the implied costs of unification.

Recent developments confirm that German monetary union has to be assessed primarily as a shock to the real economy. In July and August, industrial production fell substantially (46 % from 12 months earlier). In particular, consumer goods industries (food processing, textiles, light industry) experienced a huge drop in production. Since then, other indicators have confirmed a significant reduction in the demand for goods produced in East Germany. In the investment goods sectors, the drop in production may be lagged, as current production largely depends upon prior domestic and foreign orders.

The fall in production has led to a rapid increase in unemployment (September: 445 000 persons) and part-time employment (1,8 million). The measures introduced in order to cushion the social effects of unemployment suggest that part-time employees should largely be considered as unemployed. Short-term prospects are very gloomy. In addition to a further rise in unemployment in the industrial sector, severe employment risks exist particularly in agriculture and also in the public sector, which is heavily over-staffed.

So far, the introduction of the DM has had no important implications for inflation. Even leaving aside the improved quality of products available, monetary union has increased the purchasing power of East German residents. Although more than one third of East German internal demand has shifted towards imported products, the higher inflation rate recorded in West Germany (3 % in September) seems to be primarily due to the oil price hike rather than to supply bottlenecks. Moreover, the monetary aggregates have not yet exceeded the target growth rate of 4-6 % with M3 growing at 5 % in September. The additional demand effect has obviously been cushioned by a reduction in stocks and higher imports.

Important problems have arisen in the financial situation of both the enterprise sector and the public sector in East Germany, although the spending behaviour of private households has not yet created special concern. Enterprises still rely on credit lines with the Treuhandanstalt. [1] In short, some DM 30 billion Treuhand-backed liquidity loans have been drawn in the third quarter. Liquidity credits will be granted until 31 March 1991, although on a more selective basis. These funds have mainly been used to cover the operating costs of production rather than to finance new investment. Therefore, it is of primary importance to reduce the production costs of these enterprises by increasing efficiency so as to reduce the need for subsidies. In addition, recourse to normal bank credits should be encouraged in order to reduce dependence on quasi-public credit lines. This would contribute to achieving a more effective allocation of production factors, as well as facilitating a more appropriate assessment of the viability of individual enterprises by private banks.

Major uncertainties relate to prospects for public finances. As political unification makes it impossible to look at both deficits independently, the correct approach is to look at the all-German consolidated budget for general government. Low tax revenues and immediate expenditure commitments have led to a substantial disequilibrium in the East German public sector, which, however, is largely balanced by transfers from West Germany. As an order of magnitude, the direct and indirect budgetary impacts will amount to about DM 100 billion in 1990 and some DM 140 billion next year.

Given the high degree of uncertainty, these figures have to be interpreted with care, particularly as major risks exist in the following fields:

(i) the level of unemployment may be very high in the short term;

(ii) the liquidity needs of the enterprise sector may exceed the credit limits of the Treuhandanstalt;

(iii) subsidies to stabilize basic living conditions, e.g. in housing and energy prices, may become unavoidable;

(iv) wages may increase to higher than expected levels;

(v) the newly created local authorities will also need substantial liquid resources in order to fulfil their obligations and to begin infrastructural improvements in East Germany.

In addition to flows, further budgetary risks relate to the need to take over debt and to consolidate the all-German public sector. In this respect, the following items are important. The former debt of the GDR State insurance company represents DM 6 billion, the loans to the health scheme amount to DM 12,7 billion, the debt of the former GDR State is DM 28,1 billion and that of the municipalities is DM 11 billion. The debt of the Treuhandanstalt could reach DM 55 billion, while the equalization claims together with the enterprise debt arising from the asymmetric rate of conversion for debts and assets are worth some DM 100 billion in the books of the old GDR banking system. These enterprise debts will probably be largely transformed into public debt if privatization of enterprises is successfully achieved. Debt service requirements will therefore grow significantly and will reduce the room for manoeuvre of German fiscal policy during the foreseeable future.

All in all, the financial deficit of the all-German general government will be very high, i.e. about 3,5 % of GDP this year and 4,5 % of GDP next year, according to the latest forecast. This expansionary swing of almost 5 % of GDP within two years will have important implications for the policy stance in Germany.

2.2. The productivity-wage dilemma

The future development of the East German economy will crucially depend upon expectations about returns on new investment. In addition, the survival of existing enterprises

[1] The Treuhandanstalt is a quasi-public body which owns the whole of the formerly State-owned property of the GDR. It aims at restructuring and privatization of this property. For the time being, it is also granting credit to enterprises in order to cope with short-term liquidity problems.

will also depend upon the relation between production costs and sales prices. However, economic unification has reduced the instruments available to East German enterprises to achieve high profits. Firstly, sales prices have equalized for tradeable goods and services and secondly, monetary union implies the same capital costs throughout the union. Therefore, the only important market instrument to counter the current lower level of productivity in East Germany would be a favourable wage differential.

Although the requirement of moderate wage formation in East Germany is correctly acknowledged, it is highly doubtful whether wages could be maintained at a level consistent with prevailing productivity.

Recent wage settlements have confirmed the pessimism about wage flexibility. Some 80 % of East German employees, i.e. 6,3 million, are now covered by new wage agreements, most of which have to be renegotiated after six months. In many cases, lump sum increases have been agreed upon preventing the required adjustment of the wage structure. At present, average East German wages are about 50 % of the West German level and 30 % higher than just after the conversion date. Wages have been negotiated by sectors and no flexibility has been introduced for individual firms. Moreover, protection against redundancy has been generally agreed until 1 July 1991.

The adjustment of wage costs ahead of productivity constitutes a major impediment to existing enterprises in meeting the challenges of the new market-oriented economy. It leads to an unhealthy dependence on liquidity credits from the Treuhandanstalt and limits the financial resources for new investment necessary to improve efficiency and product quality. In the medium term, it will undermine credit worthiness through debt accumulation and will render a programme of rapid privatization more and more difficult.

Therefore, a change towards greater labour market flexibility is needed, including a much higher degree of wage differentiation. In addition, enterprises should be allowed to increase labour and capital productivity by adjusting their workforce towards the appropriate level and by allowing a more intensive utilization of the capital stock. Greater labour market flexibility is essential to at least partly compensate for the rapid adjustment of wages in East Germany, which is now probably unavoidable.

2.3. Risks and opportunities of introducing a convertible currency

The introduction of the DM simultaneously presents opportunities and risks. On the one hand, it enables a catching up without a balance of payments constraint, it provides direct and almost unlimited access to world financial markets, it reduces the exchange-rate risk of investing in East Germany and it provides modern western technology at relatively low prices. These are very favourable conditions for a rapid reconstruction of the East German economy. In these respects, catching up might prove easier than in other centrally planned economies moving towards market-based economic structures.

On the other hand, the East German economy is immediately confronted with competition on the world market. The immediate and full convertibility of the East mark has revealed the inappropriate product structure and inefficient production methods which exist in East Germany. Given the rigidities in the labour market and the upward pressure on wages, the fixed exchange rate, at the West German productivity level, denies existing East German enterprises the possibility of compensating for their inappropriate product mix by lowering prices on the world market. In this respect, other Eastern countries have the opportunity to adjust to world market conditions more gradually by reducing real wages through devaluation, thus rendering prevailing production 'competitive'.

In these circumstances, the preference must be for high investment in new activities in East Germany rather than for keeping alive existing enterprises. Emphasis should be placed on fostering new investment which will have a high level of productivity. The immediate adjustment pressures require that only production units with long-term survival prospects should be maintained. Otherwise, financial resources needed for new productive investment will be wasted.

Moreover, large and ultimately unjustified subsidies provided to existing enterprises will impede new investment by protecting these enterprises from competition.

All in all, the introduction of the DM in the East German economy has limited the choice between a gradual and a much more rapid adjustment process. Encouraging new investment with a high marginal rate of return and scrapping old structures is the only way to survive the pressures of world competition. Appropriate incentives provided for private investment (see below) together with a large infrastructural programme can help to provide the favourable investment climate which is necessary to attract private capital. In the medium term, a high rate of return will only be achieved by a modern capital stock with a high level of total factor productivity operating in an integrated world economy.

2.4. The transition to a market economy

The introduction of the DM has been the foundation on which market behaviour can be established. Nevertheless, it is not a guarantee that effective market behaviour will actually be established. The legal framework of the social market economy now applies to the East German territory but there are obvious obstacles to the implementation of efficient economic interrelations between economic agents. Firstly, market economic behaviour has to be learned by economic agents; secondly, an effective competition policy has to be established; thirdly, the framework of economic regulations must not be simply copied from the FRG, without assessing the economic consequences for the territory of East Germany.

Past experience of extremely regulated structures has prevented economic agents in East Germany from behaving rationally in an economic sense. For the consumer, the intertemporal choice between consumption and saving was largely non-attractive. Consumption was determined by supply and a distorted price system rather than demand. The introduction of the DM has immediately eliminated supply shortages without, however, changing consumer behaviour. The drastic demand shift from products produced in East Germany to imported goods even for basic consumption items such as food, the failure to gather information on quality and prices by buying in the FRG, and the relatively low importance of the standard determinants of consumption, i.e. income expectations and interest rates, are evidence of continuing irrational economic behaviour.

Establishing economic rationality is even more important in the case of producers. Production in the past has not been orientated towards demand — because of supply shortages — and profitability aspects have not been important. This has led to very inflexible production processes and poor quality products. Not surprisingly, only minor attempts were made to defend markets after the introduction of the DM. In order to regain markets, it is necessary to improve the marketing of local products, to establish an efficient distribution system and to use the price instrument more flexibly.

After more than 40 years of a centrally planned economy, an effective framework for competition must now be established. A rapid privatization and dismantling of existing monopolies is a necessary condition for competition. In the short term, stronger competition is needed in the retail sector; this will not be easily achieved, as the retail sector is highly concentrated. Thus, the consumer does not have choice and existing shops are behaving as mini-monopolies. In addition, cooperation between western enterprises and East German shops might lead to a bias towards western products as East German suppliers are hindered by an inefficient distribution system.

In the medium term, an efficient market economy requires an intensive exchange of intra-industrial intermediate products in order to achieve the benefits of division of labour. A high degree of specialization will be necessary, but without jeopardizing competition. These requirements can only be successfully achieved by medium-sized industrial enterprises.

2.5. Achieving economic prosperity in East Germany

The necessary catching-up process has to be supported by economic policies mainly to compensate for transitional disadvantages of East Germany as a place of production. It will be of crucial importance to improve the conditions for investment in East Germany relative to West Germany in order to achieve economic prosperity in East Germany. Otherwise, East Germany may remain an economically underdeveloped area with structural disadvantages possibly aggravated by emigration of skilled workers. Investment in East Germany should be encouraged with a view to the comparative advantages of the East German territory and structural difficulties which currently exist in the German or even European economy.

Special support should be given to sectors in which prospects are favourable. Nevertheless, in order to compensate for the overall disadvantages of East Germany as a place of production, a general review of regional policies in Germany is required. Investment incentives which favour the territory of West Germany should be abolished and special transitory incentives could be introduced for investment in East Germany. Measures might be taken as soon as possible to reduce uncertainties which are already leading to the postponement of decisions at the private level. Special investment subsidies could be large at the outset but should be gradually phased out. Direct investment subsidies might be preferable to lower taxation. Lower taxes only favour enterprises which are already making profits, while many existing East German enterprises will record losses for quite a time. Moreover, with a general tax cut for East Germany, West German enterprises could be favoured disproportionately as they would be able to transfer profits to East Germany through intra-company operations.

A regional development plan for East Germany might comprise the following elements:

(i) direct investment aid rather than higher depreciation allowances or lower taxes;

(ii) fostering the creation of new enterprises by giving income support during the starting phase, by providing a guarantee on risk capital and by lowering capital costs;

(iii) improving infrastructure, if necessary by shifting public projects to the territory of East Germany in order to reduce the obvious absorption problems in East Germany. Within the unified Germany, the marginal rate of social return of infrastructural and environmental investment is much higher in East Germany than elsewhere;

(iv) abolition of investment incentives and production subsidies in the West German economy.

All Community enterprises should have equal access to such regional subsidies and should participate in infrastructure investment activities through an effective application of the internal market proposals on public procurement.

3. The implications of the adjustment process in East Germany

3.1. The performance of the unified German economy

The rapid integration of the East German economy into the unified Germany makes it increasingly inappropriate to consider both economies separately. Current favourable developments in West Germany largely reflect short-term adjustment problems in East Germany. For example, the shift of internal East German consumption towards imports after the introduction of the DM has boosted demand in West Germany. The relatively healthy condition of the West German budget balance might lead to an incorrect assessment if the financial imbalances in East Germany are not considered. Finally, the still widening trade surplus in West Germany is only the counterpart of the large trade deficit in East Germany.

In a unified German context, the short-term macroeconomic implications can be seen in :

(i) a substantial gap between aggregate supply and demand in the union;

(ii) large asymmetries in the German labour market;

(iii) a significant relaxation of fiscal policy.

Recent figures confirm that unification has rendered a significant part of the East German capital stock economically obsolete; thus potential output of the region has been severely reduced. Meanwhile, the conversion of the East mark into DM has increased the purchasing power of East German residents as the price index has decreased. Clearly, higher wage settlements since then have added further to purchasing power and demand.

In the short term, the gap between aggregate demand and supply in the German economy has been largely filled by running down stocks of final goods and by higher imports. However, some markets, for example for used cars, have experienced significant price increases. For the period ahead, the gap between demand and supply may become even larger for two reasons. Firstly, wages in East Germany may continue to increase ahead of productive capacity. Secondly, higher investment in East Germany will initially have considerable demand effects while supply will increase only after some time.

Any sustained gap between demand and supply requires an adjustment of the real exchange rate, which can be achieved either via a nominal exchange rate adjustment or via higher inflation and a corresponding real appreciation. In this respect, the recent appreciation of the DM against the US dollar fits the picture. Moreover, the demand-supply gap can also be addressed by a policy designed to encourage imports. To the extent that the East German demand structure is now similar to that of other industrialized countries, the import structure may adjust in a similar way without any exchange rate adjustment. In addition, demand for imports should be supported by reducing trade barriers which still exist in many sectors. Early adoption of Community internal market proposals by the German authorities is therefore advisable. Finally, trade relations with Eastern European countries should be intensified. Higher exports from these countries would reduce the demand-supply gap in Germany while helping to mitigate the external constraint facing these countries.

The second very important effect of German union concerns the labour market. The shift in demand has improved employment prospects in the West German economy. However, this shift has considerably worsened employment prospects in the East German economy. Low demand for labour together with the need for structural changes and higher labour efficiency makes very high unemployment unavoidable in the East German economy, at least during the transition period.

An important asymmetry in the labour markets of East and West Germany concerns the wage level. The average wage level in the East is at present around 50 % of the West German level. This figure is, however, misleading as the wage gap is much lower for unskilled workers, particularly if one considers wages net of rent. As wages in East Germany are not differentiated according to economic efficiency, wage differentials are very much wider for skilled workers. A ratio of 1:4 or greater may exist in specific professions.

A further asymmetry relates to skills. In ideologically influenced jobs, e.g. economists and administrators, skills in East

Germany are probably inappropriate to a market-based economy. As regards workers, modern production techniques have to be learned. For the time being, regional and professional flexibility seems to be at a low level in East Germany.

It is unlikely that these asymmetries will persist in the long term, but integration of both labour markets may imply social costs of adjustment, e.g. through large-scale migration. Therefore, although German economic policy has traditionally not played an active role in the labour market, a review of this stance may prove necessary.

The third important macroeconomic implication of German union is a significant relaxation of fiscal policy. This relaxation is largely the counterpart of transfers to prevent a fall in the purchasing power of the East German population. The swing in the fiscal policy stance might be as large as 5 % of GDP between 1989 and 1991. Given the deterioration in the financial balances of other sectors, particularly the enterprise sector, the overall German current account surplus may disappear completely in the short term if investment picks up significantly in East Germany.

As a safeguard against the inflationary impacts of such a change in the policy-mix, fiscal policy should aim to limit the expansionary effect of the transfers to East Germany. First of all, subsidies which favour investment in regions and sectors in the West German economy should be cut. Secondly, infrastructural and environmental investment expenditures should be shifted to East Germany where the marginal rate of return is higher. Thirdly, if tax increases become unavoidable, direct tax measures should be considered as well as indirect tax measures so as to contribute to a more balanced development of after-tax wages and incomes in both areas.

In the medium term, a catching up in the East German economy will certainly contribute to economic growth in the unified German economy. Nevertheless, it has to be accepted that the benefits of higher economic growth will need to be channelled towards an improvement in the economic conditions in East Germany, i.e. an increase in real income towards the level of West Germany, an improvement in the quality of the housing stock, infrastructure and the environment, a reduction in the large fiscal deficits and servicing of the higher debt level. To the extent that new private investment in East Germany represents a shift from the West rather than a genuine addition to total investment, the potential output growth of West Germany may even be temporarily reduced.

3.2. Macroeconomic implications for the European economy

The macroeconomic impact of German unification on the rest of Europe will be significant and positive. The changing balance between demand and supply within the Union will affect trade flows and saving in partner countries. The reduction in the current account surplus of the unified Germany will stimulate demand in the Community. Thus, Community GDP may rise by an additional 0,5 percentage point during the first two years of unification.

In the longer run, it can be expected that the beneficial effects anticipated from the single market will be reinforced. Moreover, to the extent that the other Eastern European economies progress towards a market economy, the advantages of a progressive division of labour within Europe may increase further. Given the relatively high integration of the East German economy with the East European economies, East Germany can act as a bridge between the Community and Eastern Europe.

Nevertheless, fears have been expressed that rapid economic development of East Germany might retard the catching-up process in other relatively poor Community countries — notably Spain, Portugal and Ireland — by reducing the funds available for investment there. However, investment in these countries is based on an expected high real rate of return. As additional demand in Germany will not affect the return on investment elsewhere in the Community and since the integration of world financial markets has provided wider access to investment funds, the risk of financial constraints in the poorer regions should not be exaggerated.

Integration of the East German economy into the European Communities will also raise some questions regarding external trade and market access. In general, problems exist only where East European production is very competitive on world markets and where access to the Community market is restricted, while access to the East German market has not been affected by quotas or tariffs. For other products, affected by tariffs or quantitative restrictions, it is doubtful whether a demand for East German goods will persist. East German demand will shrink considerably for sub-EC-standard products from Central and East European countries. Trade relations between the former GDR and Central and Eastern Europe will decline significantly in the short run, while the potential for EC countries to export to the former GDR territory will significantly increase.

4. Specific Community policy issues

The following sections provide an overview of Community policy issues related to German unification and the automatic accession of the former GDR to the Community. Attention is focused on the issues with major economic relevance. A more complete overview is provided by the Commission's document 'The Community and German unification' (COM(90) 400).

4.1. Structural Funds

East Germany faces an immense task of structural adjustment. Community assistance will mainly be provided through the structural Funds. Assistance should aim to facilitate a smooth transition to a market system and to improve generally the economic prospects of the regions in East Germany. Structural Fund intervention must respond to the specific problems of East Germany, whether these relate to underdevelopment, areas in industrial decline or reform of agricultural structures in rural areas.

Structural Fund operations in East Germany should begin as soon as possible on the same basis as operations in the rest of the Community but based upon simplified procedures. In the absence of the relevant statistical data (and given the risk that any prior designation could limit the flexibility of response by the Commission to rapidly changing adjustment problems), designation of objective 1, 2 and 5(b) regions [1] on the basis of the criteria contained in the regulation has proved to be impossible. Therefore, as far as the territory of the former GDR is concerned, transitional provisions must be adopted for the period 1991 to 1993, i.e. until a general redefinition of the structural Funds resources will take place.

Due to the existing commitments of the structural Funds which must be adhered to, the funding of Community interventions in the East German territory can only be additional to the resources already allocated. According to the Commission's proposal, the structural Funds should have additional commitment appropriations amounting to ECU 3 billion over the period 1991 to 1993. Because of difficulties in assessing the eligibility of East German regions for structural Fund assistance and the need for a flexible response to the adjustment needs of East Germany as a part of the Community, specific transitional regulations are required.

[1] Objective 1 relates to less developed regions of the Community.
Objective 2 relates to regions seriously affected by industrial decline.
Objective 5(b) relates to regions where rural development is appropriate.

4.2. Foreign trade

The structure of external trade in East Germany has been seriously distorted by the special division of labour within the Comecon trading system and by accounting in non-convertible currencies. As both distortions disappeared with the introduction of the German economic and monetary union, the trade structure will change significantly. For market reasons, trade flows among Comecon countries, particularly between East Germany and the other countries, will diminish significantly. East German trade with the Comecon countries will adjust to the pattern of trade flows between Comecon countries and Western countries.

If the countries of Central and Eastern Europe undertake serious efforts to catch up, there will be significant trade and current account surpluses in EC countries *vis-à-vis* these countries including the territory of East Germany. This could prepare the ground for suspending remaining EC tariffs and quantitative restrictions *vis-à-vis* these countries during a transitional period. Trade relations should be extended on a market basis and Central and East European countries should be helped to improve their competitiveness on the world market in order to participate fully in the international division of labour.

4.3. Agriculture

The economic and social situation of agriculture is heavily influenced by the past policy objectives of introducing 'socialist organization' of production covering the elements of central planning, collectivization of the agricultural means of production and industrial production methods. In addition, living conditions and wages of the agricultural population were equalized with those of the industrial population. The target of ensuring a steady increase in production was consistent with the aim of national self-sufficiency.

Compared to other socialist countries the production results in agriculture were quite good. Intersectoral comparisons also show a favourable position for agriculture. Most farms are specialized in either animal or crop production. The average size of arable farms is very large (about 4 500 ha) implying severe diseconomies of scale. The separation of crop and animal production adds to a sub-optimal production efficiency and creates environmental problems.

Employment in agriculture is high (around 10 % of total employment), but not only related to genuine agricultural production. The production units have carried out a good deal of other work such as construction, repair services, transport, social and cultural tasks. Nevertheless, the high

density of the agricultural work-force at about 8,2 persons per 100 ha of land can be explained by industrial type working conditions, i.e. fixed working hours per day, regular holidays, no important part-time working contracts.

The distorted price structure — producer prices were much higher than consumer prices — has led to important distortions in the structure of consumption. A rapid adjustment of consumer demand will imply severe problems of overproduction in some specific production lines like potatoes or meat.

Ensuring the application of the Community agricultural price system which is the basis for free circulation of agricultural goods within the Community is the most vital issue in the process of integration.

As most of the needs for price changes have been anticipated no major exceptions from the Community system exist. All in all, policy measures should be completely neutral as regards the different organizational and property structures of agricultural holdings. They should give equal opportunity to all types of agriculture which might be likely to develop in East Germany.

4.4. Internal market

As has been pointed out, the adjustment process of the East German economy has to be viewed as a regional challenge. Therefore, a complete review of regional policies will be necessary in Germany in order to provide the incentives for new investment which will be the principal means of creating self-sustaining jobs. In order to facilitate the development and full integration of the former GDR territory, all support measures will be considered flexibly by the Commission on the assumption that all State aids will perform their normal function of maintaining a similar competitive environment throughout the Community. Any artificial and unjustified advantage for (East) German companies compared to other Community enterprises must be avoided.

Nevertheless, the desolate state of the East German economy, the absence of an economic structure appropriate to a market-based system, the need to rebuild, modernize and gear up industry and services, and the need to improve the environment significantly, raise questions about the appropriateness of full and immediate application of all State aid rules to the exceptional and unique situation arising from unification.

The existing provisions allow for a sensitive and flexible application of State aid regulations so as to facilitate the building of a suitable new economic and industrial structure. However, some guidelines should be followed, particularly in sectors where excess capacities exist or State aid is no longer justified. The economic justification for continuing to subsidize the former FRG borders zone and Berlin (West) has ceased to exist. On the other hand, restructuring aid is possibly needed in order to comply with new world market competition and to compensate for temporary disadvantages facing East Germany. At a sectoral level, care should be taken to ensure that investment aid does not perpetuate excess capacities, e.g. in shipbuilding or the steel industry.

Introducing a market system will be of prime importance for increasing the competitiveness of the East German economy. Obviously, monopolies of a commercial character, organized in the form of foreign trade companies, will have to be abolished immediately in cases where exclusive export rights are involved. As far as exclusive import rights are concerned, a transitional period could be envisaged for the companies concerned, so as to allow them to adjust to competition.

Moreover, integration of the East German economy into the internal market should not favour West German enterprises to a greater extent than other European companies. This is one of the arguments for giving investment incentives through direct investment subsidies rather than tax allowances. If privatization can only be achieved by granting tax allowances or by introducing a more favourable tax scheme for profits in East Germany, West German enterprises may improve their position on the Community market relative to Community partner countries.

4.5. Environmental matters

The environment in East Germany is in a catastrophic state. Water and air pollution is so bad that it is no longer simply a matter of cleaning up the environment but one of restoring the most basic living conditions. Leaving aside the potential need to close down nuclear power stations because of safety reasons, three main areas of severe environmental damage can be identified: water, air and waste.

East Germany uses little oil and natural gas at present. Seventy per cent of its energy needs are covered by lignite, of which it is the world's leading producer. Quite apart from the enormous damage caused by large-scale exploitation, lignite is burned in ageing power stations and domestic stoves, releasing on average 300 kg of sulphur dioxide per inhabitant per year, as compared with a Community average of 70 kg. East Germany has thus become 'the biggest net exporter' of SO_2 to the other European countries (more than 800 000 t in 1988). The clean-up requires a costly and prolonged effort. This will have to be accompanied by a

review of energy policy including the introduction of true market price and economy measures, by a reorganization of the chemical industry — the second main user of lignite — and by changes in the production of cars which are currently highly polluting.

To date there are no reliable data on the volume and nature of industrial and agricultural waste. However, some features are evident: the number of unauthorized dumps is enormous while official dumps do not comply with any realistic safety rules. The capacity of existing dumps is very limited. Cleaning up polluted soils, modernization of existing dumps, and new installations in particular for dangerous substances will be very costly and can only be achieved in the medium term. However, derogation is only allowed where the state of the environment is such that Community standards were unattainable at the date of unification.

4.6. Miscellaneous: energy, telecommunications, transport

Integration of the East German territory into the Community affects other areas of economic importance such as energy, telecommunications and transport.

Lignite coal is the cornerstone of energy supply. Although its share in primary energy supply will remain important, other primary resources will have to be used, especially since the future of nuclear power stations is highly uncertain. Increases are likely in the contributions of gas, because of environmental reasons, and of oil, because of growing road traffic.

In the electricity industry, the opportunity should be taken to integrate East Germany into the western network. This integration should be based upon a more competitive use of electricity supplies, i.e. imports from other Community countries could be used without detrimental effects on domestic suppliers. In addition unused electricity produced by small local enterprises should be more easily introduced into the overall network.

In telecommunications, the current East German infrastructure was installed before the Second World War and is largely obsolete. This is particularly true in transmission plant and switching equipment where only analogue systems exist. Modern means of telecommunications — mobile telephones, facsimile, packet switching — are almost non-existent. Rebuilding of the network from scratch opens the opportunity to install a very modern system leading to a comparative advantage for East Germany as a place for production in the medium term, particularly for services.

In general, transport in the former GDR is facing three major challenges:

(i) the need to gear transport policy to market economy requirements;

(ii) the need to improve the transport infrastructure;

(iii) the need to integrate transport undertakings into the common transport market.

The poor condition of the infrastructure and of vehicles and rolling stock considerably impairs productivity, efficiency, safety and quality in passenger transport and road haulage. The former GDR's Ministry of Transport estimated that DM 200 billion will be required merely to bring road and rail infrastructure up to western standards. Yet rapid improvements in the infrastructure and capacity are required because transport forecasts suggest a rapid expansion of road haulage.

The Community will need to pay particular attention to the extension of east-west infrastructure links in order to ensure that the integration of the two economies, and the resulting trade flows, are not hindered by bottlenecks. The link between the modernization of the East German transport system and the internal market programme also concerns public procurement regulations. As production capacities in the construction sector will be limited not only in East Germany but also in the rest of the German economy, investment by other Community countries in the restructuring of transport in East Germany should be encouraged.

Study No 8

Saving, investment and real interest rates

Saving, investment and real interest rates

Tables

Graphs

Summary

Renewed interest in the role played by saving in the economy has been aroused by the unsatisfactory growth performance during the early 1980s, the existence of large external imbalances among the major industrial countries and the worldwide persistence of high nominal and real interest rates. Without attempting an in-depth analysis, the present study reviews and analyses a number of issues concerning the supposed inadequacy of current savings patterns (level, composition, allocation) in relation to investment demand and discusses the role of real interest rates in this regard. After presenting a bird's-eye view of the trends and principal determinants of the main components of national saving in the Community over the period since 1970 in Section 1, the study proceeds with a succint review of the theoretical arguments about the role of saving and investment in the growth process. The discussion in Section 2 suggests that in the present situation there seems to be a case for increases in saving and investment in order to further boost economic growth in the Community. The relationship between global saving and investment, on the one hand, and real interest rates on the other are addressed in Section 3. It is concluded that the link between saving-investment gaps and real interest rates is very tenuous. However, there seems to be some evidence that the turnaround in the aggregate saving-investment equation for the industrial world to a net capital import position in the 1980s has contributed to maintaining real long-term interest rates at a high level. Finally, Section 4 considers the implications for economic policy of the increased demand for capital in Eastern Europe, on top of the existing claims in the Community and the less-developed countries. Particularly, it suggests some general policy options to foster saving. It stresses the need to improve further public saving, to continue supporting the rise in profitability, to stabilize expectations and to reduce uncertainties.

1. The components of national saving and their main determinants

Trends in gross national saving during the previous decades have already been amply discussed in a study annexed to last year's Annual Economic Report (see CEC (1989)). Although the evolution of global national saving is more important for the relationship with real interest rates, this section will analyse its main components in more details, i.e. household, corporate, and public saving, and their main determinants in order to be able to advance some policy options.

1.1. Household saving [1]

1.1.1. Trends

Table 1 indicates that in several Community countries household gross saving ratios fell drastically during the 1980s. The decline was particularly noticeable in countries like Portugal (more than 10 percentage points of GDP between 1981 and 1990), Italy (7 points), Belgium (more than 6 points) and the United Kingdom (about 5 points). Apart from the United Kingdom, these are all countries where household saving was traditionally high and constituted the major part of national saving (even exceeding national saving in the case of Belgium, Italy and Portugal in 1981). At the same time, the combination of a surge in corporate saving and an improvement in government saving meant that the relative importance of household saving for national saving declined considerably in these countries during the 1980s. In the Community as a whole, the fall in household gross saving was more moderate, from some 13 % of GDP in 1981 to 9 % in 1990, since in countries like Germany, Spain and the Netherlands the propensity to save by households remained broadly constant.

Graph 1, which presents a longer term perspective for some member countries, suggests that current household saving ratios are not exceptionally low in most member countries compared with levels prevailing in the 1960s. On the other hand, it seems that household saving ratios were particularly high during the 1970s.

1.1.2. Determinants

The scientific literature on household saving behaviour normally distinguishes between two main motives for long-term saving. First, households save to smooth out consumption over time on the basis of anticipated life-time income. Analytically, two main cases may be considered: saving for retirement and precautionary saving. Second, there is the bequest motive according to which households save in order to transfer accumulated wealth to their heirs. In addition to these two long-term saving motives, there are short-term motives working at the level of the individual economic

[1] This section largely draws on a document prepared by the Commission services for the attention of the Economic Policy Committee and discussed by its members in July 1990, see CEC (1990).

Table 1

Gross saving rates by sector, 1970-90
(as % of GDP)

		Households (a)	Companies (b)	Private[1] (c) = (a) + (b)	Public (d)	National[1] (e) = (c) + (d)	External[2] (f)
Belgium	1970	15,0	9,8	24,6	2,4	27,1	2,8
	1975	15,4	6,9	22,3	−0,5	21,8	−0,1
	1981	15,7	6,7	22,3	−8,2	14,1	−3,8
	1984	13,2	8,8	21,7	−5,9	15,8	−0,6
	1990[4]	9,1	16,1	25,8	−4,1	21,7	1,0
Denmark	1970	:	:	11,8	10,0	21,8	−3,9
	1975	:	:	16,1	3,3	19,4	−1,5
	1981	:	:	15,2	−2,7	12,4	−3,0
	1984	:	:	16,6	−1,4	15,1	−3,3
	1990[4]	:	:	14,3	1,9	16,1	−1,3
Germany	1970	8,9	12,9	21,8	6,3	28,1	0,6
	1975	10,3	10,7	21,0	−0,1	20,9	1,2
	1981	9,1	9,9	19,1	1,1	20,2	−0,7
	1984	7,5	12,2	19,8	2,1	21,8	1,3
	1990[4]	8,0	15,7	23,3	2,6	25,3	3,7
Greece	1970	:	:	19,0	4,4	23,4	−3,1
	1975	:	:	22,9	0,7	23,6	−3,7
	1981	:	:	27,1	−6,8	20,3	−0,7
	1984	:	:	25,4	−5,4	20,0	−4,0
	1990[4]	15,8	13,0	28,8	−13,9	14,9	−4,6
Spain	1970	:	:	21,5	5,6	27,1	0,2
	1975	:	:	20,7	4,8	25,6	−2,9
	1981	8,7	10,0	18,6	0,1	18,7	−2,7
	1984	8,2	12,7	21,2	−1,0	20,2	1,4
	1990[4]	7,9	11,4	19,3	3,6	22,9	−3,6
France	1970	13,4	9,1	22,6	5,1	27,6	0,8
	1975	15,0	7,3	22,3	2,0	24,3	0,8
	1981	13,3	6,1	19,4	1,7	21,1	−0,8
	1984	10,4	7,9	18,4	0,6	19,0	0,0
	1990[4]	8,9	10,7	18,7	2,2	20,9	−0,3
Ireland	1970	:	:	18,6	1,8	20,4	−4,0
	1975	:	:	27,7	−5,9	21,8	−1,5
	1981	:	:	20,3	−6,7	13,6	−14,7
	1984	:	:	22,9	−5,4	17,4	−5,8
	1990[4]	8,9	11,3	20,2	−0,7	19,5	1,2
Italy	1970	21,1[5]	6,6[5]	27,7	0,5	28,2	0,8
	1975	25,7[5]	4,2[5]	29,9	−6,1	23,8	−0,2
	1981	23,4[5]	6,1[5]	29,5	−7,0	22,5	−2,2
	1984	22,7[5]	6,8[5]	29,5	−7,1	22,4	−0,6
	1990[4]	16,2	10,1	26,5	−5,9	20,7	−1,1
Luxembourg	1970	:	:	34,2	7,1	41,3	15,0
	1975	:	:	31,2	8,7	39,9	16,5
	1981	:	:	40,6	5,7	46,3	21,2
	1984	:	:	54,2	10,0	64,1	38,9
	1990[4]	10,0	34,7	44,7	10,7	55,4	30,0
Netherlands	1970	9,2	12,8	22,1	4,4	26,5	−1,4
	1975	10,1	10,4	20,5	2,6	23,1	2,5
	1981	8,9	11,3	20,2	0,2	20,5	2,2
	1984	9,4	14,8	24,2	−1,0	23,2	4,2
	1990[4]	9,8	16,3	26,1	−1,2	24,9	3,0

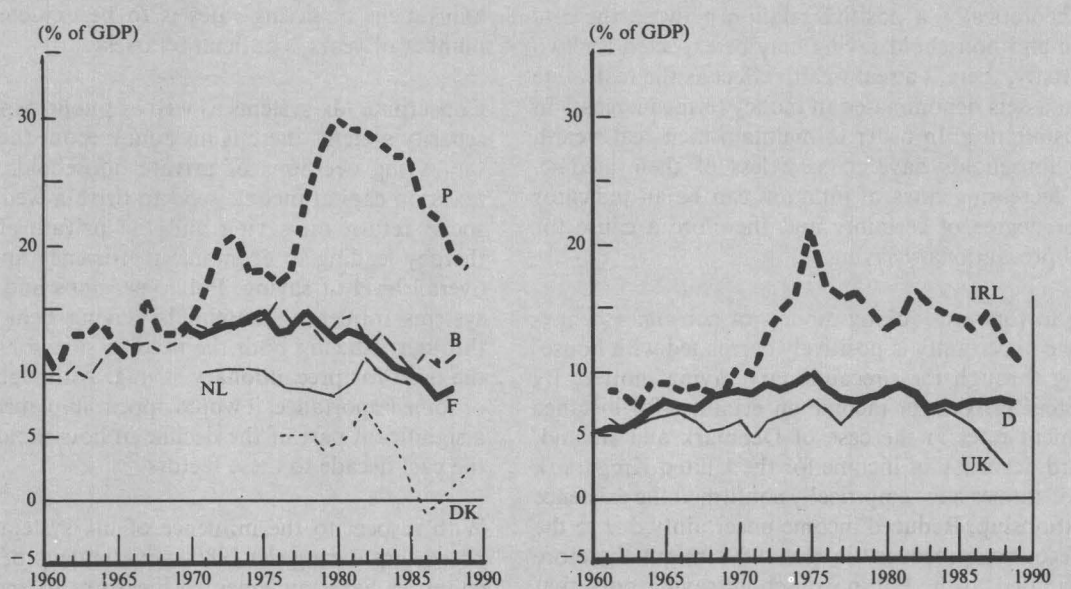
Table 1 *(continued)*

		Households (a)	Companies (b)	Private[1] (c) = (a) + (b)	Public (d)	National[1] (e) = (c) + (d)	External[2] (f)
Portugal	1970	:	:	:	:	28,8	1,9
	1975[3]	17,9	2,0[5]	19,9	−0,3	19,7	−9,4
	1981	27,4	−0,7[5]	26,6	−4,2	22,4	−12,2
	1984	27,0	−0,1[5]	26,9	−8,1	18,8	−3,4
	1990[4]	17,2	14,5	31,7	−3,5	28,2	−1,2
United Kingdom	1970	5,8	7,3	13,1	7,9	21,1	1,3
	1975	7,9	6,6	15,1	0,6	15,7	−2,0
	1981	8,4	9,1	17,6	−0,5	17,1	2,4
	1984	6,9	11,5	18,5	−1,2	17,3	−0,2
	1990[4]	3,5	9,3	12,2	2,8	15,0	−3,0
Community	1970	11,5[6]	9,4[6]	21,1	5,1	26,2	0,6
	1975	13,8[6]	7,8[6]	21,6	0,1	21,6	−0,3
	1981	13,0[6]	8,1[6]	21,1	−1,3	19,8	−0,9
	1984	11,6[6]	10,0[6]	21,7	−1,5	20,1	0,3
	1990[4]	9,3	11,7	21,0	0,3	21,1	−0,2

[1] Disregarding statistical discrepancies, private saving equals the sum of household and corporate saving while the national saving ratio equals the sum of the private and public saving ratios.
[2] Measured by the current account balance. A positive (negative) sign indicates a saving surplus (deficit) that is being exported (imported).
[3] 1977.
[4] Economic forecasts April/May 1990.
[5] Estimate.
[6] Weighted average of the countries for which data are available.

Source: Commission services.

GRAPH 1: **Trends in household gross saving rates, 1960-90[1]**



[1] Date refer to household gross saving, except in the cases of Germany (household net saving), Ireland (personal net saving) and the United Kingdom (personal gross saving). Given these conceptual differences, this graph is useful for intertemporal analysis, but not for comparisons among member countries.

Source: National accounts of the individual countries.

agent. However, on aggregate, these individual saving decisions are likely to cancel out and are therefore not expected to influence the level of total household saving.

To explain the fall in household saving rates in the Community during the 1980s, one has to analyse developments in the factors that have been advanced in the economic literature as having a significant bearing on the abovementioned saving motives by households. Although the explanations given in this respect are surrounded by a considerable degree of uncertainty, there is some consensus about the role played by the factors listed below.

If it is true that households save in the pre-retirement phase and dissave during the pre-working and the retirement phases, changes in demographic parameters (like age distribution, retirement age, life expectancy, participation rates) should be of significant importance in explaining household saving rates. Empirically, the effect of demographic developments (particularly population ageing) on household saving seems to be small in the Community thus far, except in the United Kingdom (see Currie *et al.* (1989)) and Italy. As regards the long run, the broad consensus seems to be one of potentially large declines in private saving due to the expected significant rise in the share of the 64+ age cohort in total population.

It is widely acknowledged that the disinflation process of the 1980s has contributed significantly to the fall in household saving rates in many member countries of the Community. Theoretically, a positive relation between the rate of inflation and household saving may be expected for two reasons. Firstly, there is a real wealth effect as the real value of financial assets denominated in money terms increases in times of disinflation. In order to maintain their real wealth positions, households have to save less of their income. Secondly, decreasing rates of inflation can be an indicator of a higher degree of certainty and therefore a cause for diminished precautionary saving.

According to forward-looking models of consumer behaviour, income uncertainty is positively correlated with household saving through the precautionary saving motive. By using different proxies for income uncertainty (for instance unemployment rates in the case of Denmark and Ireland, the standard deviation of income for the United Kingdom), a number of studies have empirically confirmed the existence of this relationship. Reduced income uncertainty due to the sustained economic recovery in the 1980s might therefore have contributed to the fall in household saving rates that occurred in a number of Community countries.

Wealth (or net worth) is at the centre of household saving behaviour, as it affects both saving for retirement and saving for bequest. In the life-cycle framework, for a given level of current income, the saving rate will be reduced by an increase in the value of wealth, since less saving will be needed in order to accumulate assets to any target level. In explaining the fall in household saving rates in the 1980s, real wealth effects stemming from revaluations of equities and housing seem to have been of importance in Belgium, Denmark, France and the United Kingdom.

Another factor which appears to have led to reduced household saving during the 1980s has been the move towards financial market liberalization and deregulation in the Community and worldwide, which has reduced credit constraints for many households. For several economists (e.g. Spencer and Scott (1990)) the attenuation of credit constraints was one of the major reasons for the household spending spree of the second half of the 1980s (particularly the purchases of housing and consumer durables) and therefore for the fall in household saving rates. It is however difficult to quantify the number of households that are liquidity constrained (for such an attempt see Giavazzi (1989)). Furthermore, it is important to recognize that financial market liberalization and deregulation does not by itself change the life-time income budget constraint. By reducing the credit constraint it may change the time profile of consumption and trigger a temporary decline in aggregate household saving. Eventually, the saving rate has to rise again, not only to stabilize the debt-income ratio but also to cover the increased interest burden. Whether the effects of financial deregulation have already fully come through or whether a further downward adjustment of saving rates is to be expected for the next number of years is difficult to assess.

Concerning tax systems as well as public pension and social security systems there is no doubt about their influence on the saving decisions of private households. In particular, taxes on capital income tend to drive a wedge between the social return on saving and the private after-tax return, thereby leading to economic inefficiency and affecting the overall level of saving. Public pensions and social security systems influence households' saving behaviour basically through reducing both the need to save for retirement and the need for precautionary saving. Although unmistakably of some importance, it would appear implausible to attribute a significant part of the decline in household saving during the past decade to these factors.

With respect to the influence of tax systems, it should be noted that during the 1980s governments of many member countries have implemented measures to encourage household saving (see CEC (1990)). Three broad types of policies can be distinguished: removing saving disincentives, direct saving incentives and equity participation schemes. Although there is scant empirical evidence in this field, on the

whole, the net effect on the level of household saving of these policy measures is believed to be small and of significantly less importance than the influence on the composition of saving.

1.2. Corporate saving

Data on saving by the enterprise sector[1] are not readily available in all Community countries. Some countries (Denmark, Greece, Ireland) do not distinguish in their national accounts between the enterprise and household sectors; others do not have long series for this variable (Portugal and Spain). This section will therefore comment mainly on developments in Belgium, Germany, France, Italy, the Netherlands and the UK. Where possible, developments in this group will be compared to the Community.

Gross corporate saving provided on average in the Community about half of private saving in 1970 but fell to about one third in the beginning of the 1980s. This share has recovered significantly during the second half of the 1980s, reaching about 56 % in 1990.

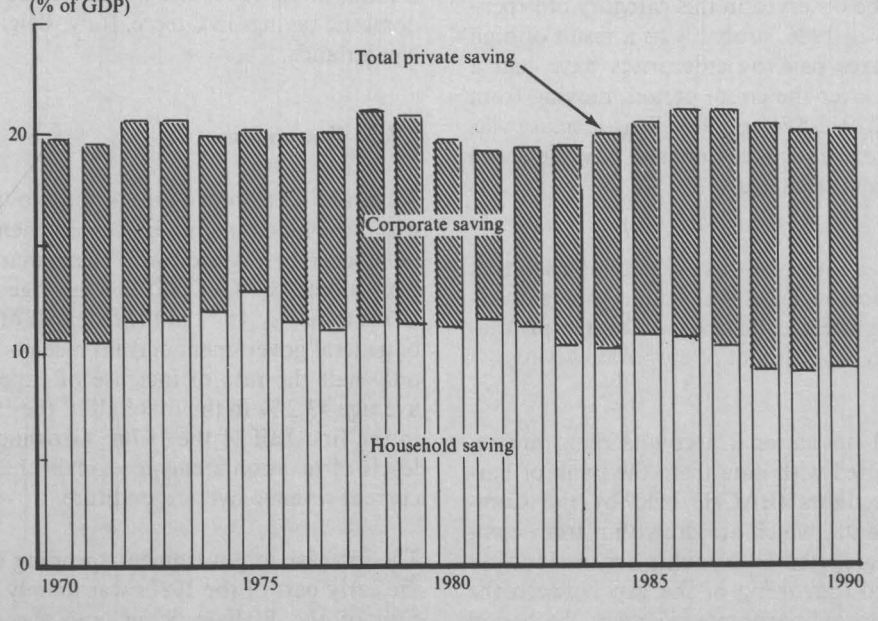
During the 1970s corporate saving oscillated around 9,0 % of GDP, decreasing after the oil price shocks of 1973 and 1979 and recovering thereafter to their original level. Since 1981, corporate saving has increased sharply from 8,1 % of GDP to about 11,7 % in 1990.

As can be seen from Graph 2, a tendency can be observed for changes in corporate saving to offset changes in household saving. One explanation suggests that increases in corporate saving generally lead to an upward adjustment of stock prices. The ensuing wealth effect would then induce households to lower their own level of saving. Households would 'pierce' through the corporate veil and adjust their own saving to changes in corporate saving. As a result the composition of private saving over personal and corporate saving would not affect the level of private saving, that would be determined by intertemporal decision-making at the household level.

Empirical observation would suggest however that the corporate veil is only partially transparent and that the compensation of household saving for corporate saving is less than

[1] The breakdown in sectors follows SNA definitions. The enterprise sector includes non-financial and financial corporate and quasi-corporate enterprises. Individual proprietorships and partnerships which are not treated as quasi-corporate enterprises are included in the same sector as their owner (households or public sector).

GRAPH 2: **Household and corporate gross saving in the Community, 1970-90**[1]



[1] EUR 7: Belgium, Germany, France, Italy, the Netherlands, Portugal and the United Kingdom.
Source: Eurostat (1970-84) and economic forecasts of the Commission services (1985-90).

one for one. The reduction in household saving would, according to several studies, represent only between 50 and 75 % of the increase in corporate savings (see Feldstein (1973), Von Furstenberg (1981), Poterba (1987) and Bovenberg (1989)). These studies are mostly related to the United States of America. However, in the Community one can also observe that the reduction in household saving since 1981 has been less important than the increase in corporate saving so that total private saving increased from 19 % of GDP in 1981 to above 20 % in 1990. This would suggest that a policy designed to stimulate enterprise saving is likely to increase national saving.

Harmonized data on the various elements that determine corporate saving are available only for Germany, France, the Netherlands and the United Kingdom. In these countries on aggregate, corporate saving tracks profit developments rather well. From the gross operating surplus of enterprises, which is a good approximation for enterprise profitability, one has to deduct net interest and dividend payments, net current transfers and direct taxes to calculate corporate gross saving (see Table 2).

The gap between the gross operating surplus and corporate saving narrowed somewhat over the entire period, as is suggested in Graph 3. Net expenditure on interest and dividends and net current transfers declined from about 10,7 % of GDP in 1972 to 8,0 % in 1981. Since then an upward tendency can be observed in this category of expenditures to about 9,4 % in 1986, probably as a result of high real interest rates. Taxes paid by enterprises have had a slight tendency to rise over the entire period, moving from 2,0 % of GDP in 1972 to 2,8 % in 1986. This increase was however less than the decrease in net interest payments and dividends and net current transfers.

High real interest rates and taxes as well as policies that induce companies to borrow excessively can thus negatively affect corporate saving. Clearly, however, enterprise profitability remains the main determinant of corporate saving.

These findings, based on national accounts data, are reinforced when confronted with data from the bank of harmonized company accounts (BACH) held by the Commission. These latest data, which are drawn up from company accounts and aggregated on a country basis, show an even more pronounced narrowing of the gap between the gross operating surplus and corporate saving in the period after 1984, reflecting a substantial reduction in corporate indebtedness in the countries concerned as a result of strongly improved profitability.

1.3. Public saving

1.3.1. Trends

Variations in general government saving have mainly determined the evolution of national saving during the 1970s and the 1980s in the Community. Gross public saving was on average in the Community positive in the first half of the 1970s, but dropped from 5,0 % of GDP in 1970 to 2,4 % of GDP in 1974. It was slightly positive in the second half of the 1970s. From 1981 to 1985 gross public saving was negative at around 1,4 % of GDP. Since then, under the influence of budget consolidation efforts, the negative contribution was gradually reduced and gross public saving turned slightly positive in 1989 and 1990.

It is shown in Table 3 that the drain on domestic savings during the first half of the 1980s was particularly important in Italy (−6,9 % of GDP), Belgium (−6,8 %), Ireland (−6,7 %), Greece (−6,3 %) Portugal (−5,3 %), and to a lesser extent in Denmark (−1,2 %), the Netherlands (−0,7 %) and the United Kingdom (−0,6 %). Only in Germany, France and Luxembourg did gross public saving remain positive.

In the second half of the 1980s the situation improved in all countries, except in Greece where it deteriorated substantially. The improvement was very marked in Ireland and Denmark. In 1990, the public sector continues to absorb domestic savings in Greece, Italy, Belgium, Portugal and the Netherlands.

1.3.2. Determinants

As can be seen from Table 4, the evolution of public saving was determined mainly by developments in general government current expenditure. Their share in GDP increased from almost 33 % of GDP on average in the first half of the 1970s to nearly 45 % in the first half of the 1980s. The share of general government current receipts in GDP increased by only half the rate of increase of expenditure, reaching on average 43,2 % in the first half of the 1980s, up from 36,3 % in the first half of the 1970s. Growing resistance to higher levels of taxation seems to explain the lag in the growth of current revenue over expenditure.

The increase in government spending during the 1970s and the early part of the 1980s was mainly related to the expansion of the Welfare State, and the consequences of the decline in economic activity, which was partly a result of the expansion of the public sector. Since the increases in tax revenues were insufficient to match the increase in expendi-

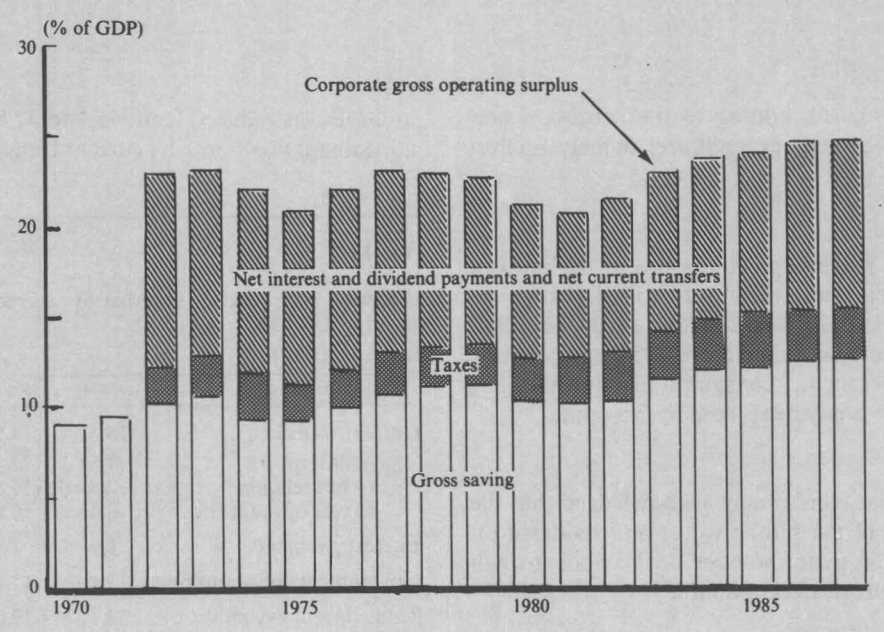
Table 2

Gross corporate saving and its determinants in EUR 4, 1970-87[1]
(as % of GDP)

	1970-74	1975-80	1981-86	1987
Gross corporate saving	9,7	10,4	11,3	12,5
Gross operating surplus	22,4	21,9	22,7	24,6
Taxes	−2,2	−2,2	−2,8	−2,8
Net interest, net dividends and net current transfers	−10,3	−9,5	−8,7	−9,3
Depreciation	7,8	9,6[2]	10,3[2]	10,3[2]

[1] Germany, France, the Netherlands and the United Kingdom.
[2] Germany, the Netherlands and the United Kingdom.
Source: OECD, national accounts, own calculations.

GRAPH 3: **Components of corporate saving in EUR 4**[1]



[1] Germany, France, the Netherlands and the United Kingdom.
Source: OECD, national accounts.

Table 3

General government gross saving and its determinants, 1970-90
(as % of GDP)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EC[1]
1970-74													
Gross saving	1,8	9,1	5,7	3,8	5,1	4,7	1,0	−2,2	8,5	4,8	:	4,3	3,7
Current receipts	38,3	47,2	41,1	26,2	23,4	39,0	33,4	28,8	38,8	44,5	:	37,7	36,3
Current expenditure	36,5	38,0	35,4	22,4	19,6	34,3	32,3	31,1	30,3	39,7	:	33,4	32,7
1975-80													
Gross saving	−2,1	3,1	2,1	0,8	2,8	2,7	−4,2	−4,6	9,4	1,9	:	−0,1	0,5
Current receipts	44,3	49,6	44,9	29,4	27,7	43,2	35,6	30,9	53,4	51,1	:	38,8	39,4
Current expenditure	46,3	46,5	42,9	28,6	25,6	40,5	39,8	35,5	44,0	49,2	:	38,9	39,0
1981-86													
Gross saving	−6,8	−1,2	1,8	−6,3	−0,7	0,8	−6,7	−6,9	9,0	−0,7	−5,3	−0,6	−1,4
Current receipts	47,5	55,4	45,9	33,0	34,2	48,3	41,5	37,3	55,8	54,4	34,7	41,6	43,2
Current expenditure	54,2	56,5	44,1	39,3	34,8	47,5	48,1	44,2	46,8	55,2	40,0	42,2	44,6
1987-90													
Gross saving	−4,4	2,9	2,2	−11,5	2,6	1,9	−2,2	−6,0	9,6	−0,9	−2,3	1,9	0,0
Current receipts	46,2	59,6	44,7	34,8	38,5	48,9	41,6	40,9	56,1	53,3	35,8	39,2	43,6
Current expenditure	50,6	56,6	42,5	46,2	36,0	47,0	43,9	46,9	46,5	54,2	38,1	37,3	43,6

[1] For 1970-74 and 1975-80, EC without Portugal.
Source: Commission services.

ture, fiscal deficits widened, adding to the process a new dynamic category of current expenditure, namely interest charges.

Above half of the 12 percentage points rise in the ratio of general government current expenditure to GDP between the average of the first half of the 1970s and the first half of the 1980s was due to increases in current transfers, mainly to households. Government consumption increased by 3,6 points, while interest payments rose by 2,6 points.

In the early 1980s it was increasingly acknowledged that the very rapid expansion of the public sector and its drain on savings, was one of the major sources of the poor growth performance of the European economies.

The reduction in current expenditure has been limited so far. Between 1985 and 1990 the share of current expenditure in GDP was reduced from 45,1 to 42,8 %. The brunt of the adjustment was borne by current transfers to enterprises and

Table 4

Structure of general government current expenditure in the munity,[1] 1970-90
(as % of GDP)

	1970-74	1975-80	1981-86	1987-90
Current transfers:	15,5	18,9	21,3	20,6
to enterprises	(1,8)	(2,3)	(2,5)	(2,1)
to households	(12,8)	(15,5)	(17,5)	(17,1)
to rest of the world	(0,6)	(0,8)	(1,3)	(1,0)
Interest payments	1,9	2,7	4,5	4,8
Government consumption	15,3	17,4	18,8	18,2
Total current expenditure	32,7	39,0	44,6	43,6

[1] For 1970-74 and 1975-80, EC without Portugal.
Source: Commission services.

households (minus 1,2 points) and government consumption (minus 0,9 points). The share of actual interest payments remained at the same level.

Further efforts will be needed if the public sector is to make a larger contribution to domestic savings.

2. The role of saving in the growth process

Gross saving is an essential element to create welfare. It is required for the replacement of the capital stock in the absence of which it would gradually be consumed and for the increase in the level of the capital stock through new investment. With increases in population, maintaining the level of the capital stock per head will require even higher savings. Saving is the primary counterpart for increases in the capital stock which are essential for increases in productivity and the standard of living. The main difficulty is however to determine what is the appropriate level of saving. The neo-classical growth models provide some insight into the link between saving and economic growth.

In the neo-classical growth models the saving rate does not affect the long-term rate of growth of income but can lead to permanently higher levels of income. An increase in the saving rate or a gross increase in capital leads initially to an increase in the capital labour ratio and to a rise in output growth per head, provided total factor productivity remains unchanged. Since the production function displays diminishing returns to capital, output per head increases at a diminishing rate. The rate of output growth per capita will therefore gradually come down to the exogenously determined rate of technological advancement, and the capital output ratio remains constant. So while the growth rate cannot be permanently raised by an increase in the share of income that is saved, the level of income per capita can be put permanently at a higher level.

The equilibrium rate of saving is determined where the cost of increasing saving cancels the benefit of a higher per capita output. This 'golden rule' of saving maximizes long term per capita consumption. When the saving rate exceeds the golden rule, the economy is considered dynamically inefficient, meaning that under these conditions the present level of consumption could be increased without reducing future consumption. When the actual saving rate is lower than the optimal rate the economy is considered dynamically efficient. The empirical validation of this rule would be important in assessing whether present saving rates are too high or too low.

Abel *et al.* (1989) have calculated for a number of European countries (Germany, France, Italy and the United Kingdom), the United States of America and Japan that these economies are dynamically efficient, meaning that increases in saving and investment would bring them closer to their optimal growth path. For that purpose the authors computed the difference of gross profit and investment as a percentage of GNP. If the cash-flow generated by enterprises is higher than the level of investment, so that a portion of the return to capital can be consumed, the economy can grow further to achieve its optimal growth path. The main conclusion from these findings is that by further increasing saving and investment, the Community could improve its growth performance.

When the saving rate is too low this could be the result of either the discrepancy between the individual's time preference and the one needed to maximize social welfare or the excessive absorption of saving by the public sector to finance government consumption. Such a discrepancy can arise as a result of distortions originating in government policies (e.g. taxation) and market rigidities. Policy adjustments could reduce this discrepancy as a means of arriving at a more optimal saving level.

These traditional models have not been very satisfactory in explaining sustained differences in growth rates over a prolonged period among industrial countries. This has prompted the development of alternative growth models where technical advancement is no longer exogenous but endogenous.

It was noted that there are powerful interactions between the investment rate and the rate of technical change. A higher investment rate as a result of higher saving may not only lead to a temporarily higher growth rate before stabilization at the steady state level, but may also increase the long- term rate of growth.

Some strong correlations have indeed been found between total factor productivity growth, which is an indicator of the rate of technical progress and the rate of growth of the capital stock. These models assume that there are externalities associated with capital accumulation that reduce the effects of diminishing returns. Physical and human investment, reorganization and changes in the method of operation, government spending on research and technology and tax policies are all examples of externalities which can in turn affect the rate of technological change. The case for increases in saving and investment is therefore even stronger.

As regards the issue of the inadequacy of savings, an important implication of this assumption is that the return for private savers may not fully be equal to the social return on investment, leading the market to generate a suboptimal level of saving.

The above arguments relate to a closed economy, where, by definition, national saving equals national investment. In a world of high capital mobility, the inadequacy of national saving is less of a problem, at least in the short run, for a country with excess investment opportunities as foreign savings can be attracted. Foreign financing can be sustained as long as the return on investment is sufficient to service the external debt. The limitation imposed upon domestic investment by national saving has then been relaxed somewhat. Over the longer run however the limitation is still relevant.

In a study concerning the period 1960-74, Feldstein and Horioka (1980) found that domestic saving passed into domestic investment nearly one to one. An extension of this work to 1987 and a larger sample of 23 OECD countries suggested that this correlation had become less important.

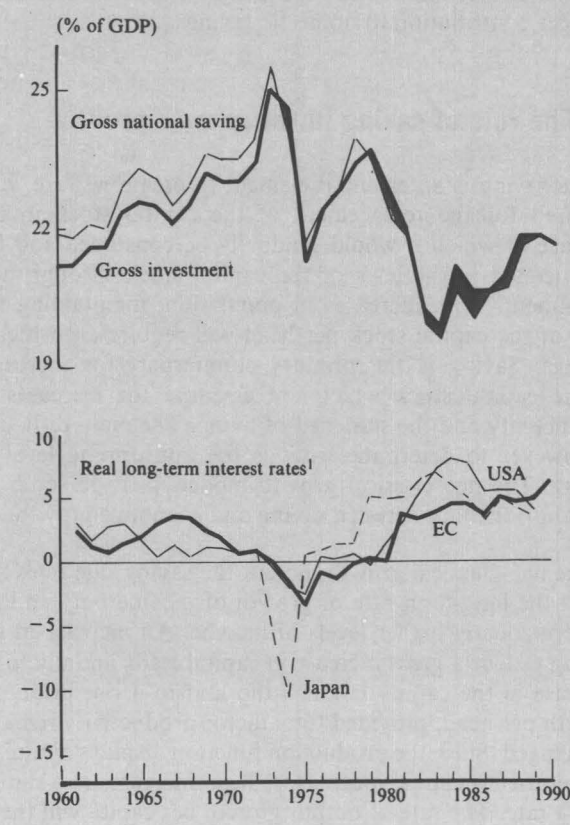
An implication of this increasing gap between savings and investment is that countries might become more reluctant to take measures to increase saving since they would not necessarily benefit from the externalities of increased investment. Savings would flow where investment produces the highest real rate of return. It would then be more optimal to ensure adequate investment conditions. Profitability and tax policy are important determinants of the rate of return on investment and of investment itself.

3. Global saving, investment and real interest rates[1]

Concern about the adequacy of national saving has also been prompted by developments in real interest rates during the 1980s. The decline in national saving (as a percentage of GDP) in the EC and in the whole of the OECD area since the early 1980s coincided with the persistence of high real interest rates, as is shown in Graph 4a. In addition, the pick-up in real long-term interest rates at the end of 1989 from an already historically high level occurred at the same time as awareness grew of substantial future capital needs, following the systemic changes in Eastern Europe. Given these coincidences, the question arises as to what extent the apparent downward rigidity in real long-term interest rates reflects a relative scarcity of national saving.

The impact of national saving on developments in real long-term interest rates is, however, not easy to assess. In theory, the expected real long-term interest rate is determined by the equality of total investment demand to total saving. A shortfall of *ex-ante* savings from desired investment leads to an increase in real interest rates. This in turn tends to increase actual savings and to reduce investment demand. The *ex-post* identity of national saving, investment and current account makes it difficult, however, to identify an *ex-ante* disequilibrium between the supply of and demand for capital. Furthermore, the increasing liberalization and integration of capital markets reduces the impact of a disequilibrium between saving and investment at the national level. An increase in domestic interest rates due to a relative insufficiency of national saving will attract foreign capital, mitigating the rise in domestic interest rates and reducing the need for national saving to rise. In a world characterized by freely moving financial capital the adequacy of saving in

GRAPH 4a: **Aggregate saving, investment and real long-term interest rates, 1960-90 (EC, USA and Japan)**



[1] Measured as the difference between the nominal long-term interest rate and the annual variation in the GDP price deflator.

Source: Commission services.

[1] Measured by the difference between nominal interest rates and the annual change in the GDP price deflator.

relation to investment has therefore to be assessed on a more global level than that of the national economy.

Aggregate data on the saving/investment equilibrium for the three largest industrial regions (EC, USA and Japan) is shown in Graph 4a together with developments in real long-term interest rates. It illustrates that for the three largest industrial blocs together, the average ratio of gross national saving to GDP fell by some 2¼ percentage points between 1960-73 and 1981-89 (from about 23 % of GDP to just below 20¾ %) while the level of gross capital formation dropped only by 1½ points (from slightly above 22½ % of GDP to 21 %). The fall in national saving between the two periods was broadly similar in the three individual regions, as suggested by Graph 4b. On the other hand, the decline in the investment ratio was very noticeable in Japan and the EC but small in the USA, albeit starting from a comparatively low level in the 1960s.

The data also clearly indicates a turnaround in the aggregate saving/investment position of the industrial world. Whereas in the 1960s and to a lesser extent in the 1970s, except in 1974, this bloc of countries experienced a strong saving surplus, it became a slight capital importer in the 1980s. The improvement in the net national saving position in Japan and the EC since 1982 (see Graph 4b) was not sufficient to offset completely a fundamental deterioration of the saving/investment position in the USA, chiefly stemming from a sharp fall in its national saving during the 1980s. The turnaround in the saving-investment gap of the industrial world was accompanied by a significant change in the global allocation of world savings as highlighted by Martins and Plihon (1990). According to them, the global transfers of capital since 1967 can be divided into three distinct phases:

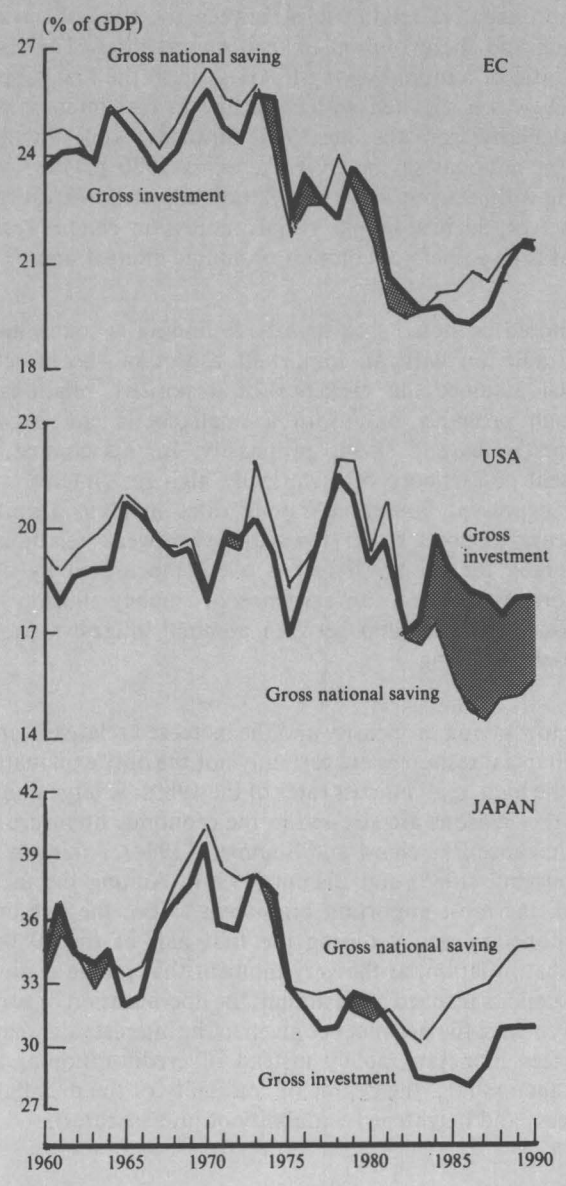
(i) 1967-73: North-South transfers, the main transfers being from Europe and Japan to the non-oil-developing countries;

(ii) 1974-82: South-South transfers, principally from OPEC to other developing countries; and

(iii) 1983-88: North-North transfers, largely from Japan and Europe to the USA, with saving-investment positions of both OPEC and the non-oil-developing countries being close to equilibrium.

The turnaround in the global saving-investment equation for the industrial world is often advanced as a major contributory factor in the persistence of real interest rates at historically high levels in the 1980s. The extent to which this phenomenon played a role in this respect is difficult to assess. As shown in Graph 4b, real long-term interest rates in the Community, but also in the USA and Japan, were slightly positive in the 1960s and close to zero or even negative during most of the 1970s. But during the first half of the 1980s, they became increasingly positive, attaining peak levels around the mid-1980s. Despite a downward tendency in subsequent years, especially in the USA and Japan though not in the EC, real interest rates remained above those recorded during the 1960s. At the end of 1989, real interest rates resumed.

GRAPH 4b: **Evolution of saving and investment rates in the EC, USA and Japan, 1960-90**



Source: Commission services.

Graph 4a suggests that the link between the evolution of real interest rates and saving-investment gaps was very tenuous over the last 30 years. On the other hand, it reveals a certain negative relationship between the level of national saving and the evolution of real interest rates. The rise in the ratio of national saving to GDP up to the first oil price shock was associated with a decline in real interest rates, particularly from the late 1960s onwards, while the sharp fall in national saving over the years 1980 to 1983 went along with a strong surge in inflation-adjusted interest rates. However, such a simple visual impression cannot resolve what is a problem of complex economic interactions.

It should be noted that the above finding is somewhat in contradiction with an important aspect of the literature which assumes the existence of a positive relationship, though probably only with a small coefficient, between interest rates and saving propensity. In this context, the present co-existence of historically high real interest rates and depressed household saving rates in many countries appears to point either toward a very weak relationship (whereby the positive effect is overcompensated by other factors) or toward the existence of 'money illusion', i.e. a positive relationship between nominal interest rates and household saving.

The low saving propensity and the increased relative scarcity of financial resources are certainly not the only explanations for the high 'real' interest rates of the 1980s. A large number of other reasons are stressed in the economic literature (see for instance Blanchard and Summers (1984), Atkinson and Chouraqui (1985) and Bismut (1990)). Among the factors cited, the most important ones seem to be: the tightening of monetary policy during the first half of the 1980s to combat inflation, at the very moment that public dissaving and deficits reached a maximum; the liberalization of capital movements; the prominence given to the interest rate weapon to steer monetary policy instead of credit rationing and risk factors (e.g. the degree of credibility of the disinflation process and heightened variability of interest rates).

Whatever the relative importance of these factors in explaining developments in the 1980s, two important new features may help in mitigating the renewed upward pressures on real interest rates since the end of 1989. Monetary policy has certainly been tightened in 1989 to curb inflationary expectations, after some deliberate relaxation of monetary conditions in 1987 and 1988 following the October 1987 stock market crash. However, the evidence available points to lower and more stable inflation rates than a decade ago so that monetary uncertainty and risk premiums should be considerably reduced. On the saving side, the performance seems to be improving as well. Aggregate gross national saving is currently higher than in the first half of the 1980s, mainly on account of improved public saving.

On the other hand, two new potential sources of upward pressures on real interest rates have emerged recently. Firstly, the current wave of economic reform and restructuring in Eastern Europe, and particularly in the former GDR, has raised expectations of a surge in the demand for financial resources from this part of the world. With demand for investment in the rest of the world unchanged, the resulting outlook for excess demand for capital may have been anticipated by financial markets as is reflected in the rise in real interest rates since the beginning of 1990.

Secondly, the strong rise in oil prices subsequent to the outbreak of the Iraq/Kuwait conflict may influence saving, investment and real interest rates. Generally speaking, the impact of the Middle East crisis will be lower growth and higher inflation this year and next than would otherwise be the case. These twin risks are likely to affect the components of national saving in opposite ways. Both corporate and public saving might fall somewhat; the former due to a decline in profitability, the latter because of the adverse effects of the working of the automatic stabilizers in times of a deceleration of economic activity. On the other hand, household savings might rise through the precautionary (higher uncertainty) and wealth effect (to preserve the real value of wealth with rising inflation). The relative importance of these responses is difficult to determine so that the impact on overall national saving is uncertain. However, on the basis of experiences with the oil price shocks of the 1970s, it is reasonable to fear subsiding national saving in the Community and the other industrial countries. In the two years following the oil price hikes of 1973 and 1979, aggregate saving in the EC, USA and Japan fell respectively by about 3,7 and 1,7 points of GDP. While in the past this fall in national saving was virtually matched by a corresponding decline in gross capital formation, at the present juncture the demand for capital — which is of a more structural nature — might be less affected by increased uncertainties and higher inflationary expectations, adding to upward pressures on real interest rates.

4. Policy options

There is a widely-held belief that the world is increasingly becoming short of savings. There is the huge additional demand for capital for investment purposes in Eastern Europe, on top of the continuing pressing capital needs in the less-developed countries. Also in the industrial world, and particularly in the Community, there is still a potential capital shortage with respect to investment needs. To sustain

and enhance the economic expansion in order to lower the still unacceptably high rate of unemployment without a resurgence of inflation, it is of crucial importance to widen the capital stock in the Community. In the absence of an increase in world saving, many capital demands may be left unfulfilled and real interest rates may rise. Hence, it is clearly desirable for the world to aim for higher saving rates.

The rise in world saving will have to be generated predominantly in the industrial world since in the short to medium term there is hardly scope for increased national savings in Eastern Europe and the less-developed countries. In these blocs of countries, priority should be given to policies geared towards the creation of an environment conducive to investment and growth. However, some of these policies might indirectly have some positive effects on the propensity to save (for instance the establishment of an efficient financial system and sound fiscal policies). Given the saving shortage in Eastern Europe and the less-developed countries, it is necessary that the industrial world becomes again an important net supplier of capital.

There are various ways to raise national saving in the industrial countries. The above analysis shows that improvement in enterprise profitability leads to higher corporate saving. But schemes to encourage household saving induce rather a change in its composition than a net increase. Therefore, the most straightforward way to increase national saving is to improve public saving. In the Community, gross saving by general government is still much lower than it was in the early 1970s. Moreover, there are risks that it might turn negative again in the years ahead. This could result either from the adverse budgetary effects of a possible deceleration of economic growth following the Iraq/Kuwait crisis or from a worsening of Germany's public finances resulting from the costs associated with the adjustment of the former GDR economy. In addition, in a number of individual member countries (Greece, Italy, Belgium, Portugal, the Netherlands and Ireland), general government saving is still negative. These countries also face either excessive budget deficits or excessively high public debt levels. For strictly budgetary reasons, but also with a view to EMU, continued fiscal consolidation thus appears highly appropriate. In the member countries where public saving is already positive, it is still rather low compared to the levels of the 1960s and beginning of the 1970s, implying that additional efforts to increase public saving would be expedient as well.

Corporate saving, which has become the major source of national saving in the Community, needs to be increased further along with a continued improvement in profitability which is required to support increased investment and employment. In order to secure further improvements in profitability, real wage increases will have to remain moderate and below productivity growth. Generally, the critical importance of expectations and uncertainties for private saving and investment decisions underscores the need for stability-oriented monetary policies and sound fiscal policies.

With respect to household saving, an increase from its currently low levels would be welcome. However, experience in many member countries has taught that specific measures to promote the saving propensity of households are not very effective. While such measures have often led to changes in the specific form of household saving, they hardly succeeded in increasing the overall level of household saving. On the other hand, serious consideration should be given to the removal of distortions, particularly in the field of taxation, that discourage household saving (e.g. incentives to borrow for consumption purposes).

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Statistical annex

Notes on the statistical annex

General remarks

This edition of *European Economy* gives in its statistical annex updated time series of annual data.

Unless otherwise specified, aggregates up to 1988 are defined for member countries as in the ESA (European system of economic accounts), and for the USA and Japan as in the SNA (UN-OECD system of national accounts). National accounts figures for 1989, 1990, and 1991 are estimates and forecasts made by Commission staff using the definitions and latest figures available from national sources, and so they are not fully comparable with the corresponding figures for earlier years. However, in Tables 1, 2, 4 to 10, 12 to 21, 23 to 36, 39, 40 and 61 to 73 discontinuities have been eliminated.

Community totals for national accounts data are aggregated using purchasing power parities, except in Tables 5, 8, 12, 15, 37, 38 and 41 to 45, where current exchange rates have been used. The data concerning Germany refer as before to the territory of the Federal Republic of Germany before the unification.

List of tables

Symbols and abbreviations used

–	nil
:	not available
%	percent or percentage
Mio	million
Mrd	1 000 million
ECU	European currency unit
EUA	European unit of account
UA	Unit of account
PPS	Purchasing power standard
GDP	Gross domestic product

Table 1

Population; total

(1 000)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	9 153	4 581	55 433	8 327	30 583	45 684	2 834	50 198	314,0	11 483	8 426	52 372	279 388	180 671	94 118
1961	9 184	4 610	56 185	8 398	30 904	46 163	2 819	50 524	316,9	11 637	8 420	52 807	281 967	183 691	94 965
1962	9 221	4 647	56 837	8 448	31 158	46 998	2 830	50 844	320,8	11 801	8 410	53 292	284 806	186 538	95 853
1963	9 290	4 684	57 389	8 480	31 430	47 836	2 850	51 199	324,1	11 964	8 466	53 625	287 536	189 242	96 772
1964	9 378	4 720	57 971	8 510	31 741	48 330	2 864	51 601	327,8	12 125	8 505	53 991	290 064	191 889	97 791
1965	9 464	4 758	58 619	8 551	32 085	48 778	2 876	51 988	331,5	12 293	8 511	54 350	292 604	194 303	98 851
1966	9 528	4 798	59 148	8 614	32 453	49 184	2 884	52 332	333,9	12 455	8 492	54 643	294 864	196 560	99 769
1967	9 581	4 839	59 286	8 716	32 850	49 568	2 900	52 667	335,0	12 597	8 486	54 959	296 784	198 712	100 839
1968	9 619	4 867	59 500	8 741	33 240	49 915	2 913	52 987	335,9	12 726	8 496	55 214	298 555	200 706	101 999
1969	9 646	4 891	60 067	8 773	33 566	50 318	2 926	53 317	337,5	12 873	8 482	55 461	300 657	202 677	103 261
1970	9 651	4 929	60 651	8 793	33 876	50 772	2 950	53 661	339,2	13 032	8 432	55 632	302 718	205 052	104 674
1971	9 673	4 963	61 284	8 831	34 190	51 251	2 978	54 015	342,4	13 194	8 382	55 928	305 032	207 661	105 713
1972	9 709	4 992	61 672	8 889	34 498	51 701	3 024	54 400	346,6	13 330	8 364	56 097	307 022	209 896	107 156
1973	9 739	5 022	61 976	8 929	34 810	52 118	3 073	54 779	350,5	13 438	8 368	56 223	308 826	211 909	108 660
1974	9 768	5 045	62 054	8 962	35 147	52 460	3 124	55 130	355,1	13 543	8 482	56 236	310 307	213 854	110 160
1975	9 795	5 060	61 829	9 046	35 515	52 699	3 177	55 441	359,0	13 660	8 737	56 226	311 544	215 973	111 520
1976	9 811	5 073	61 531	9 167	35 937	52 909	3 228	55 701	360,8	13 773	8 942	56 216	312 648	218 035	112 770
1977	9 822	5 088	61 400	9 309	36 367	53 145	3 272	55 930	361,4	13 856	9 044	56 190	313 785	220 239	113 880
1978	9 830	5 104	61 327	9 430	36 778	53 376	3 314	56 127	362,1	13 939	9 105	56 178	314 871	222 585	114 920
1979	9 837	5 117	61 359	9 548	37 108	53 606	3 368	56 292	363,0	14 034	9 189	56 240	316 060	225 055	115 880
1980	9 847	5 123	61 566	9 642	37 386	53 880	3 401	56 416	364,4	14 148	9 289	56 330	317 392	227 757	116 800
1981	9 853	5 122	61 682	9 730	37 751	54 182	3 443	56 503	365,4	14 247	9 358	56 352	318 587	230 138	117 650
1982	9 856	5 118	61 638	9 790	37 961	54 480	3 480	56 640	365,6	14 312	9 429	56 306	319 375	232 520	118 450
1983	9 855	5 114	61 423	9 847	38 180	54 728	3 505	56 836	365,7	14 368	9 502	56 347	320 071	234 799	119 260
1984	9 855	5 112	61 175	9 900	38 342	54 947	3 529	57 005	366,0	14 423	9 577	56 460	320 690	237 011	120 020
1985	9 858	5 114	61 024	9 934	38 505	55 170	3 540	57 141	366,7	14 488	9 648	56 618	321 407	239 279	120 750
1986	9 862	5 121	61 066	9 964	38 668	55 394	3 541	57 246	368,4	14 567	9 716	56 763	322 276	241 625	121 490
1987	9 870	5 127	61 094	9 990	38 832	55 630	3 543	57 345	370,6	14 664	9 756	56 930	323 151	243 934	122 090
1988	9 879	5 130	61 418	10 016	38 996	55 873	3 538	57 452	373,3	14 760	9 777	57 065	324 277	246 329	122 610
1989	9 931	5 146	62 020	10 036	39 113	56 086	3 533	57 527	374,0	14 849	9 796	57 236	325 647	248 754	123 130
1990	9 931	5 151	63 340	10 076	39 233	56 311	3 528	57 682	374,4	14 938	9 816	57 373	327 753	251 255	123 650
1991	9 931	5 156	64 169	10 106	39 350	56 536	3 528	57 797	374,8	15 013	9 835	57 533	329 330	253 677	124 170

Table 2

Employment; total economy

(Annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	0,8	1,5	1,4	1,1	0,2	0,1	−0,2	0,2	1,1	1,5	0,5	1,2	0,8	−0,4	1,4
1962	1,6	1,5	0,3	−1,7	0,9	0,2	0,7	−1,1	0,3	2,0	0,5	0,7	0,3	2,1	1,3
1963	0,7	1,2	0,2	−1,4	0,5	1,0	0,6	−1,5	−0,4	1,4	−0,2	0,1	0,1	0,9	0,9
1964	1,3	2,1	0,1	−1,3	0,5	1,1	0,5	−0,6	1,7	1,8	−0,1	1,1	0,5	1,8	1,3
1965	0,2	1,8	0,6	−0,7	0,5	0,4	−0,2	−1,7	0,9	0,9	0,4	0,9	0,2	3,3	1,6
1966	0,5	0,5	−0,3	−0,9	0,5	0,8	−0,3	−1,5	0,5	0,8	−0,6	0,6	0,0	4,5	2,1
1967	−0,3	−0,6	−3,3	−1,2	0,8	0,3	−0,6	1,1	−1,1	−0,3	−0,6	−1,4	−0,8	2,5	1,9
1968	−0,1	0,8	0,1	−1,2	0,8	−0,3	0,3	0,0	−0,4	0,9	−0,6	−0,6	−0,1	2,4	1,7
1969	1,7	1,2	1,6	−0,3	0,9	1,5	0,3	0,5	1,4	1,7	−0,6	0,4	0,9	2,5	0,8
1970	−0,5	0,7	1,3	−0,1	0,7	1,5	−1,2	0,0	2,0	1,1	5,2	−0,8	0,6	−0,8	1,1
1961-70	0,6	1,1	0,2	−0,8	0,6	0,6	0,0	−0,5	0,6	1,2	0,4	0,2	0,2	1,9	1,4
1971	1,0	0,6	0,6	0,3	0,5	0,4	−0,4	−0,1	3,2	0,5	0,3	−0,9	0,1	−0,4	0,7
1972	−0,1	2,1	−0,2	0,5	0,3	0,6	0,3	−0,6	2,7	−0,9	−0,3	−0,2	0,0	2,5	0,5
1973	1,3	1,3	0,7	1,0	2,0	1,4	1,4	2,2	1,9	0,1	−0,5	2,3	1,5	4,3	2,3
1974	1,4	−0,3	−1,3	0,1	0,7	0,9	1,4	2,0	2,8	0,2	−0,5	0,3	0,4	1,6	−0,4
1975	−1,4	−1,3	−2,8	0,1	−1,6	−0,9	−0,8	0,1	1,2	−0,7	−2,6	−0,4	−1,2	−2,1	−0,2
1976	−0,6	1,8	−0,8	2,3	−1,1	0,8	−0,8	1,5	−0,1	0,0	−0,2	−0,8	0,0	2,8	0,8
1977	−0,2	0,8	−0,2	0,8	−0,7	0,8	1,8	1,0	−0,1	0,2	0,8	0,1	0,3	3,5	1,2
1978	0,0	1,0	0,6	0,4	−1,7	0,4	2,5	0,5	−0,6	0,7	−1,5	0,6	0,3	5,0	1,0
1979	1,2	1,2	1,4	0,6	−1,7	0,1	3,2	1,5	0,5	1,3	2,1	1,5	0,9	3,2	1,0
1980	0,0	−0,5	1,1	1,3	−3,0	0,1	1,0	1,9	0,7	0,7	−0,3	−0,3	0,3	0,2	0,7
1971-80	0,3	0,7	−0,1	0,7	−0,6	0,4	0,9	1,0	1,2	0,2	−0,3	0,2	0,2	2,0	0,7
1981	−1,9	−1,3	−0,7	4,9	−2,6	−0,6	−0,9	0,0	0,3	−1,5	1,0	−3,9	−1,2	0,9	0,8
1982	−1,3	0,4	−1,7	−0,8	−0,9	0,2	0,2	0,6	−0,3	−2,5	−1,9	−1,8	−0,9	−1,6	0,8
1983	−1,0	0,3	−1,5	1,0	−0,5	−0,4	−2,1	0,6	−0,3	−1,9	−1,1	−1,2	−0,7	1,0	1,7
1984	−0,2	1,7	0,1	0,3	−2,4	−0,9	−1,9	0,4	0,6	−0,1	−1,5	1,9	0,0	4,9	0,5
1985	0,6	2,5	0,7	1,0	−1,3	−0,3	−2,4	0,9	1,4	1,5	0,0	1,6	0,6	2,4	0,7
1986	0,6	2,6	1,0	0,3	2,3	0,1	0,4	0,8	2,6	2,0	−2,7	0,4	0,7	1,7	0,9
1987	0,5	0,5	0,8	−0,1	5,4	0,2	0,6	0,6	2,7	1,4	0,5	2,2	1,3	2,9	1,0
1988	1,5	−0,6	0,6	1,6	2,9	0,6	0,4	1,4	3,1	1,3	0,1	3,2	1,5	2,9	1,6
1989	1,3	−0,5	1,4	0,4	4,1	1,2	1,1	0,2	3,7	1,6	1,8	2,8	1,6	2,0	1,9
1990	0,9	−0,2	2,4	0,7	2,7	1,2	1,6	0,9	2,4	1,7	0,7	2,0	1,6	0,9	1,6
1981-90	0,1	0,5	0,3	0,9	0,9	0,1	−0,3	0,6	1,6	0,3	−0,3	0,7	0,5	1,8	1,1
1991	0,2	0,0	1,6	−0,4	1,5	0,8	0,7	0,4	1,8	0,8	0,2	−0,4	0,6	0,7	1,3

Table 3

Unemployment rate

(Percentage of civilian labour force)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 9	EUR 12	USA	J
1960	3,1	1,6	1,0	:	:	0,7	4,7	7,2	0,1	0,7	:	1,6	2,5	:	5,4	1,7
1961	2,5	1,2	0,7	:	:	0,6	4,3	6,6	0,1	0,5	:	1,4	2,2	:	6,5	1,5
1962	2,0	1,1	0,6	:	:	0,7	4,2	5,5	0,1	0,5	:	1,9	2,0	:	5,4	1,3
1963	1,5	1,5	0,7	:	:	0,7	4,5	5,1	0,2	0,6	:	2,3	2,1	:	5,5	1,3
1964	1,5	0,9	0,6	:	1,4	0,6	4,3	5,2	0,0	0,5	:	1,6	1,9	:	5,0	1,1
1964	1,4	1,2	0,5	4,6	2,8	1,2	5,2	4,0	0,0	0,5	2,5	1,4	1,6	1,9	5,2	1,2
1965	1,6	0,9	0,4	4,8	2,6	1,5	5,0	5,0	0,0	0,6	2,5	1,2	1,8	2,0	4,5	1,2
1966	1,7	1,1	0,5	5,0	2,2	1,6	5,1	5,4	0,0	0,8	2,5	1,1	1,9	2,0	3,8	1,3
1967	2,4	1,0	1,4	5,4	3,0	2,1	5,5	5,0	0,0	1,7	2,5	2,0	2,5	2,6	3,8	1,3
1968	2,8	1,0	1,0	5,6	3,0	2,6	5,8	5,3	0,0	1,5	2,6	2,1	2,6	2,7	3,6	1,2
1969	2,2	0,9	0,6	5,2	2,5	2,3	5,5	5,3	0,0	1,1	2,6	2,0	2,3	2,4	3,5	1,1
1970	1,8	0,6	0,5	4,2	2,6	2,4	6,3	5,1	0,0	1,0	2,6	2,2	2,3	2,4	4,9	1,2
1964-70	2,0	1,0	0,7	5,0	2,7	2,0	5,5	5,0	0,0	1,0	2,5	1,7	2,1	2,3	4,2	1,2
1971	1,7	0,9	0,6	3,1	3,4	2,7	6,0	5,1	0,0	1,3	2,5	2,7	2,5	2,6	6,0	1,2
1972	2,2	0,8	0,8	2,1	2,9	2,8	6,7	6,0	0,0	2,3	2,5	3,1	2,9	2,8	5,6	1,4
1973	2,2	0,7	0,8	2,0	2,6	2,7	6,2	5,9	0,0	2,4	2,6	2,2	2,7	2,6	4,9	1,3
1974	2,3	2,8	1,8	2,1	3,1	2,8	5,8	5,0	0,0	2,9	1,7	2,0	2,8	2,8	5,6	1,4
1975	4,2	3,9	3,3	2,3	4,5	4,0	7,9	5,5	0,0	5,5	4,4	3,2	4,0	4,0	8,5	1,9
1976	5,5	5,1	3,3	1,9	4,9	4,4	9,8	6,2	0,0	5,8	6,2	4,8	4,7	4,7	7,7	2,0
1977	6,3	5,9	3,2	1,7	5,3	4,9	9,7	6,7	0,0	5,6	7,3	5,1	5,0	5,1	7,1	2,0
1978	6,8	6,7	3,1	1,8	7,1	5,1	9,0	6,7	1,2	5,6	7,9	5,0	5,1	5,3	6,1	2,3
1979	7,0	4,8	2,7	1,9	8,8	5,8	7,8	7,2	2,4	5,7	7,9	4,6	5,0	5,4	5,8	2,2
1980	7,4	5,2	2,7	2,7	11,6	6,2	8,0	7,1	2,4	6,4	7,6	5,6	5,4	6,0	7,1	2,0
1971-80	4,6	3,7	2,2	2,2	5,4	4,1	7,7	6,1	0,6	4,4	5,1	3,8	4,0	4,1	6,4	1,8
1981	9,5	8,3	3,9	4,0	14,4	7,3	10,8	7,4	2,4	8,9	7,3	8,9	7,1	7,7	7,6	2,2
1982	11,2	8,9	5,6	5,8	16,3	8,0	12,5	8,0	2,4	11,9	7,2	10,3	8,3	9,0	9,7	2,4
1983	12,5	9,3	6,9	7,8	17,8	8,2	15,2	8,8	3,5	12,4	8,0	11,1	9,1	9,9	9,6	2,7
1984	12,5	8,7	7,1	8,1	20,6	9,8	16,8	9,5	3,1	12,3	8,7	11,3	9,7	10,7	7,5	2,7
1985	11,6	7,2	7,1	7,8	21,8	10,2	18,2	9,4	2,9	10,5	8,8	11,4	9,7	10,8	7,2	2,6
1986	11,6	5,6	6,3	7,4	21,0	10,3	18,2	10,4	2,6	10,2	8,2	11,4	9,7	10,7	7,0	2,8
1987	11,4	5,7	6,2	7,4	20,4	10,4	18,1	10,2	2,6	10,0	6,8	10,4	9,4	10,3	6,2	2,8
1988	10,0	6,5	6,1	7,7	19,3	9,9	17,6	10,8	2,1	9,3	5,6	8,5	8,8	9,7	5,5	2,5
1989	8,5	7,7	5,5	7,8	17,0	9,4	17,0	10,8	1,8	8,7	5,0	7,0	8,1	8,9	5,3	2,3
1990	7,8	8,2	6,0	8,1	15,8	8,9	16,5	10,2	1,7	7,4	4,4	6,4	7,8	8,5	5,4	2,2
1981-90	10,7	7,6	6,1	7,2	18,4	9,2	16,1	9,6	2,5	10,2	7,0	9,7	8,8	9,6	7,1	2,5
1991	7,7	8,8	6,3	9,2	15,6	8,7	16,5	10,3	1,6	7,2	4,9	7,3	8,0	8,7	6,1	2,2

Table 4

Gross domestic product at current market prices

(National currency; Mrd)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	557,0	41,15	302,7	105,2	698	300,7	0,631	24 792	26,11	44,42	71,4	25,86	268,2	513,6	16 011
1961	592,4	45,66	331,7	118,6	795	328,0	0,680	27 573	26,12	46,90	76,9	27,42	292,1	532,0	19 336
1962	633,7	51,45	360,8	126,0	919	366,2	0,736	30 979	27,50	50,49	81,8	28,82	319,3	572,4	21 943
1963	681,3	54,77	382,4	140,7	1 085	410,6	0,791	35 484	29,34	54,77	88,7	30,55	350,0	604,1	25 114
1964	762,5	62,60	420,2	158,0	1 225	455,4	0,901	38 843	33,50	64,45	96,3	33,39	387,3	646,7	29 541
1965	830,0	70,32	459,2	179,8	1 425	490,3	0,959	41 796	35,10	71,98	107,5	35,96	422,6	701,7	32 866
1966	892,1	77,18	488,2	200,0	1 648	530,7	1,010	45 286	36,88	78,38	117,8	38,28	456,7	768,6	38 170
1967	955,4	84,81	494,4	216,1	1 852	573,3	1,104	49 884	37,12	85,99	131,6	40,30	487,2	812,7	44 730
1968	1 022,3	94,36	533,3	234,5	2 075	623,1	1,245	54 071	40,61	95,35	145,7	43,67	530,2	888,1	52 976
1969	1 134,2	107,32	597,0	266,5	2 360	710,5	1,438	59 692	47,02	107,99	159,8	47,00	590,5	958,8	62 228
1970	1 262,1	118,63	675,3	298,9	2 624	793,5	1,620	67 178	55,04	121,18	177,8	51,61	659,8	1 009,2	73 345
1971	1 382,0	131,12	750,6	330,3	2 962	884,2	1,853	72 994	56,05	136,53	199,1	57,57	732,5	1 095,4	80 701
1972	1 545,4	150,73	823,7	377,7	3 476	987,9	2,238	79 810	63,21	154,26	231,8	64,45	818,0	1 203,7	92 395
1973	1 755,0	172,86	917,3	484,2	4 190	1 129,8	2,701	96 738	76,82	176,04	282,2	74,01	947,2	1 345,0	112 497
1974	2 056,8	193,63	984,6	564,2	5 131	1 303,0	2,988	122 190	93,64	199,78	339,3	83,61	1 094,1	1 456,4	134 244
1975	2 271,1	216,26	1 026,9	672,2	6 023	1 467,9	3,792	138 632	86,74	219,96	377,2	105,47	1 245,8	1 583,9	148 328
1976	2 578,9	251,22	1 121,7	824,9	7 248	1 700,6	4,653	174 869	99,81	251,93	468,9	124,73	1 459,6	1 764,8	166 573
1977	2 785,3	279,31	1 197,8	963,7	9 195	1 917,8	5,703	214 398	102,56	274,93	625,8	145,37	1 681,4	1 967,5	185 622
1978	2 987,5	311,38	1 285,3	1 161,4	11 251	2 182,6	6,757	253 536	112,22	297,01	787,3	167,74	1 916,7	2 218,9	204 405
1979	3 188,8	346,89	1 392,3	1 428,8	13 158	2 481,1	7,917	309 834	122,15	315,96	993,3	197,44	2 199,8	2 464,8	221 546
1980	3 451,2	373,79	1 478,9	1 710,9	15 209	2 808,3	9,361	387 669	132,93	336,74	1 256,1	230,73	2 517,2	2 688,5	240 177
1981	3 575,2	407,79	1 540,9	2 050,1	16 989	3 164,8	11,359	464 030	141,69	352,85	1 501,1	253,64	2 795,4	3 009,5	257 364
1982	3 887,8	464,47	1 597,9	2 574,7	19 567	3 626,0	13,382	545 124	158,79	368,86	1 850,4	277,61	3 117,3	3 121,4	269 628
1983	4 122,9	512,54	1 674,8	3 079,2	22 235	4 006,5	14,779	633 441	174,68	381,02	2 301,7	302,70	3 435,7	3 353,5	280 256
1984	4 431,4	565,28	1 755,8	3 805,7	25 111	4 361,9	16,430	727 225	193,67	400,25	2 815,7	323,43	3 757,0	3 722,3	297 947
1985	4 737,4	615,07	1 830,5	4 617,7	27 889	4 700,1	17,664	812 751	205,26	418,18	3 523,9	354,16	4 082,5	3 967,5	316 303
1986	4 984,0	663,64	1 931,4	5 480,3	31 948	5 052,5	18,685	896 321	217,92	428,61	4 420,4	379,41	4 420,3	4 181,7	330 025
1987	5 185,3	692,33	2 006,4	6 255,6	35 715	5 301,3	19,988	979 677	226,21	431,22	5 174,7	416,56	4 734,7	4 463,2	343 238
1988	5 516,7	723,57	2 110,6	7 446,2	39 618	5 658,6	21,326	1 078 863	241,27	451,23	6 002,8	462,56	5 133,3	4 817,8	364 385
1989	5 997,9	766,00	2 235,3	8 821,4	44 419	6 061,9	23,728	1 183 528	265,75	476,29	7 116,1	505,60	5 573,0	5 139,4	387 973
1990	6 410,4	795,98	2 417,4	10 790,2	49 385	6 426,4	25,338	1 300 178	282,71	507,09	8 445,7	552,79	6 061,6	5 414,9	417 792
1991	6 838,8	822,01	2 604,0	12 827,6	54 079	6 816,4	26,788	1 418 614	302,01	532,06	9 809,9	594,10	6 537,8	5 729,5	444 439

Table 5

Gross domestic product at current market prices

(ECU; Mrd)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	10,5	5,6	68,2	3,3	11,0	57,7	1,7	37,6	0,5	11,1	2,4	68,5	278,1	486,2	42,1
1961	11,1	6,2	77,0	3,7	12,4	62,2	1,8	41,3	0,5	12,0	2,5	71,9	302,7	498,4	50,3
1962	11,8	7,0	84,3	3,9	14,3	69,3	1,9	46,3	0,5	13,0	2,7	75,4	330,6	535,1	57,0
1963	12,7	7,4	89,4	4,4	16,9	77,7	2,1	53,1	0,5	14,1	2,9	80,0	361,2	564,7	65,2
1964	14,3	8,5	98,2	4,9	19,1	86,2	2,4	58,1	0,6	16,6	3,1	87,4	399,4	604,5	76,7
1965	15,5	9,5	107,3	5,6	22,2	92,8	2,5	62,5	0,7	18,6	3,5	94,1	434,9	655,9	85,3
1966	16,7	10,4	114,1	6,2	25,7	100,5	2,6	67,7	0,7	20,2	3,8	100,2	469,0	718,5	99,1
1967	17,9	11,4	116,1	6,8	28,4	109,1	2,8	75,0	0,7	22,3	4,3	104,0	498,8	763,3	116,7
1968	19,9	12,2	129,6	7,6	28,8	122,7	2,9	84,1	0,8	25,6	4,9	101,9	540,9	863,1	143,0
1969	22,2	14,0	148,3	8,7	33,0	134,3	3,4	93,4	0,9	29,2	5,4	110,4	603,1	938,0	169,1
1970	24,7	15,5	180,5	9,7	36,8	139,8	3,8	105,1	1,1	32,7	6,1	121,2	676,9	987,3	199,3
1971	27,2	16,9	205,9	10,5	40,8	153,2	4,3	112,7	1,1	37,3	6,7	134,3	751,0	1 045,5	221,8
1972	31,3	19,4	230,3	11,2	48,3	174,6	5,0	122,0	1,3	42,9	7,6	143,6	837,3	1 073,0	272,0
1973	36,7	23,3	280,0	13,1	58,4	206,6	5,4	135,0	1,6	51,3	9,3	147,3	968,1	1 091,9	337,7
1974	44,8	26,9	319,0	15,8	74,5	229,6	5,8	154,3	2,0	63,0	11,3	162,8	1 109,9	1 211,5	395,2
1975	49,8	30,4	336,8	16,8	85,7	276,0	6,8	171,2	1,9	70,2	12,0	188,3	1 245,8	1 276,6	411,2
1976	59,7	37,2	398,4	20,2	97,0	318,2	7,5	188,0	2,3	85,3	13,9	200,7	1 428,3	1 578,5	502,9
1977	68,1	40,7	452,3	22,9	105,9	342,1	8,7	213,0	2,5	98,2	14,3	222,4	1 591,1	1 724,2	607,0
1978	74,6	44,4	502,8	24,8	115,5	380,3	10,2	234,7	2,8	107,8	14,1	252,7	1 764,6	1 741,5	765,3
1979	79,4	48,1	554,5	28,1	143,1	425,6	11,8	272,2	3,0	114,9	14,8	305,5	2 001,1	1 798,5	737,4
1980	85,0	47,8	585,9	28,8	152,5	478,5	13,8	326,0	3,3	122,0	18,1	385,5	2 247,2	1 930,9	762,4
1981	86,6	51,5	613,0	33,3	165,5	524,0	16,4	367,4	3,4	127,1	21,9	458,6	2 468,6	2 695,6	1 048,8
1982	87,0	56,9	672,5	39,4	181,9	563,8	19,4	411,8	3,6	141,1	23,7	495,3	2 696,5	3 186,0	1 107,1
1983	90,7	63,0	737,6	39,4	174,4	591,7	20,7	469,2	3,8	150,2	23,3	515,7	2 879,9	3 767,0	1 326,0
1984	97,5	69,4	784,5	43,0	198,4	634,8	22,6	526,4	4,3	158,6	24,3	547,6	3 111,5	4 717,6	1 592,5
1985	105,5	76,7	822,2	43,7	216,0	691,7	24,7	561,3	4,6	166,5	27,1	601,3	3 341,2	5 199,2	1 751,8
1986	113,8	83,6	907,5	39,9	232,4	743,0	25,5	613,1	5,0	178,5	30,1	565,0	3 537,4	4 249,0	2 000,2
1987	120,5	87,8	968,5	40,0	251,2	765,1	25,8	655,3	5,3	184,7	31,8	591,2	3 727,3	3 866,1	2 060,3
1988	127,0	91,0	1 017,4	44,4	287,9	804,2	27,5	701,8	5,6	193,3	35,3	696,2	4 031,6	4 074,3	2 405,3
1989	138,3	95,2	1 079,8	49,3	340,6	863,0	30,5	783,5	6,1	204,0	41,0	750,9	4 382,3	4 664,7	2 553,5
1990	150,7	101,1	1 177,9	53,8	382,5	927,4	32,9	855,5	6,6	218,6	46,5	774,3	4 728,1	4 311,3	2 264,4
1991	160,3	103,8	1 271,7	58,2	421,1	980,0	34,7	926,7	7,1	227,7	52,4	849,8	5 093,4	4 322,9	2 456,6

Table 6

Gross domestic product at current market prices

(PPS EUR 12; Mrd)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	8,4	5,2	62,8	3,1	17,5	46,4	1,7	41,7	0,5	13,1	3,1	64,7	268,2	329,6	50,5
1961	9,1	5,7	67,8	3,5	20,2	50,6	1,8	46,6	0,5	13,9	3,4	68,9	292,1	349,5	58,4
1962	10,0	6,3	74,1	3,8	23,0	56,3	1,9	51,7	0,5	15,1	3,8	72,7	319,3	384,2	66,4
1963	10,9	6,7	79,9	4,3	26,3	62,2	2,1	57,2	0,5	16,4	4,2	79,2	350,0	420,2	75,5
1964	12,2	7,6	89,1	4,9	29,2	69,2	2,3	61,5	0,6	18,6	4,7	87,3	387,3	465,2	88,2
1965	13,2	8,3	98,3	5,6	32,5	75,8	2,5	66,5	0,7	20,5	5,3	93,6	422,6	515,3	97,6
1966	14,2	8,9	105,2	6,2	36,1	82,9	2,6	73,2	0,7	21,9	5,7	99,1	456,7	563,2	112,3
1967	15,2	9,5	108,4	6,7	38,9	89,5	2,8	80,9	0,7	23,7	6,4	104,5	487,2	593,9	128,6
1968	16,4	10,2	118,2	7,4	42,9	96,4	3,1	89,1	0,8	26,1	7,2	112,4	530,2	639,3	150,0
1969	18,3	11,4	133,5	8,6	49,1	108,3	3,5	99,3	0,9	29,2	7,8	120,5	590,5	691,0	177,3
1970	20,8	12,4	149,8	9,9	54,5	122,3	3,8	111,7	1,0	32,9	9,0	131,6	659,8	736,9	209,5
1971	23,2	13,7	165,9	11,4	61,4	137,9	4,3	122,1	1,1	36,9	10,3	144,4	732,5	818,7	235,1
1972	26,2	15,4	185,2	13,3	71,0	153,7	4,9	134,3	1,2	40,9	11,9	160,1	818,0	921,4	273,0
1973	30,3	17,4	211,5	15,6	83,4	176,7	5,6	156,9	1,5	46,7	14,5	187,1	947,2	1 053,1	321,2
1974	35,7	19,6	240,4	17,0	99,6	205,8	6,6	187,5	1,9	55,0	16,6	208,5	1 094,1	1 185,1	359,7
1975	40,4	22,4	272,1	20,7	115,2	235,9	8,0	210,0	1,8	63,2	18,3	237,9	1 245,8	1 349,3	424,5
1976	47,8	26,7	320,8	24,7	133,0	275,5	9,1	250,3	2,1	74,3	21,8	273,5	1 459,6	1 582,9	497,6
1977	53,7	30,3	369,5	28,6	153,3	319,1	11,0	289,5	2,3	85,1	25,8	313,1	1 681,4	1 849,6	586,1
1978	61,0	34,0	420,1	33,7	171,9	364,6	13,0	331,7	2,6	96,3	29,3	358,6	1 916,7	2 148,3	680,7
1979	69,1	39,0	485,2	38,7	190,3	417,2	14,8	389,9	3,0	109,4	34,3	408,8	2 199,8	2 429,7	794,1
1980	81,4	43,9	555,5	44,5	217,7	477,8	17,3	459,1	3,4	124,6	40,6	451,5	2 517,2	2 742,5	936,9
1981	89,3	48,2	617,0	49,4	240,7	536,1	19,8	513,9	3,8	137,3	45,7	494,2	2 795,4	3 109,8	1 078,9
1982	100,2	54,9	677,8	54,8	269,4	606,4	22,4	570,1	4,3	149,6	51,6	555,8	3 117,3	3 349,9	1 226,8
1983	109,1	61,1	746,3	59,7	297,5	662,9	24,2	625,3	4,7	164,5	55,9	624,3	3 435,7	3 776,4	1 372,7
1984	119,1	68,2	819,9	65,6	323,6	718,9	27,0	688,3	5,2	181,3	58,6	681,3	3 757,0	4 324,1	1 540,3
1985	127,4	75,4	886,6	71,7	351,1	776,1	29,3	749,1	5,7	197,2	63,9	748,9	4 082,5	4 758,2	1 710,4
1986	136,6	82,0	957,7	76,2	382,7	836,7	30,8	810,7	6,3	212,4	70,2	817,9	4 420,3	5 163,8	1 849,5
1987	145,0	84,8	1 015,7	79,3	420,7	887,2	33,7	869,4	6,5	223,5	76,9	892,1	4 734,7	5 575,4	2 007,5
1988	157,9	88,2	1 100,4	86,2	461,3	957,8	36,5	944,0	7,1	239,9	83,5	970,5	5 133,3	6 094,5	2 217,2
1989	172,6	93,9	1 193,9	92,9	508,3	1 042,9	40,6	1 023,3	7,9	262,2	92,5	1 041,9	5 573,0	6 562,8	2 443,7
1990	188,9	100,1	1 316,9	99,4	556,4	1 129,9	44,9	1 109,5	8,6	286,8	102,0	1 118,3	6 061,6	7 014,2	2 735,8
1991	203,7	106,6	1 433,4	106,0	602,1	1 222,6	48,5	1 197,7	9,3	308,8	111,0	1 188,1	6 537,8	7 425,4	3 019,7

Table 7

Gross domestic product at current market prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	6,4	11,0	9,6	12,8	13,9	9,1	7,7	11,2	0,0	5,6	7,6	6,0	8,9	3,6	20,8
1962	7,0	12,7	8,8	6,2	15,6	11,7	8,3	12,4	5,3	7,7	6,4	5,1	9,3	7,6	13,5
1963	7,5	6,4	6,0	11,7	18,0	12,1	7,5	14,5	6,7	8,5	8,5	6,0	9,6	5,5	14,5
1964	11,9	14,3	9,9	12,3	12,9	10,9	13,8	9,5	14,2	17,7	8,5	9,3	10,7	7,0	17,6
1965	8,8	12,3	9,3	13,8	16,4	7,6	6,5	7,6	4,8	11,7	11,7	7,7	9,1	8,5	11,3
1966	7,5	9,8	6,3	11,2	15,7	8,3	5,4	8,4	5,1	8,9	9,6	6,5	8,1	9,5	16,1
1967	7,1	9,9	1,3	8,1	12,3	8,0	9,2	10,2	0,6	9,7	11,8	5,3	6,7	5,7	17,2
1968	7,0	11,3	7,9	8,5	12,1	8,7	12,8	8,4	9,4	10,9	10,7	8,4	8,8	9,3	18,4
1969	10,9	13,7	11,9	13,6	13,7	14,0	15,5	10,4	15,8	13,3	9,7	7,6	11,4	8,0	17,5
1970	11,3	10,5	13,1	12,2	11,2	11,7	12,6	12,5	17,1	12,2	11,3	9,8	11,7	5,3	17,9
1961-70	8,5	11,2	8,4	11,0	14,2	10,2	9,9	10,5	7,7	10,6	9,5	7,2	9,4	7,0	16,4
1971	9,5	10,5	11,1	10,5	12,9	11,4	14,4	8,7	1,8	12,7	12,0	11,6	11,0	8,5	10,0
1972	11,8	15,0	9,8	14,4	17,3	11,7	20,7	9,3	12,8	13,0	16,4	11,9	11,7	9,9	14,5
1973	13,6	14,7	11,4	28,2	20,6	14,4	20,7	21,2	21,5	14,1	21,7	14,8	15,8	11,7	21,8
1974	17,2	12,0	7,3	16,5	22,5	15,3	10,6	26,3	21,9	13,5	20,2	13,0	15,5	8,3	19,3
1975	10,4	11,7	4,3	19,1	17,4	12,7	26,9	13,5	−7,4	10,1	11,2	26,1	13,9	8,8	10,5
1976	13,6	16,2	9,2	22,7	20,3	15,9	22,7	26,1	15,1	14,5	24,3	18,3	17,2	11,4	12,3
1977	8,0	11,2	6,8	16,8	26,9	12,8	22,6	22,6	2,8	9,1	33,5	16,6	15,2	11,5	11,4
1978	7,3	11,5	7,3	20,5	22,4	13,8	18,5	18,3	9,4	8,0	25,8	15,4	14,0	12,8	10,1
1979	6,7	11,4	8,3	23,0	17,0	13,7	17,2	22,2	8,8	6,4	26,2	17,7	14,8	11,1	8,4
1980	8,2	7,8	6,2	19,7	15,6	13,2	18,2	25,1	8,8	6,6	26,5	16,9	14,4	9,1	8,4
1971-80	10,6	12,2	8,2	19,1	19,2	13,5	19,2	19,2	9,2	10,8	21,6	16,2	14,3	10,3	12,6
1981	3,6	9,1	4,2	19,8	11,7	12,7	21,3	19,7	6,6	4,8	19,5	9,9	11,1	11,9	7,2
1982	8,7	13,9	3,7	25,6	15,2	14,6	17,8	17,5	12,1	4,5	23,3	9,4	11,5	3,7	4,8
1983	6,0	10,4	4,8	19,6	13,6	10,5	10,4	16,2	10,0	3,3	24,4	9,0	10,2	7,4	3,9
1984	7,5	10,3	4,8	23,6	12,9	8,9	11,2	14,8	10,9	5,0	22,3	6,9	9,4	11,0	6,3
1985	6,9	8,8	4,3	21,3	11,1	7,8	7,5	11,8	6,0	4,5	25,2	9,5	8,7	6,6	6,2
1986	5,2	7,9	5,5	18,7	14,6	7,5	5,8	10,3	6,2	2,5	25,4	7,1	8,3	5,4	4,3
1987	4,0	4,3	3,9	14,1	11,8	4,9	7,0	9,3	3,8	0,6	17,1	9,8	7,1	6,7	4,0
1988	6,4	4,5	5,2	19,0	10,9	6,7	6,7	10,1	6,7	4,6	16,0	11,0	8,4	7,9	6,2
1989	8,7	5,9	5,9	18,5	12,1	7,1	11,3	9,7	10,1	5,6	18,5	9,3	8,6	6,7	6.5
1990	6,9	3,9	8,1	22,3	11,2	6,0	6,8	9,9	6,4	6,5	18,7	9,3	8,8	5,4	7,7
1981-90	6,4	7,9	5,0	20,2	12,5	8,6	10,5	12,9	7,8	4,2	21,0	9,1	9,2	7,3	5,7
1991	6,7	3,3	7,7	18,9	9,5	6,1	5,7	9,1	6,8	4,9	16,2	7,5	7,9	5,8	6,4

Table 8

Gross domestic product at current market prices per head of population

(ECU; EUR 12 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	115,8	123,7	123,7	40,0	36,2	126,8	59,3	75,2	158,2	96,8	28,0	131,5	100,0	270,4	44,9
1961	112,6	125,1	127,7	41,1	37,4	125,6	58,9	76,2	143,8	96,3	27,7	126,9	100,0	252,7	49,4
1962	110,7	129,1	127,8	40,0	39,6	127,1	58,6	78,5	138,1	95,2	27,2	121,9	100,0	247,1	51,2
1963	109,1	126,0	123,9	41,2	42,8	129,4	57,8	82,5	134,7	94,1	27,1	118,7	100,0	237,5	53,6
1964	110,4	130,3	123,0	42,0	43,7	129,6	59,8	81,8	138,8	99,7	26,7	117,5	100,0	228,8	57,0
1965	110,3	134,6	123,2	44,1	46,6	128,0	58,7	80,9	133,2	101,7	27,6	116,5	100,0	227,1	58,1
1966	110,1	136,9	121,3	45,5	49,8	128,5	57,7	81,4	129,8	102,2	28,3	115,3	100,0	229,8	62,5
1967	111,4	140,5	116,5	46,2	51,5	130,9	58,4	84,7	123,8	105,4	30,1	112,6	100,0	228,6	68,9
1968	114,0	138,7	120,2	48,0	47,8	135,6	55,0	87,6	129,7	111,0	32,0	101,8	100,0	237,4	77,4
1969	114,7	142,7	123,0	49,4	49,0	133,1	57,5	87,4	135,9	113,0	32,0	99,2	100,0	230,7	81,6
1970	114,4	140,4	133,1	49,6	48,5	123,1	57,7	87,6	142,0	112,4	32,1	97,4	100,0	215,3	85,1
1971	114,1	138,4	136,4	48,3	48,5	121,4	59,0	84,8	130,7	114,9	32,5	97,6	100,0	204,5	85,2
1972	118,2	142,1	136,9	46,3	51,3	123,9	60,4	82,2	135,5	117,9	33,3	93,8	100,0	187,4	93,1
1973	120,3	148,1	144,1	46,8	53,5	126,5	55,8	78,6	146,3	121,9	35,5	83,6	100,0	164,4	99,1
1974	128,2	149,2	143,7	49,2	59,3	122,4	52,1	78,3	160,6	130,0	37,4	80,9	100,0	158,4	100,3
1975	127,2	150,1	136,2	46,5	60,4	130,9	53,3	77,2	132,6	128,4	34,3	83,8	100,0	147,8	92,2
1976	133,3	160,3	141,7	48,2	59,1	131,6	50,7	73,9	140,3	135,5	34,1	78,1	100,0	158,5	97,6
1977	136,8	157,9	145,3	48,4	57,4	126,9	52,6	75,1	136,9	139,7	31,3	78,0	100,0	154,4	105,1
1978	135,4	155,1	146,3	47,0	56,0	127,1	54,8	74,6	138,1	138,1	27,6	80,2	100,0	139,6	118,8
1979	127,5	148,6	142,7	46,6	60,9	125,4	55,5	76,4	132,3	129,4	25,5	85,8	100,0	126,2	100,5
1980	121,9	131,7	134,4	42,2	57,6	125,4	57,5	81,6	126,9	121,8	27,5	96,7	100,0	119,7	92,2
1981	113,4	129,7	128,3	44,1	56,6	124,8	61,6	83,9	121,2	115,2	30,2	105,0	100,0	151,2	115,1
1982	104,5	131,8	129,2	47,7	56,8	122,6	66,0	86,1	115,1	116,8	29,8	104,2	100,0	162,3	110,7
1983	102,3	137,0	133,5	44,5	50,8	120,2	65,5	91,8	116,9	116,2	27,3	101,7	100,0	178,3	123,6
1984	102,0	139,9	132,2	44,8	53,3	119,1	66,1	95,2	120,0	113,3	26,2	100,0	100,0	205,1	136,8
1985	102,9	144,3	129,6	42,3	54,0	120,6	67,1	94,5	119,9	110,6	27,0	102,2	100,0	209,0	139,6
1986	105,1	148,8	135,4	36,5	54,8	122,2	65,5	97,6	123,1	111,6	28,2	90,7	100,0	160,2	150,0
1987	105,8	148,5	137,4	34,7	56,1	119,2	63,1	99,1	123,0	109,2	28,3	90,0	100,0	137,4	146,3
1988	103,4	142,7	133,2	35,7	59,4	115,8	62,5	98,3	119,7	105,3	29,0	98,1	100,0	133,0	157,8
1989	103,5	137,4	129,4	36,5	64,7	114,3	64,2	101,2	121,7	102,1	31,1	97,5	100,0	139,3	154,1
1990	105,2	136,0	128,9	37,0	67,6	114,2	64,7	102,8	123,1	101,4	32,9	93,6	100,0	118,9	126,9
1991	104,4	130,2	128,1	37,3	69,2	112,1	63,5	103,7	122,1	98,1	34,5	95,5	100,0	110,2	127,9

Table 9

Gross domestic product at current market prices per head of population

(PPS EUR 12; EUR 12 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	95,4	118,4	118,0	38,7	59,6	105,9	60,8	86,6	158,4	118,7	38,8	128,7	100,0	190,0	55,9
1961	95,5	119,7	116,5	40,8	63,1	105,7	61,4	89,1	150,6	115,5	39,0	126,1	100,0	183,7	59,4
1962	96,5	121,1	116,3	39,7	66,0	106,9	60,9	90,7	141,6	114,2	40,2	121,7	100,0	183,7	61,8
1963	96,6	116,8	114,4	42,1	68,7	106,8	61,2	91,8	138,3	112,8	40,8	121,3	100,0	182,4	64,1
1964	97,6	120,7	115,2	43,3	68,9	107,2	60,2	89,3	141,0	114,9	41,6	121,1	100,0	181,6	67,6
1965	96,8	121,0	116,1	45,5	70,0	107,5	59,1	88,5	136,4	115,3	43,2	119,2	100,0	183,6	68,4
1966	96,1	119,6	114,9	46,5	71,9	108,8	57,7	90,3	132,9	113,3	43,6	117,1	100,0	185,0	72,7
1967	96,6	119,3	111,4	47,1	72,1	109,9	59,0	93,6	132,1	114,8	45,9	115,8	100,0	182,1	77,7
1968	95,8	117,8	111,9	47,9	72,9	108,7	60,8	94,7	132,5	115,5	47,8	114,6	100,0	179,4	82,8
1969	96,8	118,4	113,1	49,8	74,4	109,6	60,8	94,8	140,5	115,4	47,0	110,7	100,0	173,6	87,4
1970	99,0	115,3	113,3	51,6	73,9	110,5	59,6	95,5	141,5	115,9	48,9	108,5	100,0	164,9	91,8
1971	100,0	114,8	112,7	53,8	74,7	112,0	59,6	94,1	131,1	116,6	51,2	107,5	100,0	164,2	92,6
1972	101,2	116,0	112,7	56,2	77,3	111,6	60,4	92,7	133,9	115,1	53,6	107,1	100,0	164,7	95,6
1973	101,3	113,3	111,2	56,9	78,1	110,6	59,0	93,4	142,3	113,2	56,4	108,5	100,0	162,0	96,4
1974	103,6	110,1	109,9	53,8	80,4	111,2	59,6	96,5	153,0	115,2	55,5	105,2	100,0	157,2	92,6
1975	103,3	110,6	110,0	57,4	81,1	111,9	62,8	94,7	126,8	115,7	52,3	105,8	100,0	156,2	95,2
1976	104,3	112,6	111,7	57,7	79,3	111,5	60,1	96,3	125,8	115,6	52,3	104,2	100,0	155,5	94,5
1977	102,0	111,2	112,3	57,3	78,7	112,1	62,5	96,6	119,3	114,6	53,2	104,0	100,0	156,7	96,1
1978	101,9	109,4	112,5	58,7	76,8	112,2	64,4	97,1	120,2	113,5	52,9	104,9	100,0	158,6	97,3
1979	100,9	109,6	113,6	58,3	73,7	111,8	63,3	99,5	119,5	112,0	53,7	104,4	100,0	155,1	98,5
1980	104,2	108,0	113,8	58,2	73,4	111,8	64,1	102,6	119,3	111,0	55,1	101,1	100,0	151,8	101,1
1981	103,3	107,3	114,0	57,8	72,7	112,8	65,5	103,7	117,5	109,8	55,7	99,9	100,0	154,0	104,5
1982	104,2	110,0	112,7	57,4	72,7	114,0	65,9	103,1	119,4	107,1	56,1	101,1	100,0	147,6	106,1
1983	103,2	111,3	113,2	56,5	72,6	112,8	64,4	102,5	118,9	106,7	54,8	103,2	100,0	149,8	107,2
1984	103,2	113,8	114,4	56,5	72,1	111,7	65,4	103,1	120,9	107,3	52,2	103,0	100,0	155,7	109,5
1985	101,7	116,0	114,4	56,8	71,8	110,8	65,2	103,2	122,6	107,2	52,1	104,1	100,0	156,6	111,5
1986	101,0	116,7	114,3	55,8	72,2	110,1	63,5	103,2	124,2	106,3	52,7	105,1	100,0	155,8	111,0
1987	100,2	112,8	113,5	54,2	73,9	108,8	64,9	103,5	120,6	104,0	53,8	106,9	100,0	156,0	112,2
1988	101,0	108,6	113,2	54,3	74,7	108,3	65,2	103,8	121,0	102,7	54,0	107,4	100,0	156,3	114,2
1989	101,6	106,6	112,5	54,1	75,9	108,7	67,2	103,9	124,1	103,2	55,2	106,4	100,0	154,2	116,0
1990	102,8	105,1	112,4	53,4	76,7	108,5	68,8	104,0	124,2	103,8	56,2	105,4	100,0	150,9	119,6
1991	103,3	104,2	112,5	52,8	77,1	108,9	69,2	104,4	125,4	103,6	56,9	104,0	100,0	147,4	122,5

Table 10

Gross domestic product at constant market prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	5,0	6,4	4,6	11,1	11,8	5,5	5,0	8,2	4,4	3,1	5,2	3,3	5,5	2,8	12,0
1962	5,2	5,7	4,7	1,5	9,3	6,7	3,2	6,2	1,4	4,0	6,6	1,0	4,7	5,3	8,9
1963	4,4	0,6	2,8	10,1	8,8	5,3	4,7	5,6	2,6	3,6	5,9	3,8	4,5	4,3	8,5
1964	7,0	9,3	6,7	8,3	6,2	6,3	3,8	2,8	7,5	8,3	7,3	5,4	5,8	5,9	11,7
1965	3,6	4,6	5,5	9,4	6,3	4,8	1,9	3,3	1,7	5,2	7,6	2,5	4,4	5,9	5,8
1966	3,2	2,7	2,9	6,1	7,1	5,2	0,9	6,0	1,7	2,7	3,9	1,9	3,9	5,1	10,6
1967	3,9	3,4	−0,1	5,5	4,3	4,7	5,8	7,2	1,6	5,3	8,1	2,3	3,5	2,3	11,1
1968	4,2	4,0	5,6	6,7	6,8	4,3	8,2	6,5	4,2	6,4	9,2	4,1	5,3	4,2	12,9
1969	6,6	6,3	7,5	9,9	8,9	7,0	5,9	6,1	8,9	6,4	3,4	2,1	6,0	2,9	12,5
1970	6,4	2,0	5,1	8,0	4,1	5,7	2,7	5,3	2,2	5,7	7,6	2,3	4,7	−0,1	10,7
1961-70	4,9	4,5	4,5	7,6	7,3	5,5	4,2	5,7	3,6	5,1	6,4	2,9	4,8	3,8	10,5
1971	3,7	2,7	2,9	7,1	4,6	4,8	3,5	1,6	2,7	4,2	6,6	2,0	3,2	3,2	4,3
1972	5,3	5,3	4,2	8,9	8,0	4,1	6,5	2,7	6,6	3,3	8,0	3,5	4,3	5,1	8,4
1973	5,9	3,6	4,7	7,3	7,7	5,4	4,7	7,1	8,3	4,7	11,2	7,2	6,1	4,8	7,9
1974	4,1	−0,9	0,3	−3,6	5,3	2,7	4,3	5,4	4,2	4,0	1,1	−1,7	1,9	−0,7	−1,2
1975	−1,5	−0,7	−1,6	6,1	0,5	−0,3	5,7	−2,7	−6,6	−0,1	−4,3	−0,8	−1,0	−1,0	2,6
1976	5,6	6,5	5,4	6,4	3,3	4,4	1,4	6,6	2,5	5,1	6,9	2,8	4,7	4,9	4,8
1977	0,5	1,6	3,0	3,4	3,0	3,5	8,2	3,4	1,6	2,3	5,5	2,3	3,0	4,4	5,3
1978	2,7	1,5	2,9	6,7	1,4	3,4	7,2	3,7	4,1	2,5	2,8	3,6	3,2	5,1	5,1
1979	2,1	3,5	4,2	3,7	−0,1	3,2	3,1	6,0	2,3	2,4	5,6	2,8	3,5	2,0	5,2
1980	4,3	−0,4	1,4	1,8	1,2	1,4	3,1	4,2	0,8	0,9	4,6	−2,2	1,3	−0,1	4,4
1971-80	3,2	2,2	2,7	4,7	3,5	3,2	4,7	3,8	2,6	2,9	4,7	1,9	3,0	2,7	4,6
1981	−1,0	−0,9	0,2	0,1	−0,2	1,2	3,3	1,0	−0,6	−0,6	1,6	−1,3	0,2	2,3	3,9
1982	1,5	3,0	−0,6	0,4	1,2	2,3	2,3	0,3	1,1	−1,4	2,1	1,7	0,9	−2,6	2,8
1983	0,4	2,5	1,5	0,4	1,8	0,8	−0,2	1,1	3,0	1,4	−0,2	3,6	1,6	3,9	3,2
1984	2,1	4,4	2,8	2,8	1,8	1,5	4,4	3,0	6,2	3,1	−1,9	2,1	2,3	7,2	5,0
1985	0,9	4,3	2,0	3,1	2,3	1,8	2,3	2,6	2,9	2,6	2,8	3,7	2,5	3,8	4,7
1986	1,6	3,1	2,3	0,8	3,3	2,1	−0,3	2,5	4,4	2,0	4,1	3,5	2,6	2,8	2,5
1987	1,9	−0,7	1,8	−0,1	5,5	1,8	4,9	3,0	2,8	1,1	5,3	4,7	2,9	3,7	4,2
1988	4,3	−0,4	3,7	4,0	5,0	3,3	3,7	3,9	4,3	2,7	3,9	4,1	3,8	4,6	5,7
1989	4,0	1,3	3,3	2,6	4,9	3,6	5,9	3,2	6,1	4,0	5,4	2,2	3,3	2,5	4,9
1990	3,5	0,9	4,3	1,2	3,5	2,5	4,5	2,6	3,2	3,4	4,2	1,5	2,9	1,1	6,0
1981-90	1,9	1,7	2,1	1,5	2,9	2,1	3,1	2,3	3,3	1,8	2,7	2,6	2,3	2,9	4,3
1991	2,2	0,9	3,1	1,0	2,5	2,5	2,3	2,3	2,9	2,0	3,2	0,7	2,2	0,3	4,2

Table 11

Industrial production

(Annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	6,1	5,1	6,2	:	:	5,6	8,7	10,9	2,9	3,8	:	0,3	−0,9	0,7	19,6
1962	5,8	8,9	8,4	:	10,1	5,1	7,0	9,6	−4,2	3,5	:	1,0	5,3	8,4	8,5
1963	7,4	1,2	3,6	10,7	12,0	7,0	5,9	8,8	0,9	5,0	:	3,3	5,9	5,9	11,2
1964	6,5	11,5	7,6	10,9	11,0	6,2	7,7	1,2	9,1	9,8	:	8,2	6,7	6,6	15,8
1965	2,5	6,6	5,2	8,4	14,4	1,8	4,3	4,6	0,9	4,3	:	2,8	4,6	10,0	3,8
1966	2,1	2,9	1,4	16,1	15,1	5,6	2,7	11,4	−3,2	4,2	:	1,5	5,3	8,8	13,5
1967	1,7	4,0	−2,5	4,3	6,1	2,3	8,3	8,2	−0,6	2,9	:	0,8	2,4	2,2	19,3
1968	5,6	7,4	9,7	7,8	7,3	3,7	10,3	6,5	6,0	9,1	:	7,6	6,3	5,6	15,4
1969	9,7	12,3	12,6	11,8	15,6	10,4	7,1	3,7	12,8	10,9	7,9	3,4	8,8	4,7	15,9
1970	3,1	2,6	6,1	10,6	10,2	5,2	4,4	6,4	0,5	8,7	6,4	0,5	5,3	−3,4	13,9
1961-70	5,0	6,2	5,7	:	:	5,3	6,6	7,1	2,4	6,2	:	2,9	4,9	4,9	13,6
1971	1,8	2,3	1,4	11,2	3,2	4,8	3,8	−0,5	−1,1	5,5	7,8	−0,5	1,9	1,4	2,5
1972	7,5	4,4	4,4	14,2	15,8	6,8	4,2	5,0	4,2	5,2	13,0	1,8	5,6	9,7	7,3
1973	6,0	3,3	7,1	15,2	15,2	6,7	9,8	9,7	11,9	7,6	11,9	8,9	8,7	8,2	15,0
1974	4,1	−0,7	−1,1	−1,4	9,3	2,3	3,0	3,9	3,5	4,7	2,8	−2,0	1,6	−1,5	−3,9
1975	−9,9	−6,0	−6,2	4,3	−6,6	−7,4	−6,0	−8,8	−21,8	−5,1	−4,9	−5,4	−6,7	−8,8	−11,1
1976	7,7	9,7	7,4	10,5	5,1	8,6	8,5	11,6	3,8	7,6	3,3	3,3	7,3	9,3	11,1
1977	0,6	0,8	2,1	1,6	5,2	2,0	8,0	0,0	0,5	0,4	13,1	5,2	2,6	8,0	4,1
1978	2,4	2,2	2,9	7,5	2,4	2,3	8,0	2,1	3,1	0,8	6,9	2,8	2,7	5,7	6,4
1979	4,5	3,7	4,9	5,9	0,7	4,1	7,7	6,7	3,4	3,2	7,2	3,9	4,5	3,8	7,3
1980	−1,3	0,2	0,5	0,9	1,3	1,0	−0,8	5,1	−3,4	−1,0	5,4	−6,6	0,0	−1,9	4,7
1971-80	2,2	1,9	2,3	6,9	5,0	3,0	4,5	3,3	0,0	2,8	6,5	1,0	2,7	3,2	4,1
1981	−2,7	0,0	−1,8	0,9	−1,0	−1,4	5,4	−2,2	−5,6	−1,2	0,6	−3,1	−1,9	1,9	0,9
1982	0,0	2,7	−3,0	1,1	−1,1	−0,3	−0,7	−3,1	0,9	−3,7	4,6	1,9	−1,2	−4,5	0,4
1983	1,9	3,2	0,8	0,0	2,7	−0,1	7,9	−2,4	5,4	2,9	1,6	3,7	1,1	3,7	3,3
1984	2,5	9,7	3,3	1,6	0,8	0,4	9,9	3,2	13,3	4,6	−0,1	0,2	2,0	9,3	9,3
1985	2,5	4,3	4,9	3,4	2,0	0,5	3,5	1,4	6,8	4,1	10,9	5,4	3,3	1,7	3,6
1986	0,8	6,5	2,2	−0,2	3,1	0,9	3,2	4,1	2,1	0,2	5,7	2,3	2,3	0,9	−0,2
1987	2,2	−3,5	0,3	−1,7	4,6	1,9	9,8	2,6	−0,9	1,0	2,5	3,3	2,0	5,0	3,5
1988	5,7	1,9	3,6	5,7	3,1	4,7	10,9	6,9	8,7	−0,3	6,1	3,8	4,2	5,5	9,2
1989	3,5	2,3	5,3	1,5	4,5	4,2	12,4	3,9	7,6	5,2	4,9	0,5	3,9	2,5	6,1
1990	4,4	−0,5	5,0	0,5	−1,4	1,5	9,0	2,2	1,9	4,9	6,2	−0,2	2,3	0,9	3,5
1981-90	2,1	2,6	2,0	1,3	1,7	1,2	7,1	1,6	3,9	1,7	4,2	1,7	1,8	2,6	3,9
1991	3,5	1,5	4,0	1,0	−0,5	2,0	6,0	2,0	2,4	3,0	3,4	−1,4	1,8	1,0	4,0

Table 12

Private consumption at current prices

(ECU; Mrd)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	7,3	3,5	40,5	2,7	7,5	34,4	1,3	22,4	0,3	6,5	1,7	45,2	173,3	310,7	24,7
1961	7,5	3,8	45,8	2,8	8,4	37,3	1,3	24,2	0,3	7,2	1,8	47,1	187,7	317,4	28,7
1962	7,9	4,3	50,2	3,0	9,6	41,6	1,4	27,3	0,3	7,9	1,9	49,8	205,1	336,3	32,9
1963	8,6	4,6	53,2	3,3	11,6	47,0	1,5	31,9	0,3	8,7	2,0	53,0	225,7	354,7	38,4
1964	9,1	5,1	57,4	3,6	12,9	51,3	1,7	34,6	0,4	9,9	2,1	56,6	244,8	380,6	44,2
1965	10,0	5,6	63,5	4,1	15,1	54,8	1,8	37,0	0,4	11,0	2,4	60,3	265,9	409,8	50,0
1966	10,7	6,2	68,1	4,5	17,3	59,2	1,9	40,8	0,4	12,0	2,6	63,8	287,6	443,7	57,5
1967	11,3	6,8	70,6	4,9	19,2	64,4	2,0	45,4	0,4	13,1	2,8	66,1	307,0	470,3	66,3
1968	12,7	7,2	77,8	5,5	19,3	72,8	2,1	50,2	0,5	14,8	3,4	64,3	330,4	534,3	78,2
1969	13,8	8,0	87,7	6,0	21,5	79,3	2,4	55,4	0,5	17,1	3,8	68,7	364,0	581,6	90,5
1970	14,8	8,9	105,3	6,7	23,9	80,9	2,6	62,6	0,5	19,1	4,0	74,8	404,3	622,0	104,2
1971	16,4	9,4	120,9	7,1	26,6	88,6	2,9	67,4	0,6	21,6	4,6	83,4	449,6	657,0	118,8
1972	18,8	10,3	136,7	7,4	31,3	100,8	3,2	73,3	0,7	24,6	4,9	90,2	502,1	672,6	146,9
1973	22,2	12,7	164,6	8,3	37,6	118,0	3,5	81,6	0,8	29,1	6,0	91,9	576,3	676,9	181,0
1974	26,8	14,6	190,2	10,7	48,5	132,1	4,0	93,0	0,9	35,8	8,2	103,6	668,5	758,4	214,7
1975	30,5	16,8	212,3	11,4	55,9	162,1	4,3	106,2	1,1	41,1	9,3	116,9	768,0	810,6	235,0
1976	36,4	21,0	248,9	13,3	64,6	185,9	4,8	114,4	1,3	50,1	10,5	122,4	873,6	1 004,3	289,2
1977	42,2	23,2	285,0	15,1	69,9	199,3	5,6	128,3	1,5	58,7	10,3	133,1	972,1	1 095,4	350,1
1978	45,9	24,9	315,4	16,2	74,8	220,2	6,5	139,6	1,6	65,1	9,6	151,0	1 070,9	1 093,1	441,5
1979	49,9	27,2	345,8	17,8	93,5	247,4	7,7	162,5	1,8	70,0	10,0	184,0	1 217,5	1 134,4	432,9
1980	53,5	26,7	369,3	18,6	101,1	281,7	9,1	199,0	1,9	74,6	12,2	231,0	1 378,6	1 236,2	448,6
1981	56,5	28,9	392,6	22,4	111,6	315,8	10,8	224,9	2,1	76,8	15,3	278,1	1 535,8	1 710,5	608,8
1982	57,0	31,3	429,1	26,5	122,2	342,2	11,6	253,4	2,1	84,9	16,5	301,1	1 678,0	2 088,7	655,3
1983	59,2	34,4	470,8	26,3	116,1	359,7	12,3	287,3	2,3	90,6	16,2	314,6	1 789,8	2 497,9	794,0
1984	63,3	37,8	498,6	27,8	129,3	385,8	13,2	321,4	2,5	93,8	17,2	334,5	1 925,4	3 069,8	940,6
1985	69,2	42,1	519,7	28,6	140,5	422,5	14,6	345,0	2,7	98,7	18,4	365,9	2 067,7	3 427,9	1 023,3
1986	72,9	45,8	560,7	26,9	148,7	449,4	15,1	377,5	2,9	106,7	19,6	353,7	2 179,9	2 821,8	1 160,6
1987	77,6	47,5	599,9	27,6	159,8	467,2	15,1	404,3	3,1	112,8	20,5	369,1	2 304,4	2 578,5	1 196,8
1988	80,2	48,9	625,0	30,5	181,3	485,6	15,9	429,4	3,2	114,9	23,0	439,3	2 477,1	2 707,8	1 382,1
1989	86,2	50,5	657,3	33,5	215,2	518,2	17,4	480,5	3,4	120,2	26,3	477,7	2 686,4	3 096,4	1 450,2
1990	94,7	53,4	714,5	36,6	241,4	559,5	18,7	522,0	3,7	129,0	29,7	493,9	2 897,0	2 877,6	1 275,5
1991	101,6	55,2	770,8	39,9	265,7	593,0	19,9	566,2	4,1	134,7	33,4	542,2	3 126,6	2 894,3	1 384,1

Table 13

Private consumption at current prices

(PPS EUR 12; Mrd)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	5,8	3,2	37,3	2,5	12,0	27,7	1,3	24,9	0,3	7,7	2,3	42,7	167,6	210,6	29,6
1961	6,2	3,5	40,3	2,7	13,7	30,3	1,3	27,3	0,3	8,3	2,5	45,1	181,7	222,5	33,3
1962	6,6	3,9	44,1	2,9	15,5	33,8	1,4	30,4	0,3	9,1	2,6	48,0	198,8	241,5	38,3
1963	7,3	4,1	47,6	3,2	18,0	37,6	1,6	34,4	0,3	10,1	2,9	52,5	219,8	263,9	44,4
1964	7,8	4,6	52,1	3,6	19,7	41,2	1,7	36,7	0,3	11,0	3,2	56,6	238,5	292,9	50,8
1965	8,5	4,9	58,2	4,1	22,1	44,7	1,8	39,4	0,4	12,2	3,6	59,9	259,6	322,0	57,1
1966	9,1	5,3	62,8	4,5	24,4	48,8	1,8	44,1	0,4	13,0	3,9	63,1	281,2	347,7	65,1
1967	9,6	5,7	65,9	4,9	26,2	52,8	2,0	49,1	0,4	13,9	4,2	66,4	301,0	366,0	73,0
1968	10,4	6,0	71,0	5,3	28,7	57,2	2,2	53,2	0,5	15,1	4,9	70,9	325,4	395,8	82,0
1969	11,4	6,5	78,9	5,9	31,9	64,0	2,4	58,9	0,5	17,1	5,4	75,0	358,0	428,4	94,9
1970	12,5	7,1	87,4	6,8	35,4	70,8	2,6	66,5	0,5	19,2	5,9	81,3	396,2	464,3	109,5
1971	14,0	7,6	97,4	7,8	40,0	79,7	2,9	73,0	0,6	21,4	7,0	89,7	441,1	514,5	126,0
1972	15,8	8,2	109,9	8,7	46,0	88,7	3,2	80,7	0,7	23,4	7,7	100,5	493,5	577,6	147,4
1973	18,3	9,5	124,3	9,9	53,8	100,9	3,6	94,9	0,7	26,5	9,4	116,7	568,4	652,8	172,2
1974	21,4	10,6	143,3	11,5	64,9	118,4	4,5	113,0	0,9	31,2	12,1	132,7	664,4	741,9	195,4
1975	24,8	12,4	171,5	14,0	75,1	138,6	5,1	130,2	1,1	37,1	14,1	147,7	771,6	856,8	242,6
1976	29,1	15,1	200,4	16,2	88,7	161,0	5,8	152,3	1,2	43,7	16,4	166,9	896,7	1 007,1	286,1
1977	33,2	17,2	232,9	18,8	101,2	185,9	7,0	174,5	1,4	50,9	18,6	187,4	1 028,9	1 175,1	338,1
1978	37,5	19,1	263,5	21,9	111,4	211,1	8,3	197,4	1,5	58,1	19,9	214,3	1 164,1	1 348,4	392,7
1979	43,4	22,0	302,6	24,5	124,4	242,5	9,7	232,9	1,7	66,6	23,2	246,2	1 339,7	1 532,6	466,3
1980	51,2	24,5	350,2	28,7	144,3	281,3	11,4	280,2	2,0	76,1	27,3	270,5	1 547,8	1 755,8	551,3
1981	58,2	27,0	395,2	33,3	162,4	323,1	13,1	314,6	2,3	83,0	31,8	299,7	1 743,7	1 973,3	626,2
1982	65,7	30,2	432,4	36,9	181,0	368,0	13,4	350,8	2,6	90,0	35,9	337,9	1 944,9	2 196,1	726,2
1983	71,2	33,4	476,3	39,8	198,2	403,0	14,4	382,9	2,8	99,2	38,8	380,9	2 140,8	2 504,1	821,9
1984	77,3	37,1	521,1	42,4	211,0	437,0	15,8	420,2	3,0	107,2	41,4	416,2	2 329,7	2 813,8	909,8
1985	83,5	41,3	560,4	47,0	228,4	474,1	17,3	460,4	3,4	116,8	43,4	455,7	2 531,7	3 137,1	999,0
1986	87,5	44,9	591,7	51,5	244,8	506,1	18,3	499,1	3,6	126,9	45,7	512,1	2 732,2	3 429,3	1 073,2
1987	93,4	45,9	629,2	54,8	267,5	541,7	19,7	536,3	3,8	136,4	49,6	556,9	2 935,1	3 718,5	1 166,2
1988	99,7	47,4	676,0	59,1	290,5	578,3	21,1	577,6	4,1	142,6	54,4	612,4	3 163,1	4 050,5	1 273,7
1989	107,6	49,8	726,7	63,1	321,1	626,2	23,1	627,6	4,4	154,6	59,2	662,8	3 426,2	4 356,3	1 387,8
1990	118,7	52,9	798,8	67,7	351,1	681,6	25,4	676,9	4,8	169,3	65,1	713,3	3 725,5	4 681,6	1 541,0
1991	129,1	56,7	868,8	72,6	379,9	739,8	27,8	731,8	5,4	182,7	70,7	758,1	4 023,3	4 971,6	1 701,3

Table 14

Private consumption at current prices

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	69,2	62,0	59,4	80,3	68,4	59,7	76,6	59,7	54,0	58,5	73,1	66,0	62,5	63,9	58,7
1961	67,9	62,1	59,5	76,8	67,9	60,0	75,0	58,6	56,9	59,7	73,6	65,4	62,2	63,7	57,0
1962	66,6	61,9	59,5	76,4	67,3	60,0	74,7	58,9	56,9	60,3	69,7	66,0	62,3	62,9	57,7
1963	67,1	61,4	59,6	74,3	68,5	60,5	74,1	60,2	57,5	61,8	69,4	66,3	62,8	62,8	58,8
1964	64,1	60,3	58,4	73,6	67,5	59,5	72,6	59,6	56,7	59,4	68,2	64,8	61,6	63,0	57,6
1965	64,3	58,9	59,2	72,8	68,0	59,0	71,7	59,2	58,2	59,4	67,9	64,1	61,4	62,5	58,5
1966	63,9	59,6	59,7	72,3	67,5	58,9	71,8	60,3	58,2	59,3	67,9	63,6	61,6	61,7	58,0
1967	62,9	59,9	60,8	72,4	67,3	59,1	70,1	60,6	59,1	58,7	65,4	63,5	61,8	61,6	56,8
1968	63,7	58,8	60,1	71,9	66,9	59,3	71,0	59,7	57,7	57,9	68,5	63,1	61,4	61,9	54,7
1969	62,2	57,5	59,1	69,2	65,1	59,1	69,8	59,3	53,4	58,5	69,1	62,2	60,6	62,0	53,5
1970	59,8	57,4	58,4	69,2	65,0	57,9	68,9	59,5	50,5	58,4	65,9	61,8	60,0	63,0	52,3
1961-70	64,3	59,8	59,4	72,9	67,1	59,3	72,0	59,6	56,5	59,3	68,6	64,1	61,6	62,5	56,5
1971	60,3	55,8	58,7	68,0	65,2	57,8	68,0	59,8	54,8	57,8	68,3	62,1	60,2	62,8	53,6
1972	60,2	53,4	59,3	65,7	64,7	57,7	65,0	60,1	53,6	57,3	64,2	62,8	60,3	62,7	54,0
1973	60,6	54,5	58,8	63,4	64,5	57,1	64,4	60,5	48,9	56,7	64,8	62,4	60,0	62,0	53,6
1974	59,8	54,3	59,6	67,7	65,1	57,5	68,4	60,3	46,1	56,8	72,7	63,6	60,7	62,6	54,3
1975	61,2	55,5	63,0	67,5	65,2	58,7	64,1	62,0	57,8	58,6	77,1	62,1	61,9	63,5	57,1
1976	60,9	56,6	62,5	65,8	66,7	58,4	64,5	60,8	56,6	58,7	75,0	61,0	61,4	63,6	57,5
1977	61,9	56,9	63,0	65,9	66,0	58,2	64,1	60,3	59,6	59,8	72,0	59,8	61,2	63,5	57,7
1978	61,6	56,2	62,7	65,2	64,8	57,9	63,8	59,5	57,9	60,3	68,0	59,8	60,7	62,8	57,7
1979	62,8	56,4	62,4	63,3	65,4	58,1	65,3	59,7	57,8	60,9	67,5	60,2	60,9	63,1	58,7
1980	62,9	55,9	63,0	64,6	66,3	58,9	65,8	61,0	58,7	61,1	67,3	59,9	61,5	64,0	58,8
1971-80	61,2	55,5	61,3	65,7	65,4	58,0	65,3	60,4	55,2	58,8	69,7	61,4	60,9	63,1	56,3
1981	65,2	56,0	64,1	67,5	67,4	60,3	65,9	61,2	60,9	60,4	69,6	60,7	62,4	63,5	58,0
1982	65,6	55,0	63,8	67,4	67,2	60,7	59,8	61,5	60,3	60,1	69,6	60,8	62,4	65,6	59,2
1983	65,2	54,6	63,8	66,7	66,6	60,8	59,6	61,2	59,6	60,3	69,3	61,0	62,3	66,3	59,9
1984	64,9	54,5	63,6	64,7	65,2	60,8	58,4	61,0	58,1	59,2	70,7	61,1	62,0	65,1	59,1
1985	65,6	54,8	63,2	65,5	65,0	61,1	59,0	61,5	58,7	59,2	67,9	60,9	62,0	65,9	58,4
1986	64,1	54,7	61,8	67,5	64,0	60,5	59,4	61,6	57,3	59,8	65,1	62,6	61,8	66,4	58,0
1987	64,4	54,1	61,9	69,0	63,6	61,1	58,5	61,7	58,4	61,0	64,5	62,4	62,0	66,7	58,1
1988	63,1	53,7	61,4	68,6	63,0	60,4	57,9	61,2	57,1	59,5	65,1	63,1	61,6	66,5	57,4
1989	62,3	53,1	60,9	67,9	63,2	60,0	56,9	61,3	55,8	58,9	64,0	63,6	61,5	66,4	56,8
1990	62,8	52,8	60,7	68,1	63,1	60,3	56,7	61,0	56,3	59,0	63,8	63,8	61,5	66,7	56,3
1981-90	64,3	54,3	62,5	67,3	64,8	60,6	59,2	61,3	58,3	59,8	67,0	62,0	61,9	65,9	58,1
1991	63,4	53,2	60,6	68,5	63,1	60,5	57,4	61,1	57,4	59,2	63,7	63,8	61,5	67,0	56,3

Table 15

Private consumpion at current prices per head of population

(ECU; EUR 12 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	128,5	122,9	117,9	51,6	39,7	121,5	72,8	71,9	137,1	90,8	32,9	139,2	100,0	277,1	42,3
1961	123,2	125,2	122,4	50,9	41,0	121,4	71,3	72,1	132,1	92,6	32,9	133,9	100,0	259,6	45,4
1962	118,9	128,8	122,6	49,3	43,0	122,9	70,5	74,5	126,7	92,6	30,6	129,6	100,0	250,3	47,6
1963	117,2	123,8	118,2	48,9	46,9	125,1	68,6	79,4	124,0	93,0	30,1	126,0	100,0	238,7	50,5
1964	115,5	128,2	117,3	50,4	48,1	125,9	70,8	79,5	128,3	96,6	29,7	124,3	100,0	235,0	53,6
1965	115,9	129,5	119,2	52,5	51,8	123,5	68,9	78,4	126,7	98,8	30,7	122,1	100,0	232,1	55,6
1966	114,7	133,0	118,1	53,6	54,8	123,5	67,5	80,0	123,1	98,9	31,4	119,7	100,0	231,4	59,1
1967	113,9	136,8	115,0	54,3	56,4	125,7	66,5	83,4	118,9	100,6	32,0	116,2	100,0	228,8	63,5
1968	119,0	133,5	118,2	56,4	52,4	131,7	63,9	85,6	122,6	105,3	35,9	105,2	100,0	240,6	69,3
1969	118,3	135,9	120,5	56,6	52,8	130,2	66,5	85,8	120,3	109,5	36,6	102,2	100,0	237,0	72,4
1970	114,6	134,9	130,0	57,4	52,8	119,4	66,5	87,3	120,1	110,0	35,4	100,7	100,0	227,1	74,5
1971	114,9	129,0	133,8	54,9	52,8	117,2	67,0	84,7	119,7	111,0	37,1	101,2	100,0	214,7	76,3
1972	118,7	126,5	135,5	50,7	55,4	119,2	65,5	82,4	121,0	112,7	35,7	98,3	100,0	196,0	83,8
1973	122,4	135,5	142,3	49,9	57,9	121,3	60,3	79,8	120,1	116,1	38,7	87,6	100,0	171,2	89,3
1974	127,4	134,6	142,3	55,3	64,1	116,9	59,2	78,3	123,0	122,6	45,1	85,5	100,0	164,6	90,5
1975	126,4	135,0	139,3	50,9	63,9	124,8	55,5	77,7	124,3	122,2	43,0	84,3	100,0	152,3	85,5
1976	132,8	148,3	144,8	51,8	64,4	125,7	53,5	73,5	129,9	130,1	41,9	77,9	100,0	164,9	91,8
1977	138,6	147,0	149,8	52,2	62,0	121,0	55,2	74,1	133,5	136,7	36,9	76,4	100,0	160,5	99,2
1978	137,3	143,5	151,2	50,4	59,8	121,3	57,6	73,2	131,8	137,2	30,9	79,0	100,0	144,4	113,0
1979	131,6	137,8	146,3	48,5	65,4	119,8	59,5	75,0	125,8	129,5	28,3	84,9	100,0	130,9	97,0
1980	125,1	119,9	138,1	44,4	62,3	120,4	61,7	81,2	121,5	121,3	30,1	94,4	100,0	125,0	88,4
1981	118,9	116,9	132,1	47,9	61,3	120,9	65,3	82,6	118,6	111,9	33,8	102,4	100,0	154,2	107,3
1982	110,1	116,6	132,5	51,6	61,3	119,6	63,5	85,2	111,5	112,9	33,3	101,8	100,0	171,0	105,3
1983	107,4	120,4	137,1	47,8	54,4	117,5	62,9	90,4	112,1	112,8	30,4	99,8	100,0	190,2	119,1
1984	107,0	123,2	135,8	46,8	56,2	117,0	62,3	93,9	112,8	108,4	29,9	98,7	100,0	215,7	130,5
1985	109,1	127,8	132,4	44,8	56,7	119,0	63,9	93,9	113,8	105,8	29,6	100,5	100,0	222,7	131,7
1986	109,3	132,1	135,7	40,0	56,8	119,9	63,2	97,5	114,4	108,3	29,8	92,1	100,0	172,7	141,2
1987	110,2	130,0	137,7	38,8	57,7	117,8	59,6	98,9	116,1	107,8	29,5	90,9	100,0	148,2	137,5
1988	106,2	124,7	133,2	39,8	60,9	113,8	58,9	97,8	111,3	101,9	30,8	100,8	100,0	143,9	147,6
1989	105,2	119,0	128,5	40,5	66,7	112,0	59,6	101,3	110,7	98,1	32,5	101,2	100,0	150,9	142,8
1990	107,9	117,2	127,6	41,1	69,6	112,4	59,8	102,4	113,0	97,7	34,2	97,4	100,0	129,6	116,7
1991	107,7	112,8	126,5	41,6	71,1	110,5	59,4	103,2	114,2	94,5	35,8	99,3	100,0	120,2	117,4

Table 16

Private consumption at current prices per head of population

(PPS EUR 12: EUR 12 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	105,6	117,4	112,2	49,7	65,3	101,3	74,5	82,7	136,9	111,1	45,4	135,9	100,0	194,3	52,5
1961	104,2	119,5	111,4	50,3	68,9	101,9	74,1	84,0	137,8	110,8	46,2	132,6	100,0	188,0	54,4
1962	103,3	120,4	111,2	48,7	71,4	103,0	73,0	85,8	129,5	110,7	45,0	129,0	100,0	185,5	57,2
1963	103,2	114,2	108,5	49,7	74,9	102,9	72,2	88,0	126,7	111,0	45,2	128,1	100,0	182,5	60,1
1964	101,6	118,1	109,3	51,7	75,5	103,6	71,0	86,4	129,8	110,8	46,1	127,4	100,0	185,6	63,2
1965	101,2	116,0	111,8	53,9	77,6	103,3	69,0	85,3	129,2	111,5	47,7	124,3	100,0	186,8	65,1
1966	99,8	115,7	111,4	54,6	78,7	104,1	67,2	88,4	125,5	109,2	48,1	121,0	100,0	185,5	68,4
1967	98,4	115,7	109,6	55,3	78,6	105,1	67,0	91,8	126,4	109,1	48,6	119,1	100,0	181,6	71,4
1968	99,5	112,8	109,5	56,1	79,2	105,1	70,2	92,0	124,6	108,9	53,3	117,8	100,0	180,9	73,8
1969	99,4	112,2	110,3	56,9	79,9	106,8	70,0	92,7	123,8	111,4	53,6	113,5	100,0	177,5	77,2
1970	98,6	110,2	110,1	59,5	79,9	106,6	68,3	94,6	119,1	112,8	53,7	111,6	100,0	173,0	79,9
1971	100,1	106,4	109,9	60,7	80,9	107,5	67,4	93,5	119,4	111,9	58,1	110,9	100,0	171,4	82,4
1972	101,0	102,6	110,9	61,2	82,9	106,8	65,0	92,3	119,0	109,4	57,0	111,5	100,0	171,2	85,6
1973	102,3	102,8	109,0	60,1	83,9	105,2	63,2	94,1	115,9	107,0	61,0	112,8	100,0	167,4	86,1
1974	102,1	98,5	107,9	60,0	86,2	105,4	67,2	95,7	116,2	107,7	66,4	110,2	100,0	162,0	82,8
1975	102,1	99,1	112,0	62,5	85,4	106,2	65,1	94,8	118,3	109,5	65,1	106,1	100,0	160,2	87,8
1976	103,5	103,7	113,6	61,7	86,0	106,1	63,1	95,3	116,0	110,5	63,9	103,5	100,0	161,0	88,5
1977	103,2	103,4	115,7	61,6	84,8	106,7	65,5	95,1	116,1	111,9	62,6	101,7	100,0	162,7	90,5
1978	103,3	101,2	116,2	63,0	81,9	107,0	67,6	95,1	114,6	112,8	59,2	103,2	100,0	163,9	92,4
1979	104,0	101,6	116,3	60,6	79,1	106,7	67,9	97,6	113,5	112,0	59,5	103,3	100,0	160,7	94,9
1980	106,6	98,2	116,6	61,1	79,1	107,0	68,5	101,8	114,0	110,4	60,3	98,5	100,0	158,1	96,8
1981	108,0	96,5	117,1	62,6	78,6	108,9	69,3	101,7	114,7	106,4	62,1	97,2	100,0	156,7	97,3
1982	109,5	97,0	115,2	61,9	78,3	110,9	63,2	101,7	115,4	103,2	62,5	98,5	100,0	155,1	100,7
1983	108,0	97,6	115,9	60,5	77,6	110,1	61,6	100,7	113,8	103,3	61,0	101,1	100,0	159,4	103,0
1984	108,0	100,0	117,3	59,0	75,7	109,5	61,5	101,5	113,3	102,4	59,5	101,5	100,0	163,4	104,3
1985	107,6	102,6	116,6	60,0	75,3	109,1	62,0	102,3	116,1	102,4	57,1	102,2	100,0	166,4	105,0
1986	104,7	103,3	114,3	60,9	74,7	107,8	61,1	102,8	115,1	102,8	55,5	106,4	100,0	167,4	104,2
1987	104,1	98,5	113,4	60,4	75,9	107,2	61,2	103,0	113,5	102,4	56,0	107,7	100,0	167,8	105,2
1988	103,4	94,7	112,8	60,5	76,4	106,1	61,2	103,1	112,2	99,1	57,0	110,0	100,0	168,6	106,5
1989	103,0	92,0	111,4	59,8	78,0	106,1	62,1	103,7	112,6	98,9	57,5	110,1	100,0	166,5	107,1
1990	105,1	90,3	110,9	59,1	78,7	106,5	63,4	103,2	113,7	99,7	58,3	109,4	100,0	163,9	109,6
1991	106,4	90,0	110,8	58,8	79,0	107,1	64,5	103,6	117,0	99,6	58,9	107,9	100,0	160,4	112,2

Table 17

Private consumption at constant prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	1,6	7,3	5,8	6,8	11,0	5,9	3,1	7,5	4,9	5,2	7,8	2,2	5,4	2,0	10,4
1962	3,9	5,9	5,5	4,3	8,8	7,1	3,5	7,1	4,6	6,1	−1,2	2,2	5,3	4,4	7,5
1963	4,4	0,0	3,0	5,1	11,3	6,9	4,2	9,3	4,5	7,0	6,9	4,7	6,0	3,7	8,8
1964	2,6	7,8	5,3	8,8	4,3	5,2	4,3	3,3	8,5	5,9	5,8	3,0	4,4	5,7	10,8
1965	4,3	3,4	7,0	7,7	6,9	4,0	0,8	3,3	3,9	7,5	6,0	1,5	4,4	5,7	5,8
1966	2,7	4,3	3,6	6,8	6,9	4,8	1,5	7,2	1,5	3,2	4,0	1,7	4,2	5,0	10,0
1967	2,8	2,9	1,4	6,2	6,0	5,1	3,8	7,4	−0,5	5,4	6,0	2,4	4,0	2,9	10,4
1968	5,3	1,9	4,9	6,9	6,0	4,0	9,0	5,2	4,3	6,6	11,1	2,8	4,6	5,1	8,5
1969	5,4	6,3	7,7	6,2	7,0	6,0	5,4	6,6	5,0	7,9	5,4	0,6	5,5	3,6	10,3
1970	4,4	3,5	7,4	8,8	4,2	4,3	−1,0	7,6	5,9	7,4	2,9	2,9	5,4	2,4	7,4
1961-70	3,7	4,3	5,1	6,7	7,2	5,3	3,4	6,4	4,2	6,2	5,4	2,4	4,9	4,0	9,0
1971	4,7	−0,8	5,4	5,6	5,1	4,7	3,2	3,5	5,8	3,3	8,4	3,2	4,3	3,3	5,7
1972	6,0	1,7	4,9	7,0	8,3	4,9	5,1	3,3	4,8	3,5	2,9	6,3	5,1	6,5	9,3
1973	7,8	4,8	3,5	7,6	7,8	5,1	7,2	7,0	5,8	4,0	13,0	5,0	5,5	4,2	9,2
1974	2,6	−2,9	1,3	0,7	5,1	0,9	1,6	3,7	4,9	3,7	9,1	−1,5	1,7	−1,1	−0,3
1975	0,6	3,7	3,8	5,5	1,8	2,6	0,8	0,2	5,2	3,3	1,7	−0,4	1,8	2,1	4,4
1976	4,8	7,9	3,9	5,3	5,5	4,7	2,8	5,0	3,1	5,3	2,3	0,4	3,9	5,5	3,5
1977	2,4	1,1	3,9	4,6	1,5	2,6	6,8	3,3	2,6	4,6	0,6	−0,4	2,5	4,5	4,2
1978	2,3	0,7	3,9	5,7	0,9	3,8	9,1	3,1	2,9	4,3	−2,0	5,7	3,6	4,1	5,4
1979	4,8	1,4	3,5	2,6	1,3	2,8	4,4	7,1	3,5	3,0	0,0	4,4	3,8	2,2	6,4
1980	2,0	−3,7	1,5	0,2	0,6	1,0	0,4	6,2	2,7	0,0	3,7	0,1	1,7	−0,3	1,4
1971-90	3,8	1,3	3,6	4,4	3,7	3,3	4,1	4,2	4,1	3,5	3,9	2,2	3,4	3,1	4,9
1981	−1,2	−2,3	−0,2	2,0	−0,6	1,8	1,7	1,6	1,6	−2,0	2,9	0,1	0,5	1,6	1,3
1982	1,4	1,4	−1,3	3,9	0,2	3,2	−7,1	1,0	0,4	−1,4	2,4	0,9	0,7	1,1	4,1
1983	−1,6	2,6	1,6	0,3	0,3	0,9	0,9	0,5	0,3	0,7	−1,4	4,3	1,4	5,0	3,2
1984	1,2	3,4	1,9	1,7	−0,4	0,9	1,1	2,3	1,1	0,8	−2,9	1,8	1,4	4,8	2,7
1985	2,0	5,0	1,6	3,9	2,4	2,2	3,7	3,2	2,5	2,4	0,7	3,7	2,6	4,7	2,7
1986	2,5	4,1	3,4	0,3	3,6	3,4	2,5	4,5	2,4	3,2	5,6	5,6	4,0	4,1	3,1
1987	2,8	−1,2	3,4	0,9	5,5	2,5	2,5	4,3	4,1	3,1	5,4	5,4	3,8	2,7	4,2
1988	2,4	−1,1	3,0	3,7	4,5	2,5	3,2	4,2	1,8	1,2	6,6	6,9	3,9	3,4	5,0
1989	3,8	−0,4	1,7	2,6	5,5	3,1	5,2	3,8	3,3	2,5	3,3	3,9	3,3	1,9	3,5
1990	4,0	0,6	4,9	1,7	4,0	3,0	3,5	3,0	3,7	4,1	4,5	2,4	3,4	0,8	4,2
1981-90	1,7	1,2	2,0	2,1	2,5	2,4	1,7	2,8	2,1	1,4	2,6	3,5	2,5	3,0	3,4
1991	3,0	0,6	3,6	0,9	2,7	2,7	3,5	2,8	4,8	2,3	3,0	1,1	2,6	−0,1	4,0

Table 18

Public consumption at current prices

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	12,4	13,3	10,7	11,7	7,9	14,2	12,5	12,0	9,8	12,6	10,5	16,4	12,9	16,6	8,0
1961	11,9	14,4	11,1	11,3	7,8	14,4	12,4	11,9	9,9	13,1	12,5	16,7	13,1	17,5	7,7
1962	12,3	15,2	11,9	11,6	7,7	14,5	12,5	12,3	10,9	13,7	12,9	17,0	13,5	17,8	8,0
1963	13,0	15,4	12,6	11,3	8,0	14,7	12,7	13,1	12,3	14,4	12,3	16,9	13,8	17,5	8,2
1964	12,5	15,6	11,9	11,7	7,8	14,5	13,3	13,5	10,8	14,6	12,3	16,4	13,6	17,2	8,0
1965	12,8	16,3	12,1	11,7	8,0	14,4	13,6	14,2	10,9	14,6	12,0	16,7	13,8	16,7	8,2
1966	13,1	17,1	12,1	11,8	8,3	14,2	13,6	14,0	11,4	14,9	12,1	17,1	13,8	17,7	8,0
1967	13,5	17,8	12,6	13,0	9,0	14,2	13,4	13,6	12,1	15,3	13,1	17,9	14,2	18,9	7,6
1968	13,6	18,6	11,8	12,9	8,8	14,8	13,4	13,6	12,1	14,9	13,1	17,6	14,0	18,8	7,4
1969	13,6	18,9	11,9	12,7	8,9	14,6	13,5	13,4	11,0	15,0	12,9	17,1	13,8	18,4	7,3
1970	13,4	20,0	12,0	12,6	9,1	14,7	14,6	13,0	10,5	15,4	13,8	17,5	13,9	18,8	7,4
1961-70	13,0	16,9	12,0	12,1	8,3	14,5	13,3	13,3	11,2	14,6	12,7	17,1	13,8	17,9	7,8
1971	14,1	21,3	12,7	12,5	9,3	14,9	15,2	14,6	11,7	16,0	13,5	17,9	14,6	18,1	8,0
1972	14,5	21,3	12,7	12,2	9,2	14,9	15,3	15,1	11,8	15,8	13,4	18,2	14,7	18,0	8,2
1973	14,5	21,3	13,0	11,5	9,2	14,8	15,7	14,4	11,3	15,6	12,8	18,1	14,6	17,4	8,3
1974	14,7	23,4	13,9	13,8	9,5	15,4	17,2	13,8	11,5	16,2	14,1	20,0	15,2	18,1	9,1
1975	16,4	24,6	14,4	15,2	10,1	16,6	18,6	14,1	14,9	17,4	15,0	21,9	16,3	18,6	10,0
1976	16,4	24,1	13,7	15,1	10,9	16,9	18,0	13,4	14,7	17,3	13,7	21,7	16,0	18,1	9,9
1977	16,8	23,9	13,6	16,0	11,1	17,2	17,1	13,8	15,9	17,4	14,0	20,3	15,9	17,6	9,8
1978	17,4	24,5	13,7	15,9	11,5	17,6	17,1	14,1	15,6	17,7	13,9	19,9	16,0	17,0	9,7
1979	17,6	25,0	13,7	16,3	12,0	17,6	18,1	14,5	16,0	18,1	13,9	19,7	16,2	17,0	9,7
1980	17,8	26,7	13,9	16,4	12,7	18,1	19,9	14,7	16,7	17,9	14,5	21,3	16,7	17,6	9,8
1971-80	16,0	23,6	13,5	14,5	10,5	16,4	17,2	14,3	14,0	16,9	13,9	19,9	15,6	17,7	9,2
1981	18,6	27,8	14,2	18,0	13,2	18,8	19,9	16,0	17,4	17,8	15,0	21,9	17,4	17,5	9,9
1982	18,0	28,2	14,1	18,3	13,4	19,3	19,8	16,0	16,4	17,7	14,9	21,8	17,5	18,4	9,9
1983	17,5	37,4	13,8	18,8	13,9	19,5	19,3	16,4	15,8	17,5	15,1	21,8	17,5	18,4	10,0
1984	17,0	25,9	13,5	19,5	13,7	19,6	18,7	16,2	15,4	16,6	15,0	21,6	17,3	18,0	9,9
1985	17,1	25,3	13,5	20,4	14,0	19,4	18,7	16,4	15,7	16,2	15,5	20,9	17,2	18,3	9,7
1986	16,7	24,2	13,4	19,5	14,0	19,0	18,9	16,2	16,3	16,0	15,4	21,0	17,0	18,7	9,8
1987	16,3	25,5	13,3	19,9	14,4	18,9	17,9	16,9	17,4	16,3	15,2	20,5	17,1	18,6	9,6
1988	15,3	26,0	12,9	20,6	14,3	18,6	16,7	17,2	17,0	15,7	16,0	19,9	16,8	18,3	9,3
1989	14,5	25,5	12,3	20,9	14,3	18,3	15,3	16,9	16,5	15,2	15,8	19,7	16,5	18,1	9,1
1990	14,5	25,2	12,1	20,8	14,3	18,2	15,6	17,2	16,9	14,9	15,8	19,8	16,5	18,1	8,8
1981-90	16,6	26,1	13,3	19,7	14,0	19,0	18,1	16,5	16,5	16,4	15,4	20,9	17,1	18,2	9,6
1991	14,5	24,7	11,8	20,3	14,3	18,0	15,9	17,3	16,7	14,6	15,8	20,4	16,4	18,2	8,7

Table 19

Public consumption at constant prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	1,9	5,3	6,6	4,4	5,6	4,8	2,1	4,4	1,2	2,8	26,7	3,5	4,6	7,7	5,9
1962	8,6	9,9	10,4	6,7	6,7	4,9	3,1	3,9	2,4	3,3	8,5	3,1	5,5	5,2	8,7
1963	11,6	2,9	6,3	4,2	9,7	3,2	4,0	4,3	5,8	4,7	3,0	1,8	4,2	2,6	8,3
1964	4,2	7,3	0,8	9,3	1,3	4,2	3,0	4,2	−0,8	1,7	6,8	1,6	2,6	4,9	3,3
1965	5,5	3,4	4,0	9,0	3,7	3,2	3,7	4,0	2,5	1,5	7,4	2,6	3,4	3,2	3,8
1966	4,7	5,8	1,0	6,3	1,7	2,7	1,0	4,0	5,8	1,7	6,6	2,7	2,6	7,5	5,7
1967	5,7	7,6	3,0	8,5	2,3	4,2	4,5	4,4	4,2	2,4	13,6	5,7	4,4	5,4	4,0
1968	3,5	4,7	−1,4	1,3	1,8	5,6	5,8	5,2	5,6	2,2	8,4	0,4	2,3	3,4	6,4
1969	6,3	6,8	4,6	7,7	4,2	4,1	6,9	2,8	3,3	4,5	3,2	−1,8	2,6	2,3	5,9
1970	3,1	6,9	4,2	5,9	5,3	4,2	11,3	2,6	4,1	6,0	12,7	1,7	3,6	0,3	7,1
1961-70	5,5	6,0	3,9	6,3	4,2	4,1	4,5	4,0	3,4	3,1	9,5	2,1	3,6	4,2	5,9
1971	5,5	5,5	3,9	4,9	4,3	3,9	8,6	5,2	3,0	4,4	6,4	3,0	4,1	−0,4	5,2
1972	5,9	5,7	2,3	5,7	5,2	3,5	7,5	5,1	4,2	0,8	8,6	4,2	3,9	−1,2	5,6
1973	5,3	4,0	3,7	6,8	6,4	3,4	6,7	2,7	3,4	0,8	7,8	4,3	3,8	0,1	5,4
1974	3,4	3,5	2,4	12,1	9,3	1,2	7,6	2,4	3,8	2,2	17,3	1,9	2,8	2,3	3,1
1975	4,5	2,0	1,5	11,9	5,2	4,4	8,7	2,4	3,3	4,1	6,6	5,6	3,9	0,2	6,7
1976	3,7	4,5	−0,2	5,1	6,9	4,2	2,6	2,1	2,8	4,1	7,0	1,2	2,5	1,8	4,7
1977	2,3	2,4	1,7	6,5	3,9	2,4	2,1	3,0	2,9	3,4	12,2	−1,7	1,7	1,1	4,4
1978	6,0	6,2	3,7	3,5	5,4	5,1	7,9	3,5	1,8	3,9	3,3	2,3	3,9	2,3	5,2
1979	2,5	5,9	3,6	5,8	4,2	3,0	4,6	3,0	2,2	2,8	6,5	2,2	3,2	1,9	4,4
1980	1,5	4,3	2,1	0,2	4,2	2,5	7,1	2,1	3,1	0,6	7,9	1,6	2,2	1,3	2,8
1971-80	4,1	4,4	2,5	6,2	5,5	3,4	6,3	3,1	3,0	2,7	8,3	2,4	3,2	0,9	4,7
1981	0,3	2,6	1,2	6,8	1,9	3,1	0,3	2,7	1,4	2,5	5,2	0,3	1,9	1,1	4,8
1982	−1,4	3,1	−0,7	2,3	4,9	3,7	3,2	2,9	1,5	0,4	3,6	0,8	1,8	2,4	1,9
1983	−0,1	0,0	0,1	2,7	3,9	2,0	−0,4	2,9	1,9	1,0	3,7	2,0	1,8	3,5	2,9
1984	0,2	−0,4	1,1	3,0	2,9	1,2	−0,7	2,5	2,2	−0,8	0,1	1,0	1,3	4,5	2,8
1985	2,6	2,5	1,6	3,2	4,6	2,2	1,6	3,5	2,0	1,3	0,1	0,0	2,0	5,3	1,7
1986	1,2	1,5	2,3	−0,6	5,7	1,7	2,4	2,9	3,3	2,5	7,2	2,1	2,4	4,9	6,2
1987	1,2	2,0	1,2	1,8	8,7	2,9	−3,8	3,6	2,6	2,0	4,9	1,2	2,6	2,7	−0,7
1988	−1,4	−0,4	0,4	5,6	5,0	2,2	−4,3	3,0	3,1	0,0	5,3	0,4	1,7	2,3	2,2
1989	−0,7	−0,8	−0,9	5,0	5,5	1,5	−3,5	0,5	3,0	0,0	1,5	0,8	0,9	0,6	2,1
1990	0,7	−0,6	2,2	1,5	4,3	2,2	0,5	1,5	3,0	0,4	1,5	2,5	2,1	0,9	2,5
1981-90	0,2	0,9	0,8	3,1	4,7	2,3	−0,5	2,6	2,4	0,9	3,3	1,1	1,9	2,8	2,6
1991	0,3	−1,5	0,1	1,0	3,0	1,8	0,5	1,5	3,0	−0,1	1,0	1,9	1,3	0,0	2,2

Table 20

Gross fixed capital formation at current prices; total economy

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	19,3	21,6	24,3	19,0	20,1	20,9	14,4	26,0	20,9	24,1	23,2	16,4	21,4	18,0	29,0
1961	20,7	23,2	25,2	18,2	21,1	22,0	16,3	26,8	24,2	24,8	23,2	17,3	22,4	17,6	31,9
1962	21,3	23,1	25,7	20,1	21,6	22,2	17,9	27,2	25,9	24,5	22,4	17,0	22,7	17,6	32,2
1963	20,7	22,0	25,6	19,2	21,8	23,0	19,5	27,7	30,1	23,8	23,7	16,8	22,8	18,0	31,6
1964	22,4	24,5	26,6	21,0	23,3	23,8	20,5	25,6	33,7	25,5	22,8	18,3	23,5	18,1	31,7
1965	22,4	24,1	26,1	21,6	24,5	24,2	21,4	22,2	28,0	25,2	22,8	18,4	23,0	18,8	29,8
1966	22,9	24,1	25,4	21,7	24,7	24,6	19,8	21,6	26,6	26,3	25,1	18,4	23,0	18,5	30,3
1967	22,9	24,2	23,1	20,3	25,1	24,8	20,1	22,5	23,9	26,4	26,6	19,1	22,8	17,9	31,9
1968	21,5	23,4	22,4	23,2	25,7	24,3	20,9	23,4	22,1	26,9	22,2	19,5	22,8	18,1	33,2
1969	21,3	24,6	23,3	24,6	26,2	24,4	23,3	24,2	22,2	24,6	22,6	18,8	23,0	18,3	34,5
1970	22,7	24,7	25,5	23,6	26,1	24,3	22,7	24,6	23,1	25,9	23,2	18,9	23,7	17,7	35,5
1961-70	21,9	23,8	24,9	21,4	24,0	23,8	20,2	24,6	26,0	25,4	23,4	18,3	22,9	18,0	32,2
1971	22,1	24,2	26,1	25,2	23,8	24,7	23,6	23,9	28,4	25,4	24,7	18,9	23,6	18,2	34,2
1972	21,3	24,6	25,4	27,8	25,0	24,7	23,7	23,1	27,8	23,6	27,1	18,5	23,3	18,9	34,1
1973	21,4	24,8	23,9	28,0	26,4	25,2	25,3	24,9	27,3	23,1	26,8	19,9	23,8	19,1	36,4
1974	22,7	24,0	21,6	22,2	28,0	25,8	24,6	25,9	24,6	21,9	26,0	20,9	23,8	18,6	34,8
1975	22,5	21,1	20,4	20,8	26,4	24,1	22,7	24,9	27,7	21,1	25,9	19,9	22,6	17,2	32,5
1976	22,1	23,0	20,1	21,2	24,9	23,9	25,0	23,9	24,9	19,4	25,1	19,6	22,0	17,5	31,2
1977	21,6	22,1	20,2	23,0	23,9	22,9	24,8	23,5	25,1	21,1	26,5	18,6	21,6	18,8	30,2
1978	21,7	21,7	20,7	23,9	22,7	22,4	27,7	22,7	24,1	21,3	27,9	18,5	21,4	20,1	30,4
1979	20,7	20,9	21,8	25,8	21,6	22,4	30,5	22,8	24,4	21,0	26,6	18,7	21,6	20,4	31,7
1980	21,1	18,8	22,7	24,2	22,1	23,0	28,6	24,3	27,1	21,0	28,6	18,0	22,1	19,1	31,6
1971-80	21,7	22,5	22,3	24,2	24,5	23,9	25,6	24,0	26,1	21,9	26,5	19,2	22,6	18,8	32,7
1981	18,0	15,6	21,8	22,3	21,8	22,1	29,7	23,9	25,4	19,2	30,8	16,3	21,1	18,6	30,7
1982	17,3	16,1	20,5	19,9	21,3	21,4	26,5	22,3	25,0	18,2	31,1	16,1	20,2	17,2	29,7
1983	16,2	16,0	20,5	20,3	20,6	20,2	23,1	21,2	21,3	18,2	29,2	16,1	19,6	17,2	28,3
1984	16,0	17,2	20,2	18,5	18,8	19,3	21,6	21,1	20,2	18,6	23,6	17,0	19,2	18,0	27,9
1985	15,6	18,7	19,7	19,1	18,9	19,3	19,3	20,7	18,5	19,2	21,8	17,0	19,1	18,1	27,8
1986	15,7	20,7	19,5	18,6	19,2	19,2	18,2	19,7	23,2	20,1	22,1	17,0	18,9	17,8	27,6
1987	16,0	19,1	19,4	16,9	20,7	19,5	17,1	20,0	24,6	20,1	24,2	17,7	19,3	17,3	28,9
1988	17,8	18,0	19,9	17,4	22,5	20,1	17,0	19,9	24,2	21,4	26,8	19,2	20,1	17,1	30,6
1989	19,5	17,8	20,7	18,6	23,9	20,5	18,2	20,1	25,6	21,7	27,0	19,6	20,6	16,6	32,4
1990	19,8	17,1	21,6	18,0	24,9	20,6	19,1	19,9	27,5	21,5	27,5	18,7	20,8	16,0	33,9
1981-90	17,2	17,6	20,4	18,9	21,2	20,2	21,0	20,9	23,6	19,8	26,4	17,5	19,9	17,4	29,8
1991	20,1	16,9	22,0	17,9	25,4	20,7	20,1	19,9	28,3	21,4	27,8	17,7	20,8	15,7	34,2

Table 21

Gross fixed capital formation at constant prices; total economy

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	12,4	13,9	6,7	8,1	17,9	10,9	16,9	11,6	9,1	6,0	6,7	9,8	9,8	1,4	23,4
1962	5,9	6,7	4,0	8,4	11,4	8,5	14,8	9,8	7,8	3,4	1,7	0,7	5,9	6,7	14,1
1963	0,1	−2,4	1,4	5,5	11,4	8,8	12,0	8,1	14,2	1,1	15,3	1,4	4,9	7,3	11,9
1964	14,7	23,5	11,4	20,7	15,0	10,5	10,8	−5,8	21,0	19,2	4,0	16,6	9,1	6,6	15,7
1965	4,1	4,7	4,7	12,8	16,6	7,0	10,5	−8,4	−13,1	5,3	10,3	5,2	3,6	9,3	4,6
1966	6,8	4,3	1,2	3,2	12,7	7,3	−3,0	4,3	−5,1	8,0	17,9	2,6	4,8	4,0	14,0
1967	2,9	5,4	−6,9	−1,6	6,0	5,9	6,8	11,7	−9,0	8,5	5,2	8,7	4,0	−1,0	18,1
1968	−1,3	1,9	3,6	21,4	9,4	5,6	13,2	10,8	−4,1	11,2	−9,3	6,3	6,5	6,4	20,5
1969	5,3	11,8	9,8	18,6	9,8	9,2	20,5	7,8	10,2	−2,2	8,1	−0,6	6,9	1,8	18,9
1970	8,4	2,2	9,4	−1,4	3,0	4,6	−3,3	3,0	9,2	7,5	11,4	2,5	5,1	−3,7	16,9
1961-70	5,8	7,0	4,4	9,3	11,2	7,8	9,6	5,1	3,5	6,7	6,9	5,2	6,1	3,8	15,7
1971	−1,9	1,9	6,1	14,0	−3,0	7,3	8,9	0,2	10,7	1,5	10,2	1,8	3,4	5,8	4,5
1972	3,4	9,3	2,7	15,4	14,2	5,6	7,8	1,3	7,0	−2,3	14,0	−0,2	3,8	8,7	10,0
1973	7,0	3,5	−0,3	7,7	13,0	7,2	16,2	8,8	11,8	4,2	10,3	6,5	6,0	6,2	12,6
1974	6,9	−8,9	−9,6	−25,6	6,2	0,8	−11,6	2,0	−7,0	−4,0	−6,1	−2,4	−2,3	−6,0	−9,5
1975	−1,9	−12,4	−5,3	0,2	−4,5	−6,8	−3,6	−7,3	−7,4	−4,4	−10,6	−2,0	−5,4	−10,7	−1,2
1976	4,0	17,1	3,6	6,8	−0,8	2,8	13,6	0,0	−4,2	−2,2	1,3	1,7	2,0	6,9	2,7
1977	0,0	−2,4	3,6	7,8	−0,9	−1,6	4,1	1,8	−0,1	9,7	11,5	−1,8	1,2	11,4	4,0
1978	2,8	1,1	4,7	6,0	−2,7	2,3	18,9	0,6	1,1	2,5	6,2	3,0	2,4	9,5	8,5
1979	−2,7	−0,4	7,2	8,8	−4,4	3,2	13,6	5,7	3,8	−1,7	−1,3	2,8	3,3	2,4	5,3
1980	4,6	−12,6	2,8	−6,5	0,7	2,7	−4,7	8,7	12,7	−0,9	8,5	−5,4	1,9	−6,8	0,0
1971-80	2,2	−0,8	1,4	2,8	1,6	2,3	5,9	2,1	2,6	0,2	4,1	0,4	1,6	2,5	3,5
1981	−16,2	−19,2	−4,8	−7,5	−3,3	−1,9	9,5	−3,2	−7,4	−10,0	5,5	−9,6	−5,0	−0,1	3,1
1982	−1,7	7,1	−5,3	−1,9	0,5	−1,2	−3,4	−5,2	−0,5	−4,3	2,3	5,4	−1,9	−8,7	0,8
1983	−4,4	1,9	3,2	−1,3	−2,5	−3,3	−9,3	−0,9	−11,5	1,9	−7,1	5,0	0,0	8,8	−0,3
1984	1,7	12,9	0,8	−5,7	−5,8	−2,6	−1,3	4,5	0,5	5,2	−17,4	8,6	1,3	15,9	4,9
1985	0,6	12,6	0,1	5,2	4,1	3,4	−8,2	1,4	−6,1	6,7	−3,5	3,9	2,4	6,9	5,8
1986	4,2	16,2	3,3	−6,2	10,0	3,5	−3,0	1,6	28,7	7,9	10,9	1,9	3,8	2,0	5,8
1987	5,2	−7,4	2,2	−7,8	14,6	3,8	−0,7	6,8	6,5	0,7	15,1	8,8	5,5	4,1	10,3
1988	16,0	−6,5	5,9	9,0	14,0	7,5	0,3	4,9	3,2	9,8	15,0	13,1	8,4	5,4	13,4
1989	13,6	−0,1	7,1	8,6	13,6	5,9	12,1	5,1	11,5	3,9	8,3	4,8	6,8	1,8	10,9
1990	7,0	−2,6	8,0	2,9	8,9	3,8	10,2	3,0	10,0	2,9	9,1	−1,2	4,4	0,6	9,9
1981-90	2,2	0,9	2,0	−0,7	5,2	1,8	0,4	1,7	2,9	2,3	3,3	3,9	2,5	3,5	6,4
1991	3,5	0,0	4,4	2,9	5,2	3,3	6,5	3,3	5,6	0,8	6,3	−1,6	2,9	−0,8	5,0

Table 22

Net stockbuilding at current prices; total economy

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	−0,1	4,4	2,9	−0,4	−0,5	3,0	2,0	2,1	2,4	3,3	1,4	2,2	2,3	0,7	3,9
1961	0,5	1,9	1,9	1,8	1,7	1,7	1,4	2,3	2,2	2,7	3,9	1,0	1,7	0,4	5,0
1962	0,0	2,9	1,7	1,1	3,6	2,3	1,6	1,7	5,6	1,5	1,8	0,0	1,5	1,1	2,0
1963	0,4	0,8	0,5	2,1	3,4	1,5	0,9	1,0	−0,1	1,1	2,0	0,5	1,1	0,9	2,2
1964	1,5	1,7	1,4	4,7	2,6	2,4	1,2	0,5	−1,2	3,0	3,3	2,1	1,8	0,7	2,9
1965	0,8	2,3	2,3	4,7	3,0	1,6	2,3	0,7	2,1	1,9	4,4	1,3	1,7	1,3	2,1
1966	1,0	0,8	1,0	0,6	2,9	2,0	0,8	0,8	1,7	1,3	1,8	0,8	1,3	1,5	2,1
1967	0,4	0,0	−0,1	2,0	1,4	1,8	−0,4	1,1	−3,0	0,9	0,6	0,7	0,8	1,2	3,4
1968	0,9	0,6	2,1	−0,1	0,8	1,8	1,1	0,0	−1,9	0,6	3,1	1,0	1,2	1,0	3,6
1969	1,9	1,3	2,9	1,3	2,5	2,6	2,4	0,7	−1,2	2,1	1,8	1,1	1,9	1,1	3,1
1970	1,6	1,0	2,0	4,5	0,8	2,5	1,7	2,8	3,2	2,0	5,9	0,7	2,0	0,1	3,5
1961-70	0,9	1,3	1,6	2,3	2,3	2,0	1,3	1,2	0,7	1,7	2,9	0,9	1,5	0,9	3,0
1971	1,4	0,6	0,6	2,7	0,9	1,5	0,3	1,0	1,7	1,1	3,2	0,2	0,9	0,7	1,5
1972	0,5	0,2	0,6	1,8	0,9	1,6	1,4	0,9	1,2	0,5	3,6	0,0	0,8	0,7	1,4
1973	1,3	1,3	1,3	7,8	0,8	2,0	1,6	2,3	0,2	1,4	5,9	2,1	1,9	1,2	1,7
1974	2,2	1,2	0,2	7,1	2,2	2,3	4,4	4,2	−3,0	2,3	5,2	1,2	2,0	0,9	2,5
1975	−0,6	−0,2	−0,7	6,2	2,1	−0,7	0,6	−1,0	−4,4	−0,4	−3,3	−1,3	−0,5	−0,3	0,3
1976	0,2	1,0	1,4	5,1	2,0	1,4	0,4	3,0	−1,7	1,2	1,8	0,7	1,6	1,0	0,7
1977	0,3	0,8	0,7	3,5	1,1	1,5	3,2	1,4	−4,2	0,6	2,5	1,3	1,2	1,3	0,7
1978	0,1	−0,2	0,5	3,7	0,2	0,8	1,4	1,4	1,4	0,6	2,6	1,1	0,9	1,4	0,5
1979	0,7	0,5	1,7	4,3	0,8	1,3	2,5	1,8	−1,9	0,5	2,9	1,1	1,4	0,5	0,8
1980	0,7	−0,3	0,8	4,4	1,2	1,2	−0,8	2,7	−1,2	0,5	4,2	−1,1	1,0	−0,2	0,7
1971-80	0,7	0,5	0,7	4,6	1,2	1,3	1,5	1,8	−1,2	0,8	2,9	0,5	1,1	0,7	1,1
1981	−0,1	−0,2	−0,8	3,1	−0,3	−0,2	−1,3	0,9	−0,4	−0,9	3,7	−1,1	−0,2	1,1	0,5
1982	0,1	0,2	−0,7	1,2	−0,1	0,5	1,3	1,2	0,4	−0,3	3,0	−0,4	0,2	−0,4	0,4
1983	−0,7	0,0	−0,1	1,6	−0,5	−0,4	0,7	0,5	3,6	0,1	−0,9	0,5	0,0	−0,3	0,1
1984	0,4	1,2	0,3	1,6	0,0	−0,3	1,6	1,9	5,1	0,5	−1,3	0,4	0,5	1,8	0,4
1985	−0,8	0,8	0,0	2,4	−0,1	−0,4	1,1	1,8	2,4	0,6	−1,2	0,2	0,3	0,6	0,7
1986	−0,5	0,8	0,1	0,8	0,7	0,3	0,9	1,0	−1,2	−0,4	0,2	0,2	0,3	0,3	0,5
1987	0,2	−0,6	0,2	0,6	1,1	0,3	0,0	0,8	0,1	−0,5	3,3	0,3	0,5	0,6	0,2
1988	0,5	−0,7	0,7	1,0	1,4	0,8	−0,8	1,5	0,3	−0,6	2,8	0,9	0,9	0,3	0,3
1989	0,7	0,4	1,3	−0,2	1,4	0,4	0,4	1,4	0,3	−0,5	2,6	0,6	0,9	0,4	:
1990	0,7	0,1	0,0	−0,2	1,5	0,4	1,8	1,5	0,3	0,0	2,4	−0,2	0,5	0,2	:
1981-90	0,0	0,2	0,1	1,2	0,5	0,2	0,6	1,2	1,1	−0,2	1,5	0,1	0,4	0,5	:
1991	0,6	0,0	0,2	−0,2	1,2	0,4	−0,4	1,5	0,1	0,0	2,2	−0,6	0,4	0,4	:

Table 23

Price deflator gross domestic product at market prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	1,3	4,3	4,7	1,5	1,8	3,4	2,5	2,8	−4,2	2,4	2,3	2,7	3,2	0,8	7,8
1962	1,7	6,6	3,8	4,6	5,7	4,7	4,9	5,8	3,9	3,5	−0,2	4,0	4,4	2,2	4,2
1963	3,0	5,8	3,1	1,4	8,5	6,4	2,7	8,5	4,0	4,7	2,5	2,1	4,9	1,2	5,5
1964	4,6	4,6	3,0	3,7	6,3	4,4	9,7	6,5	6,2	8,7	1,1	3,7	4,6	1,1	5,3
1965	5,1	7,4	3,6	4,0	9,4	2,7	4,5	4,2	3,0	6,1	3,8	5,1	4,6	2,4	5,1
1966	4,2	6,8	3,3	4,9	8,1	2,9	4,4	2,2	3,4	6,0	5,5	4,5	4,0	4,2	5,0
1967	3,1	6,3	1,4	2,4	7,7	3,2	3,2	2,8	−1,0	4,2	3,4	2,9	3,1	3,4	5,5
1968	2,7	7,0	2,2	1,7	5,0	4,2	4,2	1,7	5,0	4,2	1,4	4,1	3,3	4,9	4,9
1969	4,0	7,0	4,2	3,4	4,4	6,6	9,1	4,1	6,3	6,4	6,1	5,4	5,1	5,0	4,4
1970	4,6	8,3	7,6	3,9	6,8	5,6	9,7	6,9	14,5	6,2	3,4	7,4	6,8	5,4	6,5
1961-70	3,4	6,4	3,7	3,1	6,4	4,4	5,5	4,5	4,0	5,2	2,9	4,2	4,4	3,0	5,4
1971	5,6	7,7	8,0	3,2	7,9	6,4	10,5	6,9	−0,8	8,1	5,1	9,4	7,6	5,1	5,5
1972	6,2	9,2	5,3	5,0	8,6	7,4	13,4	6,5	5,8	9,4	7,8	8,2	7,1	4,6	5,6
1973	7,2	10,7	6,4	19,4	12,0	8,5	15,3	13,2	12,2	9,0	9,4	7,1	9,1	6,6	12,9
1974	12,6	13,1	7,0	20,9	16,3	12,3	6,1	19,8	17,0	9,2	18,9	14,9	13,4	9,1	20,8
1975	12,1	12,4	6,0	12,3	16,8	13,0	20,1	16,5	−0,9	10,2	16,2	27,1	15,0	9,9	7,7
1976	7,6	9,1	3,6	15,4	16,5	11,0	21,0	18,4	12,2	9,0	16,3	15,1	11,9	6,2	7,2
1977	7,5	9,4	3,7	13,0	23,2	8,9	13,3	18,6	1,2	6,7	26,5	13,9	11,9	6,7	5,8
1978	4,4	9,9	4,3	12,9	20,6	10,1	10,5	14,1	5,1	5,4	22,3	11,3	10,5	7,3	4,8
1979	4,5	7,6	4,0	18,6	17,1	10,2	13,7	15,3	6,4	3,9	19,4	14,5	10,9	8,9	3,0
1980	3,8	8,2	4,8	17,7	14,2	11,6	14,7	20,0	7,9	5,7	20,9	19,5	13,0	9,2	3,8
1971-80	7,1	9,7	5,3	13,7	15,2	9,9	13,8	14,8	6,5	7,6	16,1	14,0	11,0	7,4	7,6
1981	4,7	10,1	4,0	19,8	12,0	11,4	17,4	18,6	7,2	5,5	17,6	11,4	10,9	9,5	3,2
1982	7,1	10,6	4,4	25,1	13,8	12,0	15,2	17,1	10,8	6,1	20,7	7,6	10,6	6,5	1,9
1983	5,6	7,6	3,3	19,1	11,6	9,6	10,7	14,9	6,8	1,9	24,6	5,3	8,5	3,4	0,8
1984	5,2	5,7	2,0	20,3	10,9	7,3	6,5	11,4	4,4	1,9	24,7	4,6	6,9	3,6	1,2
1985	6,0	4,3	2,2	17,7	8,5	5,8	5,1	8,9	3,0	1,8	21,7	5,6	6,0	2,7	1,4
1986	3,5	4,7	3,1	17,8	10,9	5,2	6,1	7,5	1,7	0,5	20,5	3,5	5,5	2,5	1,8
1987	2,1	5,1	2,0	14,2	5,9	3,0	2,0	6,1	0,9	−0,4	11,2	4,8	4,1	2,9	−0,2
1988	2,0	4,9	1,5	14,5	5,7	3,3	2,9	6,0	2,2	1,9	11,6	6,6	4,5	3,2	0,4
1989	4,5	4,5	2,6	15,5	6,9	3,4	5,1	6,3	3,8	1,5	12,5	7,0	5,1	4,1	1,5
1990	3,3	3,0	3,7	20,8	7,4	3,5	2,1	7,1	3,1	2,9	13,9	7,7	5,7	4,2	1,6
1981-90	4,4	6,0	2,9	18,4	9,3	6,4	7,2	10,3	4,4	2,3	17,8	6,4	6,8	4,2	1,4
1991	4,4	2,3	4,4	17,7	6,8	3,4	3,3	6,7	3,8	2,8	12,6	6,8	5,5	5,5	2,1

Table 24

Price deflator private consumption

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	2,7	3,5	3,6	1,1	1,8	3,4	2,3	1,7	0,5	2,4	0,6	2,9	2,8	1,2	6,4
1962	1,1	6,2	3,2	1,3	5,3	4,4	4,1	5,3	0,7	2,6	2,0	3,7	3,9	1,8	6,7
1963	3,7	5,6	3,1	3,4	7,8	5,7	2,4	7,0	3,2	3,8	1,1	1,7	4,3	1,7	7,3
1964	4,2	4,0	2,3	2,2	6,7	3,8	7,0	4,9	3,7	6,8	0,8	3,6	3,9	1,5	4,1
1965	4,6	6,1	3,4	4,6	9,7	2,6	4,4	3,6	3,5	4,0	4,8	4,9	4,2	1,9	6,8
1966	4,1	6,5	3,5	3,5	7,3	3,2	3,9	2,9	3,5	5,4	5,5	4,0	3,9	3,1	4,6
1967	2,5	7,4	1,6	1,9	5,8	3,0	2,8	3,2	2,7	3,0	1,5	2,6	2,9	2,5	3,9
1968	2,9	7,1	1,6	0,7	5,1	5,0	4,8	1,5	2,5	2,6	4,3	4,7	3,3	4,4	5,1
1969	2,8	4,6	2,3	3,0	3,4	7,1	7,8	2,9	2,1	6,1	4,9	5,5	4,3	4,4	4,2
1970	2,5	6,6	4,0	3,1	6,6	5,1	12,4	5,0	4,5	4,4	3,2	5,9	5,0	4,4	7,2
1961-70	3,1	5,8	2,9	2,5	5,9	4,3	5,1	3,8	2,7	4,1	2,8	4,0	3,9	2,7	5,6
1971	5,3	8,3	6,1	2,9	7,8	6,2	9,4	5,5	4,5	7,9	7,0	8,7	6,7	4,8	6,7
1972	5,4	8,2	5,8	3,3	7,6	6,4	9,7	6,3	5,1	8,3	6,3	6,5	6,4	2,9	5,6
1973	6,1	11,7	6,6	15,0	11,4	7,6	11,6	13,9	4,8	8,5	8,9	8,6	9,2	6,0	10,7
1974	12,8	15,0	7,5	23,5	17,8	15,1	15,7	21,4	9,6	9,5	23,5	17,0	15,0	10,6	21,2
1975	12,3	9,9	6,3	12,7	15,5	12,1	18,0	16,5	10,3	10,1	16,0	23,6	14,0	8,0	11,3
1976	7,8	9,9	4,2	13,4	16,5	10,0	20,0	17,8	9,3	9,0	18,1	15,8	11,8	5,8	9,2
1977	7,2	10,6	3,7	11,9	23,7	9,6	14,1	17,6	5,4	6,1	27,3	14,8	12,0	6,6	7,2
1978	4,2	9,2	2,8	12,8	19,0	9,0	7,9	13,2	3,4	4,5	21,3	9,1	9,2	7,0	4,5
1979	3,9	10,4	4,0	16,5	16,5	10,9	14,9	14,5	4,9	4,3	25,2	13,6	10,8	9,3	3,6
1980	6,4	10,7	5,8	21,9	16,5	13,5	18,6	20,4	7,6	6,9	21,6	16,2	13,6	11,0	7,1
1971-80	7,1	10,4	5,3	13,2	15,1	10,0	13,9	14,6	6,5	7,5	17,3	13,3	10,8	7,2	8,6
1981	8,6	12,0	6,0	22,7	14,3	13,4	19,6	18,2	8,7	5,8	20,2	11,2	12,1	9,3	4,4
1982	7,8	10,2	4,7	20,7	14,5	11,8	14,9	16,9	10,6	5,5	20,3	8,7	10,7	6,0	2,6
1983	7,2	6,8	3,2	18,1	12,3	9,7	9,2	15,1	8,5	2,9	25,8	5,0	8,6	3,5	1,9
1984	5,7	6,4	2,5	17,9	11,0	7,9	7,6	11,9	6,9	2,2	28,5	5,1	7,3	3,9	2,1
1985	5,9	4,3	2,1	18,3	8,2	6,0	4,7	9,0	4,5	2,2	19,4	5,2	5,9	3,1	2,2
1986	0,3	3,5	−0,2	22,0	8,7	2,9	4,0	5,7	1,2	0,2	13,8	4,4	3,8	2,0	0,6
1987	1,8	4,4	0,8	15,6	5,4	3,3	2,6	5,0	1,5	−0,4	10,0	3,9	3,5	4,4	−0,1
1988	1,8	4,9	1,3	14,0	5,1	3,0	2,5	4,8	2,6	0,7	10,0	5,0	3,7	4,1	0,0
1989	3,4	5,0	3,2	14,4	6,6	3,3	3,9	6,0	4,0	2,1	12,8	6,1	4,9	4,5	1,7
1990	3,6	2,8	2,8	20,5	6,8	3,4	2,8	6,1	3,5	2,4	13,2	7,0	5,1	5,1	2,5
1981-90	4,6	6,0	2,6	18,4	9,2	6,4	7,0	9,8	5,1	2,3	17,2	6,1	6,5	4,6	1,8
1991	4,5	3,3	3,9	18,5	6,6	3,6	3,5	6,3	4,0	2,8	12,6	6,3	5,3	6,3	2,3

Table 25

Price deflator exports of goods and services

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	0.6	−1,2	0,3	0,2	2,0	0,3	−0,1	−0,8	−2,7	−1,7	−1,1	1,2	0,3	1,4	−0,7
1962	1,0	2,5	0,5	1,1	4,8	1,1	1,9	0,9	−1,4	−0,1	−0,9	0,8	1,1	0,1	−1,5
1963	2,1	2,8	0,9	8,0	6,3	2,8	2,1	3,3	0,2	2,6	3,2	3,7	3,3	0,0	2,5
1964	4,2	3,4	2,5	0,9	2,8	4,4	4,7	4,1	2,0	2,5	3,9	2,1	2,9	0,8	1,6
1965	1,4	2,2	2,5	−1,1	5,6	1,0	1,9	0,0	1,1	2,3	3,0	2,0	1,8	4,0	−0,4
1966	3,7	3,0	2,5	3,9	5,7	2,0	1,9	0,2	0,9	0,7	−1,8	2,5	1,9	3,5	−0,2
1967	0,5	1,2	0,2	−2,7	7,9	−0,4	0,6	1,1	0,2	0,0	3,7	2,7	1,3	3,0	0,2
1968	0,2	3,0	−0,1	−1,3	9,2	−0,5	6,2	0,3	1,3	−0,5	2,3	7,7	2,2	6,8	0,1
1969	4,6	6,7	4,1	0,5	1,6	4,8	6,1	2,7	6,5	2,2	−1,5	2,2	3,2	3,5	1,5
1970	5,7	6,5	4,4	3,1	5,0	7,7	−6,1	6,1	14,5	5,8	5,4	8,0	6,1	5,1	2,9
1961-70	2,4	3,0	1,8	1,2	5,1	2,3	1,9	1,8	2,2	1,3	1,6	3,3	2,4	2,8	0,6
1971	2,1	3,5	4,0	1,7	6,0	5,4	7,3	4,6	−2,8	3,2	2,9	5,0	4,3	5,4	2,7
1972	1,7	6,9	2,0	5,7	6,1	1,4	11,5	4,3	0,9	1,8	5,2	4,1	2,9	−2,4	−0,7
1973	8,3	12,0	6,3	26,1	9,4	8,3	19,7	14,8	14,9	7,2	9,4	11,9	10,1	12,9	9,1
1974	24,5	20,5	15,1	31,6	22,4	24,5	23,0	38,2	26,8	26,0	39,5	24,9	25,3	22,7	30,7
1975	5,5	7,7	4,2	12,9	10,7	4,9	18,4	13,5	−0,9	5,1	1,0	20,7	10,1	10,8	3,1
1976	5,8	7,0	3,6	10,0	16,4	9,7	23,0	23,0	8,6	6,6	7,1	19,8	12,6	3,5	1,7
1977	3,7	6,7	1,9	9,9	19,4	9,2	14,8	15,8	−2,8	3,6	35,5	15,3	10,8	4,6	−3,6
1978	1,2	6,3	1,5	8,2	15,8	6,3	6,6	9,0	2,3	−1,3	25,9	7,7	6,5	6,6	−5,6
1979	9,0	8,2	4,8	14,5	9,3	9,9	9,6	16,4	8,0	8,3	27,6	11,4	10,9	13,0	9,1
1980	9,3	14,6	6,1	34,0	19,3	12,0	10,8	23,6	7,8	12,3	25,2	14,3	14,4	10,3	9,2
1971-80	6,9	9,2	4,9	15,0	13,4	9,0	14,3	15,9	5,9	7,1	17,2	13,3	10,6	8,6	5,2
1981	9,8	12,7	5,5	25,5	17,9	14,1	16,4	20,1	9,3	13,4	18,5	8,4	13,0	7,6	1,1
1982	13,2	10,6	4,0	20,7	13,8	12,7	10,8	15,5	15,3	4,2	19,8	6,8	10,4	0,9	2,7
1983	7,3	5,2	1,9	19,3	16,8	9,9	9,1	9,0	5,8	0,1	30,0	7,9	8,0	−0,1	−6,8
1984	8,1	7,7	3,3	15,7	12,6	9,6	8,1	10,7	5,2	5,5	30,2	7,7	8,8	0,7	−2,5
1985	2,8	3,6	2,7	17,0	6,7	4,6	3,1	8,0	3,9	1,5	17,6	5,1	5,2	−3,3	−1,9
1986	−8,6	−5,2	−1,4	10,6	−1,9	−3,5	−6,3	−4,0	−3,1	−15,3	4,5	−7,9	−4,6	−1,7	−13,6
1987	−3,7	−1,6	−1,0	7,5	2,4	0,1	0,4	2,1	−5,1	−6,5	11,4	3,5	0,6	−1,7	−4,8
1988	2,9	1,1	1,9	8,9	3,7	2,8	5,7	4,5	1,7	0,8	8,9	0,6	2,9	3,8	0,5
1989	6,6	6,1	2,6	13,9	4,7	5,4	7,3	6,7	5,8	5,7	7,3	8,9	6,2	1,8	6,9
1990	−0,7	−0,2	1,5	12,8	0,9	0,7	−3,6	2,4	2,1	−1,1	7,3	5,1	2,3	1,3	6,8
1981-90	3,6	3,8	2,1	15,1	7,6	5,5	4,9	7,3	3,9	0,5	15,2	4,5	5,2	0,9	−1,3
1991	4,0	2,0	3,7	12,3	3,4	2,9	2,5	3,9	4,3	3,8	8,3	2,5	4,0	4,6	1,6

Table 26

Price deflator imports of goods and services

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	2,6	0,1	−2,4	−1,7	2,0	0,1	1,1	−2,2	1,4	−1,9	1,0	0,0	−0,7	−1,4	1,2
1962	0,8	−0,1	−0,1	−0,7	2,0	2,8	0,5	0,4	0,7	−0,9	−1,3	−0,2	0,5	−1,2	−2,2
1963	4,0	1,9	2,4	3,0	2,0	1,1	1,9	1,5	0,8	1,4	1,6	4,3	2,7	3,0	1,8
1964	3,2	1,3	1,7	3,0	2,4	0,9	1,3	3,4	1,4	2,4	2,2	2,1	2,3	2,2	1,5
1965	0,2	1,6	2,9	0,3	0,2	1,4	2,6	0,6	1,9	0,5	2,8	1,1	1,3	2,6	−0,7
1966	3,2	1,6	2,0	3,3	0,2	3,2	0,2	1,9	1,4	0,7	0,0	1,3	1,1	4,4	2,3
1967	0,5	2,5	−1,4	−3,0	2,8	−1,4	−0,3	0,7	−0,7	−0,9	−2,4	1,4	−0,2	2,4	−0,1
1968	0,6	5,0	0,4	0,2	10,7	−1,0	7,9	0,7	−0,1	−2,9	−2,5	10,6	2,9	2,3	0,7
1969	3,2	2,9	2,4	0,0	3,0	4,9	4,2	1,4	3,0	3,3	0,9	2,5	2,3	2,6	2,9
1970	5,1	5,6	−0,2	4,0	5,1	9,7	0,7	3,7	11,5	6,6	9,3	6,3	4,8	6,1	2,1
1961-70	2,3	2,2	0,7	0,8	3,0	2,1	2,0	1,2	2,1	0,8	1,1	2,9	1,7	2,3	1,0
1971	3,4	6,1	1,0	2,9	5,4	4,8	5,4	4,9	5,3	4,3	1,4	4,1	3,7	5,0	−1,7
1972	0,4	2,0	2,1	7,7	1,5	0,4	5,7	4,5	−0,2	−0,4	3,4	2,7	1,8	5,4	−4,4
1973	7,5	16,8	8,1	21,9	10,4	7,2	13,9	27,1	9,5	7,5	14,1	23,4	14,4	11,4	18,5
1974	27,5	32,7	22,9	41,6	41,9	48,6	44,4	55,9	22,4	32,7	43,8	41,5	38,9	44,5	63,5
1975	6,7	4,9	3,2	17,4	7,0	2,6	20,5	9,9	10,8	4,3	13,9	13,6	7,4	7,4	9,1
1976	6,4	8,5	5,0	11,2	14,9	12,0	19,0	25,3	6,5	6,4	11,2	21,8	13,6	3,1	5,9
1977	3,1	7,7	2,2	5,8	22,1	12,2	16,8	14,9	1,8	3,2	30,7	13,7	10,7	7,7	−3,7
1978	1,1	2,7	−2,1	9,7	7,6	3,0	4,7	7,7	2,8	−1,6	22,1	2,8	3,6	9,8	−14,7
1979	8,9	13,7	8,0	17,7	7,2	11,4	13,7	19,7	7,5	10,9	30,5	9,1	12,4	17,7	28,7
1980	13,6	21,7	12,3	35,2	37,9	22,0	18,0	29,0	7,8	14,5	31,3	9,8	19,3	26,4	38,8
1971-80	7,6	11,3	6,1	16,5	14,9	11,7	15,7	19,1	7,3	7,8	19,5	13,7	12,1	13,3	11,9
1981	14,1	17,7	11,6	19,5	29,8	19,3	18,6	28,0	10,3	14,3	25,6	7,9	17,7	5,2	0,8
1982	13,4	10,1	2,9	24,0	12,9	12,8	7,5	12,4	13,7	1,3	18,1	6,9	9,3	−2,8	3,5
1983	7,4	3,7	0,6	17,6	21,5	8,5	5,2	5,3	8,1	0,4	29,9	7,5	7,1	−3,4	−5,7
1984	8,1	7,9	4,7	22,8	11,5	10,1	9,4	10,8	7,6	5,7	31,2	8,8	9,4	−1,0	−3,0
1985	2,1	3,2	2,0	17,8	3,8	2,3	2,6	7,6	2,9	1,2	13,0	4,0	4,1	−2,2	−3,2
1986	−12,5	−9,3	−11,7	8,4	−16,3	−12,2	−10,2	−14,9	−3,0	−16,2	−6,8	−4,1	−10,7	−0,5	−33,3
1987	−4,4	−2,2	−4,6	0,4	0,2	−0,5	1,1	−0,4	−2,6	−5,6	12,6	2,7	−1,0	3,7	−4,3
1988	2,8	2,1	1,4	6,6	2,1	2,8	6,3	4,1	1,2	−0,1	11,6	−0,7	2,2	3,2	−0,4
1989	6,5	6,2	4,8	12,3	2,2	6,6	6,9	7,5	6,0	5,9	8,0	6,4	6,1	0,7	11,8
1990	−0,3	−1,4	0,7	9,8	−0,5	0,3	−2,8	0,9	3,0	−2,1	7,2	2,3	0,9	2,1	12,0
1981-90	3,4	3,6	1,1	13,7	6,0	4,7	4,2	5,6	4,6	0,2	14,5	4,1	4,3	0,5	−3,0
1991	4,9	3,5	3,7	13,2	3,1	3,1	4,3	4,1	4,5	4,2	8,6	0,7	3,7	8,6	7,8

Table 27

Terms of trade (goods and services)

(1980 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	USA	J
1960	106,0	112,1	100,7	109,8	93,9	125,5	114,7	123,4	112,2	101,9	116,8	99,7	145,1	193,6
1961	103,9	110,7	103,5	111,9	93,8	125,7	113,3	125,3	107,7	102,1	114,4	100,9	149,1	189,8
1962	104,1	113,5	104,2	114,0	96,4	123,7	114,9	125,9	105,5	102,9	114,9	102,0	151,1	191,0
1963	102,2	114,5	102,7	119,6	100,5	125,7	115,0	128,0	104,9	104,1	116,7	101,4	146,8	192,4
1964	103,2	116,9	103,5	117,1	100,9	130,1	118,9	128,9	105,5	104,2	118,6	101,4	144,8	192,5
1965	104,4	117,5	103,2	115,5	106,3	129,6	118,1	128,1	104,7	106,0	118,9	102,2	146,8	193,1
1966	105,0	119,1	103,8	116,1	112,1	128,1	120,0	126,0	104,2	106,0	116,7	103,5	145,6	188,4
1967	105,0	117,6	105,5	116,5	117,6	129,4	121,1	126,5	105,2	106,9	124,0	104,8	146,5	188,9
1968	104,5	115,4	105,0	114,7	116,0	130,1	119,3	126,0	106,7	109,4	130,1	102,1	152,8	187,7
1969	106,0	119,7	106,8	115,2	114,4	130,0	121,4	127,6	110,3	108,2	126,9	101,8	154,2	185,2
1970	106,6	120,7	111,8	114,2	114,3	127,6	113,2	130,6	113,2	107,3	122,3	103,6	152,8	186.5
1971	105,3	117,8	115,0	112,8	114,9	128,3	115,2	130,1	104,5	106,2	124,1	104,5	153,3	194,9
1972	106,7	123,5	115,0	110,7	120,2	129,6	121,5	129,9	105,7	108,6	126,2	105,9	141,9	202,5
1973	107,5	118,5	113,1	114,5	119,1	131,0	127,7	117,3	110,8	108,2	121,0	96,1	143,9	186,4
1974	104,9	107,6	105,9	106,4	102,7	109,7	108,8	104,0	114,8	102,8	117,3	84,8	122,2	149,0
1975	103,8	110,4	106,9	102,3	106,4	112,2	106,9	107,4	102,7	103,6	104,1	90,0	126,1	140,9
1976	103,2	108,9	105,5	101,2	107,7	109,9	110,5	105,4	104,7	103,7	100,3	88,6	126,6	135,3
1977	103,8	107,8	105,2	105,2	105,4	107,0	108,5	106,1	100,0	104,1	103,9	89,8	123,0	135,4
1978	103,8	111,5	109,1	103,7	113,4	110,4	110,5	107,4	99,5	104,4	107,2	94,0	119,3	149,9
1979	103,9	106,2	105,8	100,9	115,6	108,9	106,5	104,4	100,0	101,9	104,8	96,1	114,6	127,1
1980	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1981	96,2	95,7	94,5	105,0	90,8	95,6	98,1	93,8	99,0	99,3	94,4	100,5	102,2	100,3
1982	96,0	96,1	95,5	102,2	91,5	95,5	101,1	96,4	100,5	102,0	95,7	100,5	106,1	99,6
1983	95,9	97,5	96,8	103,7	88,0	96,8	104,8	99,9	98,3	101,7	95,8	100,9	109,7	98,4
1984	95,9	97,3	95,5	97,6	88,9	96,4	103,5	99,8	96,1	101,5	95,1	99,9	111,6	98,9
1985	96,6	97,6	96,1	97,0	91,4	98,5	104,1	100,2	97,0	101,7	98,9	100,9	110,3	100,3
1986	100,9	102,1	107,3	99,0	107,1	108,3	108,6	113,0	97,0	102,9	110,9	96,9	109,0	129,9
1987	101,7	102,7	111,4	105,9	109,5	109,0	107,8	115,9	94,5	102,0	109,7	97,6	103,3	129,2
1988	101,8	101,6	111,9	108,2	111,1	109,0	107,1	116,4	94,9	102,9	107,1	98,8	103,9	130,4
1989	101,9	101,5	109,5	109,7	113,8	107,7	107,6	115,5	94,7	102,7	106,4	101,1	105,0	124,7
1990	101,5	102,8	110,4	112,7	115,4	108,2	106,6	117,2	93,9	103,8	106,5	103,9	104,2	118,9
1991	100,6	101,3	110,3	111,9	115,7	107,9	104,8	117,0	93,7	103,5	106,2	105,8	100,4	112,1

Table 28

Nominal compensation per employee; total economy

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	3,2	12,9	10,2	3,7	12,9	10,6	8,3	8,2	2,9	7,4	5,1	6,8	8,7	3,2	13,2
1962	7,2	11,1	9,1	7,1	15,2	11,6	8,5	13,5	4,8	6,8	4,9	4,7	9,0	4,3	14,1
1963	8,0	4,6	6,1	7,5	21,1	11,4	5,2	19,7	8,0	9,3	8,6	5,0	9,9	4,0	13,2
1964	9,7	10,7	8,2	13,1	13,7	9,2	13,7	12,3	13,3	16,5	8,3	7,1	9,7	5,1	13,1
1965	9,5	13,8	9,5	12,0	15,6	6,5	5,3	7,7	4,2	11,7	10,5	6,8	8,6	3,7	11,9
1966	8,6	10,2	7,6	12,4	18,1	6,0	8,5	7,9	5,0	11,1	10,5	6,4	8,1	5,1	11,2
1967	7,4	10,9	3,3	9,3	14,7	6,9	8,0	8,4	2,8	9,3	13,8	6,2	6,9	4,3	12,1
1968	6,3	10,0	6,7	9,7	8,8	11,3	10,6	7,4	5,9	8,6	3,6	7,8	8,1	7,4	13,7
1969	8,4	11,0	9,5	9,4	11,8	11,1	13,9	7,6	5,6	13,2	10,0	6,8	9,2	7,4	15,8
1970	9,4	11,0	16,0	9,0	9,4	10,3	16,8	15,7	15,1	12,4	18,2	13,4	13,1	7,6	16,7
1961-70	7,8	10,6	8,6	9,3	14,1	9,5	9,8	10,8	6,7	10,6	9,3	7,1	9,1	5,2	13,5
1971	11,7	11,6	11,6	8,3	13,6	11,3	14,8	13,4	7,8	13,8	15,3	11,3	12,0	7,2	14,6
1972	14,0	8,0	9,9	13,4	17,7	10,1	15,8	10,6	9,7	12,8	16,0	13,3	11,7	7,4	14,2
1973	13,0	13,1	12,1	18,0	18,3	12,2	18,8	17,7	11,4	15,4	17,5	13,3	14,3	7,0	21,0
1974	18,2	18,4	11,5	20,0	21,3	18,1	18,0	22,6	22,9	15,7	34,9	18,7	18,0	8,1	25,7
1975	16,5	13,9	7,2	21,1	22,5	18,8	28,9	20,8	12,3	13,3	38,1	31,2	19,1	9,0	16,2
1976	16,0	11,7	7,9	21,3	23,4	14,9	19,6	20,9	11,1	10,8	24,3	14,8	15,1	8,2	11,1
1977	8,8	9,7	6,6	22,8	26,8	12,4	14,9	20,8	9,9	8,5	23,2	10,7	13,4	7,5	10,1
1978	7,2	9,2	5,6	23,3	24,8	12,6	15,5	16,5	5,9	7,2	18,7	13,4	12,7	7,6	7,5
1979	5,5	9,4	5,9	23,4	19,0	13,0	18,9	19,9	6,7	6,0	20,0	15,3	13,1	8,8	6,0
1980	9,6	10,0	6,9	16,1	17,3	15,3	21,1	21,5	9,0	5,5	25,6	19,6	15,0	10,0	6,5
1971-80	12,0	11,5	8,5	18,7	20,4	13,8	18,6	18,4	10,6	10,8	23,1	16,0	14,4	8,1	13,1
1981	6,2	9,2	5,2	21,5	15,3	14,3	18,1	22,6	8,5	3,5	21,0	14,0	13,2	9,4	6,6
1982	7,8	11,9	4,2	27,8	13,7	14,1	14,2	16,2	6,9	5,8	21,6	8,5	11,0	7,7	4,3
1983	6,1	8,2	3,7	21,4	13,8	10,1	12,8	16,0	6,9	3,2	21,8	8,6	9,8	5,1	2,7
1984	6,7	5,5	3,5	22,3	10,0	8,2	11,2	11,8	7,1	0,2	21,2	5,4	7,5	4,1	4,2
1985	4,5	4,7	3,1	25,2	9,4	6,6	7,9	10,1	3,5	1,4	22,5	6,9	7,0	4,1	3,4
1986	4,7	4,9	3,8	12,8	9,5	4,3	4,6	7,4	5,2	1,6	21,6	7,3	6,2	4,1	3,4
1987	2,0	8,4	3,1	11,3	6,4	3,5	6,1	9,3	3,9	1,4	17,9	6,2	5,5	4,2	2,9
1988	1,8	4,6	3,1	17,2	6,4	4,0	4,1	8,8	3,1	1,4	13,4	7,2	5,6	5,1	3,7
1989	3,9	3,5	2,8	18,8	5,8	4,9	2,3	9,2	3,9	0,5	13,0	8,8	6,0	3,8	4,0
1990	6,2	3,3	4,7	18,0	8,2	5,4	4,3	8,9	6,2	4,7	16,9	10,4	7,5	5,2	5,6
1981-90	5,0	6,4	3,7	19,5	9,8	7,5	8,4	11,9	5,5	2,4	19,0	8,3	7,9	5,3	4,1
1991	7,1	3,0	5,1	16,7	7,4	4,7	5,4	9,0	5,3	4,4	15,6	8,7	7,0	6,5	5,4

Table 29

Real compensation per employee, deflator GDP; total economy

(Annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	1,9	8,2	5,2	2,2	10,9	6,9	5,6	5,3	7,4	4,9	2,8	4,0	5,3	2,4	5,1
1962	5,5	4,2	5,0	2,4	8,9	6,7	3,4	7,3	0,9	3,2	5,1	0,6	4,4	2,1	9,5
1963	4,8	−1,1	2,9	6,0	11,6	4,7	2,4	10,4	3,8	4,4	6,0	2,8	4,8	2,8	7,3
1964	4,8	5,8	5,0	9,1	6,9	4,6	3,7	5,5	6,7	7,2	7,1	3,3	4,9	3,9	7,4
1965	4,2	5,9	5,7	7,7	5,6	3,7	0,8	3,4	1,1	5,2	6,5	1,7	3,9	1,2	6.4
1966	4,3	3,1	4,2	7,2	9,3	3,1	3,9	5,5	1,6	4,8	4,8	1,9	3,9	0,8	5,9
1967	4,1	4,4	1,9	6,7	6,5	3,6	4,6	5,5	3,8	4,8	10,0	3,1	3,7	0,9	6,2
1968	3,5	2,8	4,4	7,8	3,7	6,8	6,1	5,5	0,9	4,2	2,2	3,6	4,7	2,4	8,4
1969	4,2	3,7	5,1	5,9	7,1	4,2	4,4	3,4	−0,6	6.3	3,7	1,3	3,9	2,3	10,9
1970	4,6	2,4	7,8	4,9	2,4	4,5	6,5	8,2	0,5	5,9	14,3	5,6	6,0	2,2	9,6
1961-70	4,2	3,9	4,7	6,0	7,3	4,9	4,1	6,0	2,6	5,1	6,2	2,8	4,5	2,1	7,7
1971	5,7	3,7	3,3	4,9	5,3	4,6	3,8	6,0	8,7	5,3	9,7	1,8	4,1	2,0	8,7
1972	7,3	−1,1	4,4	8,0	8,4	2,5	2,1	3,9	3,7	3,2	7,6	4,7	4,3	2,7	8,1
1973	5,4	2,2	5,4	−1,2	5,7	3,4	3,1	4,0	−0,7	5,8	7,4	5,7	4,8	0,4	7,2
1974	5,0	4,7	4,2	−0,7	4,3	5,2	11,2	2,3	5,1	6,0	13,5	3,3	4,1	−0,9	4,0
1975	4,0	1,3	1,2	7,8	4,9	5,1	7,3	3,7	13,3	2,8	18,8	3,2	3,6	−0,8	7,9
1976	7,8	2,3	4,1	5,1	5,9	3,5	−1,2	2,2	−1,0	1,7	6,9	−0,3	2,9	1,8	3,7
1977	1,2	0,3	2,8	8,7	2,9	3,2	1,4	1,8	8,6	1,7	−2,6	−2,8	1,4	0,7	4,0
1978	2,7	−0,6	1,2	9,2	3,5	2,3	4,5	2,1	0,7	1,6	−3,0	1,8	2,0	0,2	2,6
1979	1,0	1,7	1,8	4,0	1,6	2,6	4,6	4,0	0,3	2,0	0,5	0,7	2,0	−0,2	2,9
1980	5,6	1,7	2,0	−1,3	2,7	3,3	5,6	1,2	1,0	−0,2	3,9	0,0	1,8	0,7	2,6
1971-80	4,6	1,6	3,0	4,4	4,5	3,6	4,2	3,1	3,9	3,0	6,1	1,8	3,1	0,7	5,1
1981	1,4	−0,8	1,1	1,4	3,0	2,7	0,6	3,4	1,2	−1,9	2,9	2,4	2,1	0,0	3,3
1982	0,6	1,2	−0,2	2,2	−0,1	1,9	−0,8	−0,8	−3,5	−0,3	0,7	0,8	0,4	1,2	2,3
1983	0,5	0,5	0,4	1,9	1,9	0,5	1,9	1,0	0,1	1,3	−2,3	3,2	1,2	1,7	1,9
1984	1,4	−0,1	1,5	1,7	−0,9	0,9	4,4	0,3	2,6	−1,6	−2,8	0,7	0,6	0,5	2,9
1985	−1,4	0,4	0,8	6,4	0,8	0,7	2,7	1,1	0,5	−0,4	0,6	1,2	0,9	1,4	2,0
1986	1,1	0,2	0,7	−4,2	−1,2	−0,9	−1,5	−0,2	3,5	1,2	0,9	3,7	0,7	1,6	1,6
1987	−0,1	3,2	1,1	−2,5	0,4	0,5	4,0	3,0	2,9	1,9	6,0	1,3	1,3	1,2	3,1
1988	−0,3	−0,3	1,7	2,3	0,7	0,7	1,2	2,7	0,8	−0,4	1,5	0,6	1,1	1,8	3,2
1989	−0,5	−0,9	0,3	2,9	−1,0	1,4	−2,6	2,7	0,0	−1,0	0,5	1,7	0,9	−0,3	2,5
1990	2,9	0,3	1,0	−2,4	0,8	1,9	2,1	1,6	3,0	1,7	2,7	2,5	1,6	0,9	3,9
1981-90	0,5	0,4	0,8	0,9	0,4	1,0	1,2	1,5	1,1	0,0	1,1	1,8	1,1	1,0	2,7
1991	2,6	0,7	0,6	−0,8	0,6	1,2	2,0	2,2	1,4	1,5	2,7	1,8	1,4	1,0	3,3

Table 30

Real compensation per employee, deflator private consumption; total economy

(Annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	0,6	9,0	6,4	2,6	10,9	7,0	5,9	6,4	2,4	4,9	4,5	3,7	5,7	2,0	6,5
1962	6,1	4,7	5,7	5,8	9,3	7,0	4,2	7,8	4,1	4,1	2,9	0,9	4,9	2,5	7,0
1963	4,2	−0,9	2,9	4,0	12,4	5,4	2,7	11,8	4,7	5,3	7,4	3,1	5,3	2,3	5,5
1964	5,3	6,4	5,7	10,6	6,6	5,2	6,3	7,1	9,2	9,1	7,4	3,3	5,5	3,5	8,7
1965	4,7	7,3	5,9	7,1	5,4	3,8	0,9	4,0	0,7	7,4	5,4	1,8	4,2	1,8	4,7
1966	4,3	3,4	3,9	8,6	10,0	2,8	4,4	4,8	1,4	5,4	4,8	2,4	4,0	2,0	6,3
1967	4,7	3,2	1,6	7,3	8,4	3,7	5,1	5,1	0,0	6,1	12,0	3,5	4,0	1,7	7,8
1968	3,3	2,7	5,0	8,9	3,5	6,0	5,5	5,8	3,4	5,9	−0,7	3,1	4,6	2,8	8,2
1969	5,4	6,1	7,0	6,2	8,1	3,7	5,7	4,5	3,5	6,7	4,9	1,2	4,7	2,8	11,2
1970	6,7	4,1	11,5	5,7	2,7	5,0	4,0	10,1	10,1	7,7	14,5	7,0	7,7	3,1	8,9
1961-70	4,5	4,6	5,5	6,7	7,7	5,0	4,4	6,7	3,9	6,3	6,2	3,0	5,1	2,4	7,5
1971	6,0	3,1	5,2	5,3	5,4	4,8	4,9	7,4	3,2	5,4	7,8	2,4	4,9	2,3	7,5
1972	8,2	−0,2	4,0	9,8	9,4	3,5	5,6	4,0	4,4	4,2	9,1	6,3	5,0	4,3	8,2
1973	6,5	1,3	5,2	2,6	6,2	4,3	6,5	3,3	6,3	6,3	7,9	4,3	4,7	1,0	9,3
1974	4,9	3,0	3,8	−2,8	3,0	2,5	1,9	0,9	12,1	5,6	9,2	1,5	2,7	−2,2	3,7
1975	3,8	3,6	0,9	7,4	6,0	6,0	9,3	3,7	1,8	2,9	19,0	6,2	4,4	0,9	4,4
1976	7,6	1,6	3,6	6,9	5,9	4,4	−0,4	2,6	1,7	1,7	5,2	−0,9	2,9	2,2	1,8
1977	1,5	−0,8	2,8	9,7	2,4	2,6	0,6	2,7	4,3	2,2	−3,2	−3,5	1,3	0,9	2,7
1978	2,9	−0,1	2,7	9,3	4,8	3,3	7,0	2,9	2,4	2,5	−2,2	4,0	3,2	0,5	2,9
1979	1,6	−0,9	1,8	5,9	2,1	1,9	3,5	4,7	1,7	1,6	−4,1	1,5	2,1	−0,5	2,3
1980	3,0	−0,6	1,0	−4,7	0,6	1,6	2,1	0,8	1,3	−1,3	3,3	2,9	1,3	−0,9	−0,6
1971-80	4,6	1,0	3,1	4,8	4,6	3,5	4,1	3,3	3,9	3,1	5,0	2,4	3,2	0,8	4,2
1981	−2,3	−2,5	−0,8	−1,0	0,8	0,9	−1,3	3,7	−0,2	−2,2	0,7	2,5	0,9	0,2	2,1
1982	−0,1	1,5	−0,5	5,9	−0,7	2,0	−0,6	−0,6	−3,3	0,2	1,1	−0,2	0,3	1,6	1,6
1983	−1,0	1,3	0,5	2,8	1,3	0,4	3,2	0,8	−1,4	0,2	−3,2	3,5	1,1	1,6	0,8
1984	0,9	−0,8	1,0	3,8	−0,9	0,4	3,3	−0,1	0,2	−1,9	−5,6	0,3	0,1	0,2	2,1
1985	−1,3	0,4	1,0	5,8	1,1	0,6	3,1	1,0	−0,9	−0,8	2,6	1,6	1,0	0,9	1,2
1986	4,4	1,4	4,1	−7,5	0,7	1,4	0,5	1,6	4,0	1,4	6,8	2,8	2,3	2,0	2,8
1987	0,2	3,9	2,4	−3,7	0,9	0,2	3,4	4,1	2,3	1,8	7,2	2,2	2,0	−0,2	3,0
1988	−0,1	−0,4	1,9	2,8	1,3	1,0	1,6	3,8	0,5	0,7	3,1	2,1	1,8	0,9	3,7
1989	0,5	−1,3	−0,3	3,9	−0,8	1,5	−1,5	3,0	−0,2	−1,5	0,2	2,5	1,1	−0,7	2,3
1990	2,6	0,4	1,9	−2,1	1,3	2,0	1,5	2,6	2,6	2,2	3,3	3,2	2,2	0,0	3,0
1981-90	0,4	0,4	1,1	1,0	0,5	1,0	1,3	2,0	0,3	0,0	1,5	2,1	1,3	0,7	2,3
1991	2,5	−0,3	1,2	−1,5	0,7	1,0	1,9	2,5	1,2	1,5	2,7	2,2	1,6	0,2	3,1

Table 31

Adjusted wage share; total economy

(Percentage of GDP at factor cost)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	69,0	71,4	70,6	98,8	70,8	72,8	87,4	74,2	66,1	63,7	70,2	71,2	73,7	72,5	80,0
1961	68,2	72,4	72,1	92,1	70,2	73,6	87,0	72,6	68,9	65,9	69,2	72,4	74,2	72,0	76,0
1962	69,5	73,0	72,5	91,8	70,4	73,7	87,4	72,3	68,3	66,8	69,0	72,8	74,1	71,3	77,1
1963	70,3	73,4	72,6	87,4	72,6	74,1	86,6	74,3	68,7	68,3	68,8	72,1	74,3	70,9	76,8
1964	69,8	72,6	71,4	86,9	73,7	74,1	87,4	75,6	68,9	68,7	68,9	71,7	74,1	70,8	74,5
1965	70,0	75,4	71,6	84,9	73,7	73,3	86,5	74,3	69,4	69,4	68,5	72,1	73,9	69,8	75,9
1966	71,7	76,6	72,2	85,4	75,9	72,4	89,9	72,8	69,5	71,6	68,9	73,0	74,0	69,6	73,9
1967	72,0	77,4	71,5	85,6	78,0	71,4	87,9	72,8	70,3	71,2	70,3	72,7	73,7	70,5	71,9
1968	71,1	78,0	70,0	86,3	76,0	72,1	86,4	71,6	67,8	70,8	65,4	72,3	72,9	71,2	70,0
1969	70,6	77,1	70,5	83,3	75,8	71,8	86,2	69,9	62,9	71,3	65,5	73,1	72,6	72,7	69,4
1970	68,7	78,1	72,1	80,5	75,0	71,4	88,6	71,8	63,3	72,6	73,7	74,7	73,6	74,0	69,6
1961-70	70,2	75,4	71,6	86,4	74,1	72,8	87,4	72,8	67,8	69,7	68,8	72,7	73,7	71,3	73,5
1971	70,7	79,4	72,8	78,4	75,5	71,5	88,7	74,5	69,9	74,2	75,7	73,0	74,0	72,9	73,0
1972	71,2	76,0	72,8	77,8	76,1	71,0	84,9	74,4	70,4	73,5	75,0	73,0	73,8	72,8	73,1
1973	71,3	75,2	73,6	71,5	76,5	70,3	84,4	73,6	65,6	73,9	71,8	72,9	73,6	72,6	74,4
1974	73,2	78,0	75,1	72,5	75,5	72,5	90,0	72,8	67,1	74,9	79,4	75,5	74,9	73,7	77,5
1975	75,7	78,9	74,9	75,2	77,0	75,5	88,2	75,7	83,6	76,8	96,4	78,0	77,0	72,3	81,1
1976	77,0	77,6	73,4	75,9	78,1	75,8	87,7	74,3	80,0	74,2	96,6	75,4	75,9	71,9	81,0
1977	77,3	77,9	73,2	81,0	77,4	75,4	80,5	74,3	85,4	74,5	89,6	72,6	75,1	71,6	81,3
1978	77,4	77,9	72,5	83,3	76,8	75,2	78,5	73,4	82,8	74,5	81,9	71,8	74,4	71,3	80,0
1979	77,3	78,3	72,0	84,5	77,0	75,3	81,7	72,6	81,0	74,8	79,4	72,5	74,2	71,9	79,5
1980	78,3	79,3	73,3	81,2	75,8	76,8	86,6	72,2	82,7	74,6	79,8	74,6	75,0	72,8	78,6
1971-80	74,9	77,9	73,4	78,1	76,6	73,9	85,1	73,8	76,9	74,6	82,6	73,9	74,8	72,4	78,0
1981	78,8	78,3	73,5	84,7	76,8	77,1	85,3	73,7	83,7	72,5	81,6	75,1	75,5	72,1	78,9
1982	77,3	76,4	72,4	86,5	75,1	77,3	83,8	73,3	80,3	71,1	80,4	73,4	74,7	73,6	79,2
1983	76,4	75,2	70,7	89,7	75,4	76,6	84,0	74,1	78,9	69,7	78,7	71,9	74,0	72,7	79,4
1984	75,6	73,4	69,7	89,5	71,8	75,6	81,9	72,4	77,1	66,4	76,5	72,0	72,7	71,5	78,6
1985	74,3	72,9	69,1	92,0	70,4	74,6	79,2	72,0	76,7	65,6	75,1	71,4	72,0	71,6	77,3
1986	74,2	73,9	68,4	89,0	70,2	72,2	78,8	70,8	78,2	66,6	73,1	72,5	71,4	71,8	77,2
1987	73,8	76,9	68,4	87,9	70,3	71,5	78,8	71,7	80,2	68,1	73,0	71,8	71,4	72,0	77,7
1988	71,6	75,9	67,4	88,5	69,0	70,5	77,2	72,5	80,7	66,8	72,2	71,5	70,7	72,1	77,4
1989	69,7	73,0	66,7	88,6	67,9	69,9	72,6	72,5	79,4	64,8	69,8	72,9	70,3	71,6	77,0
1990	70,2	71,9	66,1	87,9	68,0	70,4	70,7	73,0	81,6	64,9	68,9	75,2	70,7	72,2	76,7
1981-90	74,2	74,8	69,2	88,4	71,5	73,6	79,2	72,6	79,7	67,6	75,0	72,8	72,4	72,1	78,0
1991	70,8	71,9	65,7	86,7	67,9	69,9	72,0	73,5	82,6	65,1	69,2	75,9	70,7	73,3	77,0

Table 32

Nominal unit labour costs; total economy

(National currency; 1980 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	31,2	20,1	39,1	24,6	12,0	23,5	15,6	15,9	29,4	24,9	15,1	17,5	22,2	35,9	28,3
1961	31,0	21,6	41,7	23,2	12,1	24,6	16,1	15,9	29,3	26,3	15,2	18,3	23,1	35,9	29,0
1962	32,1	23,0	43,6	24,1	12,9	25,8	17,0	16,8	30,4	27,6	15,0	19,1	24,1	36,3	30,7
1963	33,4	24,3	45,1	23,2	14,4	27,5	17,2	18,8	31,8	29,5	15,4	19,4	25,3	36,5	32,4
1964	34,7	25,1	45,8	23,9	15,5	28,6	18,9	20,4	34,1	32,3	15,5	19,9	26,4	36,9	33,2
1965	36,8	27,8	47,8	24,3	16,9	29,2	19,5	20,9	35,3	34,6	16,0	20,9	27,5	37,4	35,7
1966	38,9	30,0	49,9	25,5	18,8	29,6	20,9	21,0	36,6	37,7	16,9	22,0	28,6	39,0	36,6
1967	40,1	31,9	49,9	26,1	20,8	30,3	21,2	21,5	36,6	39,0	17,7	22,5	29,3	40,8	37,6
1968	40,9	34,0	50,5	26,6	21,4	32,3	21,7	21,6	37,1	40,1	16,7	23,2	30,1	43,1	38,5
1969	42,2	36,0	52,2	26,4	22,1	34,0	23,5	22,0	36,4	43,4	17,7	24,3	31,3	46,1	40,0
1970	43,2	39,4	58,3	26,6	23,4	36,0	26,4	24,2	41,8	46,7	20,4	26,8	34,0	49,3	42,6
1971	47,0	43,1	63,7	26,9	25,6	38,4	29,2	27,0	45,3	51,2	22,1	29,0	37,0	51,0	47,1
1972	50,8	45,1	67,0	28,2	28,0	40,9	31,8	28,9	47,9	55,4	23,7	31,6	39,6	53,4	49,9
1973	55,0	49,9	72,3	31,3	31,3	44,1	36,6	32,4	50,2	61,1	24,9	34,2	43,3	56,9	57,2
1974	63,3	59,4	79,3	39,1	36,3	51,2	42,0	38,4	60,9	68,1	33,0	41,4	50,4	62,9	72,5
1975	73,9	67,3	84,0	44,6	43,5	60,4	50,8	47,7	74,0	76,7	46,4	54,6	59,9	67,9	81,9
1976	80,7	71,8	85,2	52,0	51,5	67,0	59,4	55,0	80,2	80,9	53,8	60,4	65,8	72,0	87,5
1977	87,2	78,2	88,1	62,3	62,9	73,3	64,2	64,9	86,7	86,0	63,3	65,4	72,7	76,6	92,7
1978	91,1	85,0	91,0	72,3	76,0	80,2	70,8	73,3	87,7	90,6	72,0	72,0	79,6	82,4	95,7
1979	95,2	90,9	93,8	86,5	89,0	87,9	84,3	84,2	91,9	94,9	83,5	82,0	87,8	90,7	97,4
1980	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1981	105,3	108,8	104,3	127,3	112,6	112,3	113,3	121,4	109,4	102,6	120,3	111,0	111,6	108,0	103,4
1982	110,3	118,7	107,5	160,9	125,3	125,4	126,8	141,3	115,4	107,4	140,5	116,2	121,8	117,4	105,7
1983	115,4	125,6	108,2	196,6	139,4	136,5	140,3	163,2	119,5	107,2	169,4	120,4	130,7	120,0	107,0
1984	120,4	129,1	108,9	234,8	147,0	144,3	146,6	177,8	121,2	104,1	206,1	126,6	137,3	122,2	106,7
1985	125,4	132,9	110,8	287,9	155,1	150,6	150,8	192,4	123,5	104,5	245,5	132,6	144,2	125,5	106,1
1986	130,0	138,8	113,6	323,3	168,2	154,0	158,8	203,0	127,7	106,2	278,8	138,0	150,3	129,3	108,0
1987	130,8	152,3	115,9	359,7	178,7	156,9	161,6	216,9	132,5	108,1	314,0	143,0	156,3	133,7	107,6
1988	129,5	159,0	116,1	411,9	186,5	158,9	163,0	230,2	135,0	108,0	342,7	152,0	161,4	138,1	107,3
1989	131,1	161,7	117,1	478,9	195,8	162,6	159,2	244,0	137,1	106,1	374,0	166,3	168,4	142,7	108,4
1990	135,8	165,2	120,4	562,0	210,2	169,4	161,4	261,4	144,4	109,1	422,4	184,5	178,7	149,8	109,7
1991	142,5	168,6	124,6	646,7	223,5	174,2	167,4	279,5	150,4	112,4	474,4	198,4	188,2	160,2	112,5

Table 33

Real unit labour costs; total economy

(1980 = 100)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	86,9	94,3	94,1	121,2	91,4	92,9	96,8	98,5	81,4	86,5	89,5	97,7	96,9	98,5	99,6
1961	85,1	97,3	96,0	112,7	90,8	94,2	97,1	96,1	84,6	89,3	87,9	99,6	97,5	97,7	94,7
1962	86,6	97,4	96,6	111,8	91,3	94,3	98,0	96,0	84,5	90,4	87,1	99,8	97,4	96,8	96,5
1963	87,7	96,9	96,9	106,1	94,2	94,7	96,3	98,9	85,2	92,3	87,1	98,9	97,8	96,2	96,3
1964	87,1	95,7	95,5	105,5	95,3	94,2	96,7	100,9	86,0	92,9	86,8	98,0	97,4	96,1	93,8
1965	87,8	98,8	96,2	103,2	95,2	93,5	95,4	99,2	86,2	93,7	86,3	98,1	97,1	94,9	95,8
1966	89,2	99,7	97,1	103,3	97,6	92,3	98,0	97,3	86,6	96,4	86,5	98,7	97,1	95,2	93,6
1967	89,1	100,0	95,8	103,2	100,4	91,6	96,4	96,8	87,5	95,7	87,5	98,1	96,6	96,2	91,2
1968	88,4	99,6	94,9	103,1	98,3	93,5	94,7	95,9	84,4	94,6	81,5	97,0	95,9	96,8	89,1
1969	87,8	98,4	94,3	99,0	97,5	92,5	93,7	93,9	78,0	96,1	81,2	96,7	94,9	98,7	88,5
1970	85,9	99,5	97,9	96,1	96,6	92,7	96,0	96,4	78,2	97,3	90,8	99,1	96,7	100,2	88,5
1971	88,4	101,1	98,9	94,4	97,7	93,0	95,9	100,5	85,5	98,8	93,7	98,0	97,6	98,6	92,9
1972	90,1	96,9	98,8	94,0	98,3	92,1	92,3	101,1	85,4	97,7	93,0	99,0	97,6	98,7	93,1
1973	90,8	96,8	100,2	87,4	98,4	91,6	92,1	100,3	79,8	98,9	89,3	99,8	97,9	98,6	94,6
1974	92,9	102,0	102,7	90,2	98,2	94,6	99,6	99,2	82,7	101,0	99,7	105,3	100,4	100,1	99,2
1975	96,8	102,7	102,6	91,7	100,8	98,9	100,3	105,8	101,4	103,3	120,6	109,0	103,8	98,2	104,1
1976	98,2	100,5	100,5	92,7	102,2	98,9	96,9	103,0	97,9	99,9	120,3	104,9	101,9	98,0	103,8
1977	98,7	100,0	100,2	98,2	101,4	99,3	92,5	102,4	104,6	99,5	111,9	99,7	100,7	97,8	103,8
1978	98,7	98,9	99,2	100,9	101,6	98,6	92,4	101,5	100,6	99,5	104,0	98,5	99,7	97,9	102,3
1979	98,8	98,4	98,3	101,8	101,7	98,1	96,7	101,1	99,1	100,3	101,0	98,0	99,2	99,0	101,1
1980	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1981	100,6	98,8	100,3	106,3	100,5	100,8	96,5	102,4	102,1	97,3	102,3	99,7	100,7	98,6	100,2
1982	98,3	97,5	99,0	107,4	98,3	100,6	93,7	101,8	97,2	96,0	99,0	97,0	99,4	100,7	100,6
1983	97,4	95,9	96,5	110,2	98,0	99,8	93,7	102,3	94,2	94,1	95,8	95,5	98,3	99,6	101,0
1984	96,6	93,3	95,3	109,4	93,1	98,3	91,9	100,0	91,5	89,7	93,5	95,9	96,6	97,9	99,5
1985	94,9	92,1	94,9	114,0	90,6	97,0	90,0	99,4	90,6	88,4	91,4	95,1	95,7	98,0	97,6
1986	95,1	91,8	94,3	108,7	88,6	94,3	89,3	97,5	92,1	89,4	86,2	95,6	94,5	98,4	97,5
1987	93,6	95,9	94,3	105,9	88,8	93,2	89,1	98,1	94,6	91,4	87,3	94,5	94,4	98,8	97,4
1988	90,9	95,4	93,1	105,9	87,7	91,4	87,3	98,3	94,3	89,7	85,4	94,2	93,3	99,0	96,7
1989	88,0	92,8	91,6	106,6	86,1	90,5	81,2	98,0	92,2	86,8	82,8	96,4	92,6	98,2	96,3
1990	88,3	92,1	90,8	103,5	86,1	91,1	80,6	98,0	94,2	86,8	82,2	99,2	93,0	99,0	95,9
1991	88,8	91,8	90,0	101,3	85,7	90,6	80,9	98,2	94,5	87,0	82,0	100,0	92,8	100,4	96,3

Table 34

Nominal unit labour costs; total economy relative to 19 industrial countries; double export weights

(USD; 1980 = 100)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12	USA	J
1960	94,3	77,6	82,4	169,1	66,2	100,7	95,5	107,9	65,7	123,1	97,8	76,4	167.4	68,5
1961	89,0	80,0	88,8	153,1	64,5	101,6	94,5	103,5	69,2	119,2	99,2	79,8	162,3	68,3
1962	88,5	82,0	89,5	152,5	66,2	102,4	96,5	105,3	70,1	113,7	100,3	81,4	159,5	70,8
1963	88,2	83,4	88,7	141,7	71,4	105,1	95,3	113,4	72,2	112,2	97,6	82,9	154,6	72,9
1964	88,6	83,4	86,7	141,7	74,4	105,4	101,7	119,0	76,5	109,2	96,6	83,7	151,1	72,9
1965	90,4	88,8	86,4	138,5	78,3	103,1	100,3	117,2	78,8	108,3	97,9	84,4	145,8	76,2
1966	91,4	91,6	86,3	139,8	83,4	100,0	102,6	112,7	82,1	109,8	98,7	84,4	146,6	74,8
1967	91,8	94,0	83,6	139,4	88,2	99,4	100,3	112,2	83,4	111,7	95,9	82,1	148,1	74,3
1968	91,4	93,6	83,1	140,1	78,3	104,7	93,4	111,5	84,7	105,9	84,3	78,0	155,8	74,7
1969	90,0	94,4	84,5	133,5	77,4	100,7	96,0	108,2	88,1	107,9	84,5	77,4	159,7	73,9
1970	85,6	95,4	96,0	122,6	75,5	90,7	99,3	109,1	86,2	115,1	86,2	80,9	157,2	72,9
1971	86,0	95,7	100,0	112,3	75,8	87,1	102,2	111,9	88,2	115,1	86,7	83,1	146,6	77,5
1972	89,8	94,5	101,2	103,4	79,4	89,0	101,6	111,9	91,0	114,0	86,0	85,5	134,6	86,1
1973	90,4	102,3	110,4	97,1	83,3	90,9	100,5	103,9	95,4	112,3	76,2	87,5	120,3	96,3
1974	93,0	106,9	110,6	106,2	86,4	85,9	96,4	97,5	98,0	127,7	77,7	86,2	115,5	100,3
1975	96,9	108,2	102,2	96,2	88,2	97,5	92,2	102,6	99,2	150,1	83,3	91,6	107,1	97,6
1976	100,8	108,7	100,2	98,7	88,7	96,8	89,3	91,6	100,1	146,6	73,2	83,3	110,3	101,9
1977	107,1	108,9	102,8	106,7	88,1	93,5	86,3	93,1	104,2	125,2	70,1	84,0	108,3	111,1
1978	107,5	110,5	104,2	105,2	89,8	94,3	88,9	92,5	105,4	105,5	72,5	85,9	99,6	130,4
1979	105,8	109,3	103,7	110,5	106,3	96,6	97,2	95,8	104,5	95,9	81,5	93,9	99,6	112,9
1980	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1981	91,3	92,4	89,4	105,1	93,1	93,8	94,8	98,4	90,3	106,1	102,5	85,8	112,0	107,5
1982	80,8	90,0	89,0	113,7	90,1	89,5	98,0	99,5	92,7	100,4	95,1	79,9	127,4	96,3
1983	78,8	90,9	88,3	108,6	79,2	86,6	100,0	106,6	90,4	91,2	87,9	75,3	132,8	104,4
1984	77,9	87,2	84,2	107,5	78,8	84,4	96,9	106,2	83,4	88,8	85,6	69,6	142,4	107,0
1985	79,1	87,7	82,7	107,3	78,4	86,0	97,3	105,7	81,0	90,4	86,7	69,5	148,1	105,9
1986	83,8	93,7	90,4	91,7	80,9	88,5	102,5	111,9	85,6	91,2	80,8	76,2	119,6	132,5
1987	85,2	103,8	95,4	89,2	83,4	88,2	99,1	117,6	88,8	92,5	80,5	82,0	105,9	138,1
1988	81,5	103,3	92,1	92,5	87,4	84,9	95,6	117,9	86,4	93,4	88,4	80,6	100,5	147,3
1989	79,5	98,7	88,5	96,5	92,5	82,9	88,6	121,8	81,4	95,3	91,1	78,2	105,2	137,2
1990	82,5	102,5	91,1	99,6	99,3	86,8	89,5	129,2	82,5	100,7	95,8	87,4	100,1	117,0

Table 35

Exports of goods and services at current prices

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	39,9	32,2	18,8	9,1	10,2	14,5	31,8	13,0	86,7	47,7	17,5	20,9	19,5	5,2	10,7
1961	41,2	29,9	17,9	9,3	9,8	14,0	34,6	13,3	86,9	45,5	16,4	20,6	18,9	5,1	9,3
1962	42,8	28,5	17,2	9,7	10,1	12,9	32,3	13,2	79,9	44,8	18,7	20,1	18,4	5,0	9,4
1963	44,0	30,3	17,7	10,0	9,4	12,7	33,6	12,7	77,7	44,9	19,1	20,0	18,3	5,1	9,0
1964	44,9	29,7	17,9	9,2	10,8	12,7	33,4	13,3	78,8	43,5	25,6	19,4	18,5	5,4	9,5
1965	44,3	29,2	17,9	9,0	10,4	13,3	34,8	14,9	80,7	42,9	26,8	19,2	18,8	5,2	10,5
1966	46,1	28,4	19,0	11,3	11,0	13,4	37,2	15,3	77,2	41,7	27,1	19,4	19,1	5,3	10,6
1967	45,1	27,2	20,3	10,7	10,1	13,2	37,8	15,0	78,5	40,5	27,2	19,1	19,1	5,3	9,6
1968	47,3	27,5	21,2	9,6	11,6	13,3	38,8	15,8	80,5	41,0	25,0	21,4	20,1	5,3	10,1
1969	51,5	27,4	21,6	9,7	12,0	14,1	37,3	16,5	84,3	42,5	24,4	22,3	20,8	5,4	10,5
1970	53,9	27,9	21,1	10,0	13,3	15,8	37,0	16,4	88,9	44,8	24,4	23,1	21,5	5,9	10,8
1961-70	46,1	28,6	19,2	9,8	10,8	13,5	35,7	14,6	81,3	43,2	23,5	20,5	19,4	5,3	9,9
1971	52,5	27,6	20,9	10,3	14,2	16,4	36,1	16,9	88,1	45,4	25,1	23,2	21,7	5,7	11,7
1972	53,1	27,1	20,8	11,7	14,6	16,7	34,6	17,7	82,9	45,0	27,2	21,8	21,7	5,8	10,6
1973	57,8	28,5	22,0	14,2	14,6	17,6	38,0	17,4	89,3	47,4	26,7	23,7	22,8	7,0	10,0
1974	63,7	31,8	26,4	16,1	14,4	20,7	42,6	20,2	102,6	53,9	26,9	28,1	26,3	8,5	13,6
1975	55,8	30,1	24,5	16,9	13,5	19,1	42,7	20,5	92,5	49,9	20,4	26,0	24,5	8,6	12,8
1976	58,7	28,8	25,6	17,6	13,8	19,6	46,3	22,1	88,1	51,0	17,4	28,6	25,7	8,3	13,6
1977	57,6	28,8	25,3	16,8	14,5	20,5	49,4	23,2	86,9	47,6	18,4	30,2	26,2	7,9	13,1
1978	55,6	27,8	24,8	17,6	15,2	20,4	49,9	23,4	83,8	44,9	20,1	28,6	25,7	8,2	11,1
1979	60,8	29,2	24,9	17,5	15,0	21,2	49,7	24,3	90,9	49,1	27,1	28,1	26,4	9,1	11,6
1980	62,9	32,7	26,2	20,9	15,8	21,5	49,6	21,9	88,2	52,5	27,4	27,5	26,6	10,2	13,7
1971-80	57,8	29,2	24,1	16,0	14,6	19,4	43,9	20,8	89,3	48,7	23,7	26,6	24,8	7,9	12,2
1981	68,1	36,5	28,6	20,6	18,1	22,6	48,5	23,3	86,5	58,0	25,9	26,8	28,1	9,7	14,8
1982	71,8	36,4	29,6	18,4	18,8	21,8	48,1	23,0	88,8	57,6	26,4	26,5	28,2	8,7	14,6
1983	74,6	36,4	28,5	19,8	21,3	22,5	52,4	22,1	90,0	57,7	31,3	26,7	28,4	7,9	14,0
1984	79,0	36,7	30,3	21,7	23,7	24,1	59,5	22,7	100.9	62,1	37,2	28,7	30,3	7,6	15,1
1985	76,9	36,7	31,9	21,2	23,4	23,9	60,8	22,8	108,4	63,5	37,3	29,1	30,7	7,1	14,6
1986	70,7	32,1	29,7	22,5	20,3	21,3	55,4	20,3	103,2	54,2	33,2	26,1	27,6	7,4	11,5
1987	69,7	31,7	28,5	24,6	19,7	20,8	59,0	19,6	99,1	52,5	34,3	25,9	26,9	7,9	10,5
1988	72,3	32,3	29,0	24,2	19,5	21,5	63,5	19,6	102,9	54,5	35,5	23,6	27,0	8,9	10,8
1989	76,7	34,5	30,9	24,5	19,1	23,5	67,4	21,0	106,4	57,6	37,4	24,5	28,5	9,5	12,5
1990	75,3	35,1	32,8	23,4	17,7	23,4	63,5	20,6	105,5	56,4	37,3	24,8	28,7	9,9	13,9
1981-90	73,5	34,9	30,0	22,1	20,1	22,5	57,8	21,5	99,2	57,4	33,6	26,3	28,4	8,5	13,2
1991	77,0	36,1	34,4	23,2	17,4	23,7	65,4	20,4	106,6	58,2	37,1	24,0	29,1	10,3	14,2

Table 36

Exports of goods and services at constant prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	9,2	4,3	3,7	14,5	7,9	5,1	17,2	14,7	3,2	2,3	1,9	3,1	5,4	0,6	5,3
1962	10,1	4,9	4,1	10,0	12,8	1,8	−1,0	10,3	−1,9	6,2	22,7	1,8	5,1	5,2	17,2
1963	8,2	10,0	8,0	6,7	3,8	7,1	9,6	6,5	3,5	6,0	7,2	1,7	5,7	7,0	7,0
1964	9,4	8,5	8.5	1,6	25,5	6,6	8,2	10,8	13,4	11,3	39,9	3,8	8.8	11,8	21,7
1965	6,1	7,9	6,6	12,7	6,9	11,5	8,9	20,0	6,2	7,6	13,5	4,4	8,5	1,9	23,7
1966	7,7	3,9	10,1	34,4	15,2	6,6	10,6	11,2	−0,3	5,2	12,8	5,2	8,2	6,4	17,0
1967	4,3	4,0	7,7	5,1	−4,7	7,3	10,3	7,2	2,1	6,6	8,3	1,0	5,0	3,1	6,7
1968	12,2	9,3	13,0	−1,0	18,4	9,4	9,0	13,9	10,7	12,8	−0,5	12,7	12,2	3,2	23,9
1969	15,3	6,2	9,3	14,6	15,6	15,7	4,6	11,8	13,8	14,9	8,7	9,2	11,7	4,8	20,8
1970	10,2	5,6	5,8	12,4	17,4	16,1	18,8	5,8	7,8	11,9	5,4	5,4	8,7	9,5	17,5
1961-70	9,2	6,4	7,6	10,7	11,6	8,7	9,5	11,1	5,7	8,4	11,5	4,8	7,9	5,3	15,9
1971	4,5	5,6	6,3	11,9	14,2	9,8	4,1	7,0	3,9	10,7	11,9	6,8	7,7	0,0	16,1
1972	11,1	5,6	7,1	22,9	13,4	12,1	3,6	9,5	5,1	10,0	20,2	0,8	8,1	15,2	4,2
1973	14,2	7,8	10,7	23,4	10,0	11,0	10,9	3,9	14,0	12,1	9,2	11,9	10,5	18,7	5,8
1974	3,8	3.5	11,7	0,1	−1,0	9,1	0,7	5,9	10,4	2,6	−13,3	6,9	6,3	7,9	23,7
1975	−8,2	−1,8	−7,2	10,6	−0,4	−1,1	7,6	1,8	−15,8	−3,1	−16,4	−3,2	−3,5	−0,9	0,8
1976	12,9	4,1	10,2	16,4	5,0	8,5	8,1	10,2	1,0	9,9	−0,8	8,8	9,3	3,8	16,9
1977	2,2	4,1	3,8	1,8	12,1	8,0	14,0	11,6	4,2	−1,8	4,1	6,5	5,8	1,6	11,7
1978	2,3	1,2	3,3	16,4	10,7	6,6	12,3	9,4	3,1	3,3	9,1	1,6	4,9	9,7	−1,0
1979	7,0	8,4	4,1	6,7	5,6	7,7	6,5	8,7	9,4	7,4	33,0	3,8	6,5	8,7	3,3
1980	2,5	5,2	5,1	6,9	2,3	2,4	6,4	−8,5	−2,1	1,5	2,2	−0,1	0,9	10,8	17,5
1971-80	5,0	4,3	5,4	11,4	7,0	7,4	7,3	5,8	3,0	5,1	5,0	4,3	5,6	7,4	9,6
1981	2,3	8,2	7,7	−5,9	8,4	3,6	2,0	6,2	−4,4	2,1	−4,4	−0,8	3,8	−0,4	14,2
1982	1,2	2,5	3,3	−7,2	4,8	−1,8	5,5	0,0	−0,2	−0,3	4,7	0,9	1,1	−8,3	1,0
1983	2,7	4,9	−0,9	8,0	10,1	3,7	10,5	2,6	5,4	3,3	13,6	2,0	2,8	−2,4	7,0
1984	5,3	3,5	7,9	16,9	11,7	6,7	16,6	6,6	18,2	7,2	11,6	6,6	7,5	6,5	17,6
1985	1,1	5,0	7,0	1,3	2,7	2,0	6,6	3,7	9,5	5,3	6,7	5,8	4,5	2,7	4,7
1986	5,9	−0,3	−0,5	14,0	1,3	−1,0	2,9	2,4	4,2	3,4	6,8	4,1	2,0	11,9	−4,8
1987	6,4	4,7	0,7	16,0	5,9	2,7	13,4	3,2	5,2	4,1	8,6	5,2	3,9	15,8	−0,1
1988	7,4	5,3	5,2	7,6	6,3	7,2	8,7	5,3	8,9	7,8	10,2	0,7	5,4	18,0	8,1
1989	8,2	6,6	9,9	5,2	4,4	11,0	10,1	10,1	7,7	5,5	16,6	4,3	8,1	11,4	15,5
1990	5,7	6,0	13,3	3,8	2,4	5,1	4,4	5,3	3,2	5,3	10,3	5,1	6,9	8,4	11,8
1981-90	4,6	4,6	5,3	5,7	5,8	3,9	8,0	4,5	5,6	4,3	8,3	3,4	4,6	6,0	7,3
1991	4,8	3,9	8,9	4,6	3,8	4,1	6,2	4,2	3,5	4,4	6,8	1,7	5,0	5,5	7,2

Table 37

Intra-Community exports of goods at current prices

(Percentage of GDP at market prices)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12
1960	20,8	14,9	6,7	2,7	3,8	4,6	20,7	3,9	22,3	5,3	3,5	6,3
1961	21,5	13,6	7,0	2,4	3,4	5,0	23,1	4,3	22,3	5,1	3,9	6,6
1962	23,1	12,9	7,1	3,0	2,9	5,0	20,3	4,6	22,7	5,6	4,2	6,8
1963	25,6	13,6	7,8	2,8	2,5	5,1	21,4	4,3	23,6	5,9	4,5	7,1
1964	26,7	13,1	7,9	2,9	2,9	5,2	22,2	5,0	24,1	7,0	4,5	7,4
1965	27,9	12,4	7,8	2,7	2,3	5,6	20,6	5,9	23,8	7,3	4,3	7,6
1966	28,0	11,6	8,4	2,9	2,4	5,8	21,0	6,1	22,8	7,0	4,3	7,7
1967	26,9	10,5	8,9	3,5	2,3	5,5	23,0	5,8	22,2	7,0	4,1	7,6
1968	28,3	9,9	9,2	3,3	2,4	5,5	22,3	6,1	22,7	6,6	4,5	8,0
1969	32,6	9,5	9,8	3,3	2,6	6,3	21,1	6,4	24,4	6,9	5,0	8,8
1970	33,9	9,4	9,4	3,5	3,2	7,4	21,9	6,5	26,1	6,9	5,2	9,2
1971	32,4	8,9	9,5	3,4	3,5	7,6	22,1	6,8	26,9	7,0	5,2	9,3
1972	33,5	9,0	9,1	3,7	3,4	8,0	22,9	7,4	26,7	7,5	5,1	9,5
1973	35,7	10,4	9,9	5,0	3,7	8,5	24,9	7,4	28,4	8,2	6,1	10,3
1974	36,5	10,8	11,4	5,8	4,1	9,7	29,0	8,3	32,1	8,5	7,3	11,7
1975	32,6	10,8	10,1	5,7	3,5	8,1	30,7	8,1	29,8	7,0	6,6	10,5
1976	35,7	10,3	11,2	5,8	4,0	8,6	30,8	9,2	31,4	6,3	7,9	11,6
1977	34,0	9,9	11,0	5,1	4,2	8,9	34,3	9,4	28,3	6,7	8,9	11,6
1978	33,3	10,2	10,8	5,5	4,4	8,9	34,6	9,7	26,5	7,9	9,0	11,5
1979	37,1	11,3	11,6	5,0	4,7	9,6	34,9	10,3	30,2	10,5	9,6	12,4
1980	38,5	13,2	12,1	6,4	5,1	9,3	33,5	8,9	32,1	10,8	9,6	12,3
1981	39,5	13,5	12,6	5,1	5,1	9,1	30,4	8,4	35,1	9,7	9,0	12,2
1982	42,6	13,9	13,5	5,3	5,5	8,8	30,6	8,8	35,3	10,9	9,0	12,5
1983	44,1	14,3	13,0	6,8	6,4	9,2	33,1	8,5	36,1	13,8	9,3	12,7
1984	45,3	13,3	13,9	7,8	7,6	9,9	37,8	8,4	39,9	16,7	10,3	13,6
1985	45,0	13,3	14,6	7,4	7,6	9,9	38,0	8,9	42,2	17,2	10,7	14,0
1986	43,1	12,4	13,8	9,2	7,1	9,4	36,1	8,7	36,4	16,6	9,1	13,0
1987	42,5	12,5	13,9	9,4	7,4	9,8	39,4	8,6	34,4	17,7	9,4	13,1
1988	43,6	12,8	14,5	6,7	7,6	11,1	42,6	8,8	34,8	18,8	8,8	13,4
1989	46,3	13,8	15,7	9,1	7,7	12,0	45,6	9,2	39,0	20,0	9,2	14,3
1990	45,6	14,0	15,6	8,8	7,6	12,0	43,1	9,3	38,7	20,3	9,7	14,4
1991	46,9	14,6	15,8	8,7	7,6	12,1	44,0	9,3	40,7	20,5	9,4	14,4

Table 38

Extra-Community exports of goods at current prices

(Percentage of GDP at market prices)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12
1960	13,4	11,2	10,0	3,5	2,6	7,3	4,8	5,8	14,1	8,6	11,6	9,2
1961	12,4	10,9	9,5	3,6	2,2	6,6	5,3	5,8	13,5	7,9	11,1	8,7
1962	11,8	10,7	8.7	3,3	2,2	5,7	5,1	5,5	12,5	8,3	10,4	7,9
1963	10,8	11,6	8,5	3,8	1,9	5,3	5,1	5,2	11,5	8,6	10,4	7,6
1964	10,8	11,4	8,6	3,3	2,1	5,2	4,2	5,2	10,8	9,5	10,2	7,6
1965	11,5	11,4	8,9	3,1	2,0	5,2	4,0	5,6	10,6	9,2	10,3	7,7
1966	11,4	11,4	9,2	3,6	2,5	5,1	4,9	5,7	10,6	9,1	10,3	7,8
1967	10,9	11,1	9,8	3,9	2,6	4,9	7,4	5,9	10,5	9,3	9,6	7,7
1968	11,2	11,2	10,0	2,8	3,1	4,8	7,7	6,1	9,9	8,9	10,5	7,9
1969	10,9	11,6	9,8	3,1	3,1	4,7	7,7	6,1	9,7	8,8	10,9	7,9
1970	11,2	11,9	9,5	3,1	3,3	5,3	7,6	6,1	9,8	8,8	10,7	8,0
1971	10,7	11,2	9,5	2,6	3,4	5,2	6,9	6,0	9,1	8,2	10,8	7,9
1972	10,7	11,0	8,9	3,2	3,6	5,2	6,0	6,2	8,4	7,7	10,0	7,6
1973	11,8	11,4	9,6	3,8	3,5	5,5	7,2	6,0	9,6	7,9	10,8	8,0
1974	14,1	13,2	12,1	5,0	3,9	7,1	8,8	8,3	11,9	8,3	12,6	10,0
1975	12,2	12,4	11,5	5,3	3,7	7,1	7,0	8,4	11,0	6,0	12,1	9,5
1976	11,6	11,6	11,7	5,6	4,0	7,1	8,6	8,6	11,0	5,4	12,7	9,7
1977	12,5	11,8	11,9	5,4	4,3	7,4	9,4	9,2	10,7	5,7	13,7	10,1
1978	12,2	10,5	11,4	5,1	4,5	6,9	9,0	9,1	9,9	5,6	13,2	9,7
1979	12,7	11,0	11,0	5,1	4,5	7,2	9,0	9,0	10,2	7,2	12,0	9,5
1980	13,7	12,3	11,5	6,8	4,6	7,4	10,1	8,1	10,6	7,3	11,7	9,6
1981	15,3	14,7	13,0	6,5	5,8	8,3	11,7	9,9	12,2	7,0	11,7	10,7
1982	16,0	14,0	13,1	5,8	5,7	7,9	11,3	9,2	11,7	6,6	11,7	10,5
1983	17,1	14,7	12,7	6,0	6,2	8,1	13,2	8,8	12,0	7,9	10,9	10,4
1984	19,0	16,5	13,8	6,4	6,9	8,8	15,6	9,2	13,5	9,9	11,7	11,3
1985	18,6	16,4	14,7	6,2	6,6	8,5	16,5	9,4	13,5	10,0	11,2	11,3
1986	15,5	14,1	13,4	5,2	4,4	6,9	13,7	7,5	11,2	7,6	9,8	9,7
1987	14,3	13,2	12,4	4,5	4,9	6,4	13,8	6,7	10,8	7,1	9,6	9,1
1988	14,7	12,9	12,3	3,7	4,9	6,9	14,4	6,6	11,5	7,2	8,7	9,0
1989	16,2	13,4	12,9	4,8	4,6	7,5	15,2	7,1	12,1	7,7	9,0	9,4
1990	15,2	13,5	12,4	4,3	4,2	7,4	13,8	6,6	11,4	7,6	8,8	9,1
1991	15,2	13,6	12,3	4,1	4,0	7,5	14,2	6,4	11,3	7,6	8,5	8,9

Table 39

Imports of goods and services at current prices

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	40,8	33,4	16,2	16,7	7,4	12,4	37,3	13.5	73,7	45,9	23,7	22.3	18,9	4,4	10,2
1961	42,1	31,5	15,5	16,4	9,3	12,2	39,8	13,5	80,2	45,4	27,7	20,9	18,4	4,2	10,9
1962	43,0	31,6	16,0	16,9	11,0	12,0	38,9	13,9	29,2	44,5	23,5	20,3	18,4	4,3	9,3
1963	45,2	30,0	16,0	18,0	11,7	12,3	40,8	15,1	77,5	45,6	24,3	20,4	18,8	4,3	9,8
1964	45,3	31,8	16,3	19,0	12,0	12,9	41,0	13,4	78,8	45,6	29,9	21,1	19,1	4,3	9,7
1965	44,5	30,7	17,6	20,3	13,8	12,4	43,9	12,7	79,9	43,6	31,5	20,0	19,0	4,4	9,1
1966	46,9	30,0	17,3	18,8	14,2	13,1	43,2	13,7	75,1	43,1	31,0	19,5	19,0	4,8	9,0
1967	44,7	29,2	16,6	18,0	12,6	13,0	40,9	14,2	70,6	41,4	29,5	20,2	18,7	4,9	9,4
1968	47,0	28,9	17,6	18,4	13,4	13,3	45,2	14,0	70,4	41,0	29,8	22,2	19,5	5,2	9,0
1969	50,4	29,6	18,8	18,7	14,1	14,6	46,3	15,3	69,7	42,7	28,6	21,8	20,4	5,2	8,9
1970	51,3	30,9	19,0	18,4	14,2	15,3	45,0	16,3	76,1	46,6	30,9	22,2	21,1	5,5	9,5
1961-70	46,1	30,4	17,1	18,3	12,6	13,1	42,5	14,2	75,8	43,9	28,7	20,9	19,2	4,7	9,5
1971	50,2	29,4	19,1	18,4	13,4	15,3	43,4	16,2	84,8	45,7	32,1	21,7	20,9	5,6	9,0
1972	49,4	26,5	18,8	20,0	14,4	15,7	39,9	16,9	77,2	42,2	31,9	21,8	20,8	6,1	8,3
1973	55,4	30,4	19,1	25,2	15,4	16,7	44,8	19,4	77,0	44,2	33,7	26,2	22,9	6,7	10,0
1974	63,0	34,7	21,7	25,6	19,2	21,7	57,2	24,3	81,7	51,2	42,2	33,0	27,8	8,6	14,3
1975	55,3	31,0	21,6	26,9	17,4	17,9	48,8	20,6	88,5	46,5	32,8	27,7	24,6	7,6	12,8
1976	58,2	33,5	23,2	25,8	18,2	20,3	54,2	23,2	82,7	47,6	30,9	29,9	26,5	8,4	12,8
1977	58,2	32,5	23,0	25,2	16,6	20,4	58,5	22,2	83,2	46,3	33,5	29,6	26,0	9,1	11,5
1978	56,3	29,9	22,3	24,6	14,4	19,1	59,8	21,2	82,8	44,9	32,5	27,3	24,6	9,4	9,4
1979	62,6	32,1	24,4	25,3	14,7	20,6	66,1	23,2	87,2	49,6	37,9	27,8	26,4	10,1	12,5
1980	65,4	33,8	26,7	26,2	18,1	22,7	63,0	24,6	89,6	53,0	42,0	25,2	27,8	10,7	14,6
1971-80	57,4	31,4	22,0	24,3	16,2	19,0	53,6	21,2	83,5	47,1	34,9	27,0	24,8	8,2	11,5
1981	69,8	35,8	27,8	27,1	20,2	23,5	62,7	25,3	89,8	54,5	45,2	24,0	28,6	10,3	14,0
1982	72,8	35,9	27,2	28,7	20,6	23,7	55,4	24,0	90,9	53,4	45,0	24,6	28,4	9,5	13,8
1983	72,8	34,4	26,6	30,1	21,9	22,6	55,2	21,4	90,4	53,9	44,1	25,8	27,9	9,5	12,2
1984	77,3	35,5	28,0	29,9	21,4	23,5	59,7	23,0	99,7	56,9	45,2	28,9	29,5	10,5	12,4
1985	74,3	36,3	28,3	32,8	21,2	23,2	58,9	23,2	103,7	58,7	41,4	28,1	29,4	10,1	11,2
1986	66,7	32,5	24,4	31,1	18,0	20,2	52,8	18,8	98,8	49,7	35,9	26,8	25,8	10,6	7,5
1987	66,5	29,9	23,4	31,9	19,5	20,6	52,4	18,9	99,6	49,4	41,5	27,0	25,8	11,1	7,3
1988	69,0	29,4	23,9	30,4	20,7	21,4	54,2	19,3	101,6	50,5	46,3	27,1	26,4	11,2	8,5
1989	73,7	31,2	25,7	31,8	22,1	23,0	57,8	20,7	104,7	53,7	46,7	28,3	28,1	11,1	10,8
1990	73,1	30,3	26,8	30,2	21,8	23,2	56,3	20,2	106,3	52,4	46,8	27,1	27,9	11,2	12,5
1981-90	71,6	33,1	26,2	30,4	20,7	22,5	56,5	21,5	98,6	53,3	43,8	26,8	27,8	10,5	11,0
1991	75,7	30,9	28,3	29,8	21,7	23,6	58,0	20,3	109,2	54,0	46,6	25,5	28,2	11,7	13,6

Table 40

Imports of goods and services at constant prices

(National currency; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1961	7,2	4,4	7,8	12,7	40,1	6,9	13,7	13,7	7,4	6,4	24,9	−0,6	7,0	0,7	26,4
1962	8,2	13,4	12,6	10,1	34,4	6,7	5,4	14,9	3,2	6,5	−8,7	2,1	8,6	11,5	−1,1
1963	8,6	−1,1	3,2	15,4	23,5	14,1	10,6	22,5	3,6	9,8	10,4	2,2	9,0	1,6	19,5
1964	8,9	19,6	9,8	15,3	13,0	15,1	12,9	−6,1	14,4	14,9	30,8	10,8	9,6	5,2	13,7
1965	6,6	6,9	14,8	21,2	33,1	2,3	11,0	2,0	4,3	6,1	14,3	1,1	7,3	9,4	5,6
1966	9,9	5,4	2,4	−0,5	19,0	10,6	3,5	14,0	−2,5	7,0	8,1	2,5	7,1	12,6	12,2
1967	1,6	4,5	−1,0	7,1	−3,3	8,4	3,7	13,5	−4,8	6,3	8,9	7,2	5,2	5,1	22,7
1968	11,7	4,9	13,5	10,3	8,1	12,8	15,7	5,9	9,3	13,0	14,6	7,9	10,3	14,0	12,1
1969	15,5	13,1	17,0	15,5	15,7	19,5	13,4	19,3	11,3	14,1	4,3	2,9	13,7	5,8	13,7
1970	7,6	9,3	14,4	6,2	7,0	6,3	8,6	16,0	14,6	14,7	9,9	5,1	10,3	4,1	22,9
1961-70	8,5	7,9	9,3	11,2	18,3	10,2	9,8	11,3	5,9	9,8	11,3	4,1	8,8	6,9	14,5
1971	3,6	−0,7	10,8	7,6	0,7	6,7	4,7	2,9	7,7	6,1	14,6	5,2	6,0	6,5	5,7
1972	9,6	1,5	5,9	15,4	24,5	13,7	5,1	9,1	2,8	4,8	12,1	9,4	9,5	13,0	10,3
1973	18,5	12,8	4,3	32,2	16,7	13,7	19,0	9,3	10,7	11,0	12,7	11,5	11,4	10,4	24,3
1974	4,4	−3,8	−0,7	−16,3	8,0	0,8	−2,3	1,4	5,8	−0,8	4,6	0,8	0,9	−3,9	4,6
1975	−9,0	−4,8	0,9	6,3	−0,9	−9,5	−10,2	−12,5	−9,4	−4,1	−24,2	−6,9	−6,5	−10,5	−9,9
1976	12,2	15,6	11,6	6,1	9,8	17,6	14,7	13,4	0,9	10,1	5,2	4,8	11,1	19,4	6,0
1977	4,8	0,0	3,3	8,0	−5,5	0,8	13,3	1,9	1,5	2,9	10,8	1,4	2,1	12,0	3,9
1978	2,6	0,1	6,5	7,2	−1,0	3,5	15,7	4,9	6,0	6,3	0,2	3,8	4,3	5,9	5,7
1979	9,0	5,0	9,7	7,2	11,4	10,4	13,9	11,5	6,7	6,0	12,6	9,7	9,7	1,3	12,0
1980	−0,4	−6,8	3,5	−8,0	3,3	2,3	−4,5	3,1	3,7	−0,4	6,9	−3,5	0,9	−8,2	−8,7
1971-80	5,3	1,7	5,5	5,9	6,3	5,7	6,5	4,3	3,5	4,1	4,9	3,5	4,8	4,2	5,0
1981	−3,2	−1,7	−2,9	3,6	−4,2	−2,3	1,7	−3,9	−3,1	−5,8	2,3	−2,8	−3,0	2,4	1,7
1982	0,1	3,8	−1,3	7,0	3,9	2,3	−3,1	−0,7	−0,2	1,1	3,9	4,9	1,4	−2,2	0,4
1983	−1,3	1,8	1,8	6,6	−0,6	−2,7	4,7	−1,7	1,1	3,9	−6,1	6,3	1,0	12,2	−2,7
1984	5,6	5,5	5,4	0,2	−1,0	2,6	9,9	11,3	13,7	5,0	−4,4	9,9	5,9	23,0	10,9
1985	0,8	8,1	3,5	12,8	6,2	4,2	3,2	4,7	7,1	6,5	1,4	2,4	4,0	5,0	−0,4
1986	7,8	6,4	3,1	3,8	16,5	6,5	5,6	5,0	4,2	3,6	16,9	6,7	6,2	10,9	4,6
1987	8,6	−2,0	4,3	16,6	20,4	7,6	5,0	10,6	7,4	6,1	20,0	7,7	8,4	8,2	6,2
1988	7,3	0,6	5,9	6,5	15,2	7,5	3,9	7,8	7,6	7,0	16,1	12,3	8,6	5,3	22,7
1989	9,1	5,7	8,6	10,2	17,5	8,3	10,9	9,6	7,1	6,0	10,8	7,0	9,0	5,5	21,3
1990	6,3	2,4	12,0	5,8	10,0	6,7	7,0	6,2	4,9	6,1	10,9	2,5	7,1	3,7	11,8
1981-90	4,0	3,0	4,0	7,2	8,1	4,0	4,8	4,8	4,9	3,9	6,8	5,6	4,8	7,2	7,3
1991	5,3	1,7	9,9	3,7	5,6	4,4	4,5	5,4	4,9	3,9	6,5	0,5	5,1	1,7	7,3

Table 41

Intra-Community imports of goods at current prices

(Percentage of GDP at market prices)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12
1960	20,3	17,4	5,9	9,5	2,3	3,8	24,2	4,6	22,2	12,0	4,1	6,4
1961	21,6	16,5	5,8	9,7	3,1	4,1	27,0	4,8	24,6	14,7	4,1	6,6
1962	22,2	16,1	6,1	10,2	4,5	4,4	26,7	5,2	24,2	11,8	4,0	6,8
1963	23,9	14,8	6,2	9,8	5,2	5,0	28,3	6,0	25,5	11,4	4,1	7,2
1964	24,8	15,5	6,6	9,9	5,6	5,3	28,2	5,1	25,8	12,3	4,5	7,5
1965	25,0	14,8	7,6	10,5	6,6	5,2	28,1	4,5	24,8	13,7	4,4	7,6
1966	26,8	14,1	7,4	10,3	6,8	5,7	26,5	5,0	24,5	14,0	4,5	7,8
1967	24,8	13,1	7,1	9,7	5,7	5,8	25,5	5,4	23,1	13,1	4,9	7,7
1968	25,8	12,6	7,6	10,0	5,3	6,2	28,6	5,2	22,7	12,5	5,3	8,1
1969	28,6	13,2	8,6	9,7	5,5	7,4	29,6	6,0	24,1	12,9	5,1	8,9
1970	29,2	13,8	8,5	10,2	5,2	7,6	29,9	6,8	25,9	13,8	5,3	9,2
1971	31,0	12,0	9,0	9,9	4,9	7,6	27,6	6,6	24,4	13,8	5,5	9,3
1972	30,6	11,1	8,7	10,4	5,4	8,0	26,6	7,2	23,0	13,3	5,9	9,5
1973	33,6	12,9	8,6	10,9	5,8	8,4	30,7	8,5	24,1	13,4	7,6	10,4
1974	35,9	14,5	9,2	10,4	6,3	9,7	38,1	9,8	26,0	16,5	9,0	11,6
1975	32,9	13,0	9,3	11,5	5,3	8,2	31,6	8,1	23,6	11,6	7,9	10,5
1976	35,2	14,5	10,0	11,1	5,3	9,5	35,4	9,5	23,8	12,8	8,5	11,5
1977	34,5	14,0	10,1	11,8	5,0	9,5	37,5	8,9	22,9	14,8	10,2	11,7
1978	34,6	13,2	10,0	11,2	4,4	9,3	39,2	8,8	22,7	15,0	9,8	11,5
1979	35,0	14,7	10,9	11,3	4,7	10,2	46,3	9,7	24,7	16,2	10,6	12,2
1980	36,0	14,9	11,4	10,9	5,0	10,6	43,5	10,2	24,8	17,1	9,1	12,2
1981	37,3	15,1	11,9	12,3	5,1	10,6	43,7	9,4	24,9	18,2	8,7	12,2
1982	40,6	15,3	12,0	12,3	5,6	11,3	38,1	9,3	25,1	19,1	9,2	12,5
1983	43,4	14,7	12,2	13,4	6,2	11,4	36,6	8,6	25,3	17,6	10,1	12,7
1984	45,2	15,0	12,9	13,8	6,0	12,0	38,6	9,2	27,6	17,7	11,1	13,4
1985	46,3	16,0	13,4	14,7	6,4	12,2	38,2	10,0	30,2	17,3	11,3	14,0
1986	41,5	15,0	11,6	16,9	7,3	11,3	33,9	9,2	27,8	18,8	11,4	13,0
1987	41,8	13,7	11,1	17,1	8,8	11,7	32,6	9,3	27,7	23,2	11,6	13,1
1988	42,9	13,2	11,1	14,7	9,5	12,7	33,9	9,6	28,4	28,7	11,7	13,4
1989	44,4	13,6	12,1	18,5	10,3	13,8	35,9	10,1	30,0	28,4	12,2	14,3
1990	43,4	13,3	13,1	17,7	10,3	13,9	34,6	10,1	29,7	28,8	11,7	14,4
1991	44,7	13,9	13,7	17,5	10,1	14,0	35,6	10,2	30,3	28,7	10,9	14,5

Table 42

Extra-Community imports of goods at current prices

(Percentage of GDP at market prices)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12
1960	15,5	14,5	8,9	11,6	4,2	7,1	13,6	8,0	18,8	11,2	14,4	10,4
1961	14,8	13,6	8,4	9,6	5,7	6,6	14,0	7,9	17,9	11,5	13,0	9,8
1962	14,6	14,4	8,5	7,7	6,4	6,4	13,0	7,9	16,8	10,2	12,6	9,5
1963	14,6	13,8	8,4	8,5	6,3	6,3	13,3	8,3	16,7	11,3	12,8	9,5
1964	15,0	15,3	8,3	8,1	6,1	6,4	13,3	7,4	16,6	12,5	13,7	9,6
1965	14,4	14,8	8,6	9,7	6,9	6,0	13,4	7,3	15,4	12,7	12,7	9,4
1966	14,5	14,5	8,4	9,3	7,1	6,1	13,0	7,7	15,1	12,7	12,1	9,2
1967	13,6	14,3	7,9	7,8	6,4	5,6	14,4	7,7	14,3	11,5	12,1	8,9
1968	14,5	13,7	7,9	8,3	6,8	5,2	14,0	7,0	13,6	11,4	13,3	8,8
1969	14,7	13,9	8,2	8,7	7,2	5,5	14,0	7,3	13,6	11,0	13,0	9,0
1970	14,9	14,6	8,0	9,9	7,6	6,0	12,7	7,5	15,0	12,4	12,6	9,1
1971	12,7	13,7	7,7	9,1	6,6	5,6	13,1	6,9	14,8	12,5	11,6	8,6
1972	11,8	12,2	6,8	8,2	7,1	5,7	11,0	6,9	13,1	12,9	11,4	8,1
1973	13,2	14,3	7,1	10,3	7,5	6,1	11,4	8,3	14,4	13,1	13,8	9,0
1974	17,5	16,4	9,0	13,0	10,9	9,6	16,1	12,5	18,2	17,7	18,8	12,4
1975	15,1	14,6	8,6	14,1	9,8	7,6	12,8	10,1	16,9	14,8	14,9	10,7
1976	15,9	15,3	9,8	15,8	10,6	8,6	14,2	11,5	18,2	15,1	16,4	11,8
1977	15,6	14,5	9,6	14,5	9,6	8,5	16,0	10,9	17,8	15,7	14,8	11,3
1978	14,7	12,6	9,0	13,5	8,2	7,6	15,7	10,0	15,8	14,2	14,6	10,5
1979	18,4	13,7	10,1	13,7	8,2	8,1	14,3	11,1	17,9	17,2	13,9	11,3
1980	22,4	14,7	11,7	15,7	11,0	9,7	13,9	11,9	20,5	20,7	13,1	12,6
1981	24,4	15,8	12,0	11,8	12,2	10,0	13,7	12,9	21,7	22,0	12,1	12,9
1982	24,7	15,3	11,6	13,6	11,9	9,5	12,4	12,0	20,2	21,4	12,1	12,4
1983	22,6	14,7	11,1	14,1	12,6	8,6	13,0	10,7	20,7	21,3	12,0	11,9
1984	24,0	15,7	11,8	14,7	10,9	8,7	15,3	11,1	23,9	23,0	13,4	12,6
1985	21,0	15,6	11,9	15,9	10,4	8,3	14,7	11,2	23,9	20,0	12,5	12,2
1986	17,7	13,2	9,8	12,1	7,0	6,2	12,3	7,4	17,8	13,1	11,1	9,5
1987	15,9	11,9	9,3	10,9	7,2	6,1	12,8	7,1	17,3	13,3	10,9	9,1
1988	17,9	11,4	9,7	8,8	7,3	6,8	13,4	7,1	17,6	14,1	12,0	9,6
1989	19,9	12,4	10,6	11,2	7,8	7,4	15,1	7,6	19,8	13,4	11,5	10,2
1990	19,7	11,9	11,4	10,3	7,5	7,5	14,6	7,1	19,0	13,2	10,9	10,1
1991	20,5	12,0	12,0	10,3	7,4	7,6	14,9	7,0	19,9	13,1	10,2	10,2

Table 43

Balance on current transactions with the rest of the world

(Percentage of GDP at market prices)

	B	B/L	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	0,1	0,7	−1,1	1,7	−2,9	3,8	1,5	−0,1	0,8	12,5	3,0	−4,0	−1,0	0,8	0,6	0,5
1961	−0,1	0,2	−1,7	1,1	−2,2	1,9	1,1	0,2	1,2	6,5	1,4	−10,0	0,0	0,7	0,8	−1,6
1962	0,6	0,6	−3,2	−0,2	−1,6	−0,1	1,0	−1,8	0,6	0,6	1,0	−3,4	0,4	0,3	0,7	0,1
1963	−0,5	−0,5	0,1	0,4	−2,2	−1,5	0,3	−2,8	−1,4	0,2	0,7	−3,3	0,3	−0,1	0,8	−1,0
1964	0,2	0,2	−2,2	0,3	−4,3	0,1	−0,3	−3,5	1,1	−0,1	−1,1	0,0	−1,3	−0,3	1,2	−0,5
1965	0,6	0,6	−1,8	−1,2	−5,8	−2,1	0,8	−4,4	3,6	0,7	0,1	−0,4	−0,4	0,1	0,9	1,1
1966	−0,3	−0,2	−1,9	0,3	−2,0	−2,1	0,1	−1,6	3,2	1,7	−1,0	0,8	0,1	0,3	0,5	1,3
1967	0,8	1,1	−2,4	2,2	−2,2	−1,5	0,0	1,4	2,2	7,4	−0,3	3,7	−0,9	0,6	0,4	0,0
1968	0,9	1,2	−1,7	2,3	−3,6	−0,8	−0,5	−1,3	3,3	9,7	0,3	1,5	−0,8	0,7	0,2	0,8
1969	1,2	1,7	−2,8	1,4	−4,0	−1,1	−1,1	−4,8	2,7	14,0	0,2	3,6	0,6	0,5	0,2	1,3
1970	2,8	3,3	−3,9	0,6	−3,1	0,2	0,8	−4,0	0,8	15,0	−1,4	1,9	1,3	0,6	0,4	1,0
1961-70	0,6	0,8	−2,1	0,7	−3,1	−0,7	0,2	−2,3	1,7	5,6	0,0	−0,6	−0,1	0,3	0,6	0,2
1971	2,1	2,3	−2,4	0,4	−1,5	2,2	0,9	−3,8	1,4	6,2	−0,3	2,5	1,8	0,9	0,0	2,5
1972	3,6	3,9	−0,4	0,4	−1,2	1,5	1,0	−2,2	1,6	10,1	2,8	5,5	0,1	1,0	−0,3	2,2
1973	2,0	2,6	−1,7	1,3	−3,8	0,8	0,6	−3,5	−1,6	16,1	3,8	3,0	−1,9	0,3	0,7	0,0
1974	0,4	1,5	−3,1	3,1	−2,8	−3,5	−1,3	−9,9	−4,2	26,1	3,1	−6,2	−4,5	−0,9	0,5	−1,0
1975	−0,1	0,5	−1,5	1,2	−3,7	−2,9	0,8	−1,5	−0,2	16,5	2,5	−5,5	−2,0	0,0	1,4	−0,1
1976	0,3	1,0	−4,9	1,1	−1,9	−3,9	−0,9	−5,3	−1,2	21,1	2,9	−8,0	−1,7	−0,6	0,5	0,7
1977	−1,1	−0,3	−4,0	0,9	−1,9	−1,7	−0,1	−5,4	1,1	21,2	0,8	−9,4	−0,2	0,0	−0,4	1,5
1978	−1,3	−0,5	−2,7	1,4	−1,3	1,0	1,4	−6,8	2,2	19,2	−0,9	−5,7	0,4	0,9	−0,5	1,7
1979	−2,9	−2,0	−4,7	−0,8	−1,9	0,5	0,9	−13,4	1,6	21,3	−1,2	−1,7	0,1	−0,1	0,1	−0,9
1980	−4,3	−3,5	−3,7	−1,7	0,5	−2,4	−0,6	−11,8	−2,2	18,7	−1,5	−5,9	1,5	−1,2	0,4	−1,0
1971-80	−0,1	0,5	−2,9	0,7	−1,9	−0,8	0,3	−6,3	−0,1	17,6	1,2	−3,1	−0,6	0,0	0,2	0,6
1981	−3,8	−2,8	−3,0	−0,7	−0,7	−2,7	−0,8	−14,7	−2,2	21,2	2,2	−12,2	2,4	−0,7	0,3	0,5
1982	−3,7	−2,2	−4,2	0,5	−4,4	−2,5	−2,1	−10,6	−1,6	34,4	3,2	−13,5	1,4	−0,7	0,0	0,7
1983	−0,8	0,8	−2,6	0,7	−5,0	−1,5	−0,8	−6,9	0,3	39,3	3,1	−8,3	0,9	0,1	−1,0	1,8
1984	−0,6	1,1	−3,3	1,3	−4,0	1,4	0,0	−5,8	−0,6	38,9	4,2	−3,4	−0,2	0,3	−2,4	2,8
1985	0,3	2,1	−4,6	2,6	−8,2	1,6	0,1	−4,0	−0,9	43,5	4,1	0,4	0,6	0,7	−2,9	3,7
1986	2,0	3,6	−5,5	4,4	−5,3	1,7	0,5	−2,9	0,5	39,4	2,7	2,4	−0,8	1,4	−3,2	4,3
1987	1,2	2,5	−3,0	4,1	−3,1	0,1	−0,3	1,3	−0,2	31,6	1,4	−0,4	−1,9	0,7	−3,4	3,7
1988	1,0	2,4	−1,8	4,1	−1,7	−1,1	−0,4	1,8	−0,6	34,3	2,4	−4,4	−4,1	0,2	−2,4	2,8
1989	1,0	2,3	−1,3	4,7	−4,8	−2,9	−0,2	1,6	−1,3	31,5	3,6	−1,2	−3,7	0,2	−1,9	2,1
1990	0,3	1,5	0,0	2,6	−5,1	−3,8	−0,3	1,2	−1,3	27,3	3,3	−1,2	−2,8	−0,3	−1,7	1,6
1981-80	−0,3	1,1	−2,9	2,4	−4,2	−1,0	−0,4	−3,9	−0,8	34,1	3,0	−4,2	−0,8	0,2	−1,9	2,4
1991	−0,3	0,7	0,3	0,7	−5,1	−4,0	−0,4	0,4	−1,7	24,1	3,4	−1,7	−2,0	−0,8	−1,8	1,6

Table 44

Structure of EC exports by country and region, 1958 and 1989

(Percentage of total exports)

Export of / to	B/L		DK		D		GR		E		F		IRL		I		NL		P		UK		EUR 12	
	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989
B/L	—	—	1,2	2,1	6,6	7,7	1,0	2,1	2,1	3,1	6,3	9,1	0,8	5,0	2,2	3,4	15,0	16,0	3,7	3,1	1,9	5,8	4,8	6,8
DK	1,6	0,9	—	—	3,0	2,0	0,2	0,8	1,7	0,5	0,7	0,8	0,1	1,0	0,8	0,8	2,6	1,7	1,2	2,0	2,4	1,4	2,0	1,3
D	11,6	19,8	20,0	18,2	—	—	20,5	25,1	10,2	11,1	10,4	18,7	2,2	12,2	14,1	17,4	19,0	28,1	7,7	15,8	4,2	12,7	7,6	12,8
GR	0,8	0,6	0,3	0,9	1,3	1,1	—	—	0,1	0,7	0,6	0,8	0,1	0,5	1,9	1,9	0,6	1,0	0,6	0,4	0,7	0,7	0,8	1,0
E	0,7	2,3	0,8	1,7	1,2	3,6	0,2	1,1	—	—	1,6	5,6	0,8	2,1	0,7	4,9	0,8	2,3	0,7	12,7	0,8	3,9	1,0	3,7
F	10,6	21,4	3,0	6,2	7,6	12,4	12,8	9,1	10,1	18,2	—	—	0,8	11,1	5,3	16,7	4,9	11,4	6,6	15,3	2,4	10,8	4,7	11,6
IRL	0,3	0,4	0,3	0,6	0,3	0,4	0,4	0,2	0,3	0,4	0,2	0,5	—	—	0,1	0,3	0,4	0,7	0,3	0,5	3,5	5,5	1,1	1,1
I	2,3	6,7	5,3	4,9	5,0	10,0	6,0	15,1	2,7	9,3	3,4	13,3	0,4	4,9	—	—	2,7	7,0	4,3	4,3	2,1	5,4	3,1	7,8
NL	20,7	14,4	2,2	4,4	8,1	9,0	2,0	3,6	3,2	4,1	2,0	5,7	0,5	6,5	2,0	3,2	—	—	2,5	5,8	3,2	7,4	5,3	6,7
P	1,1	0,7	0,3	0,7	0,9	0,9	0,3	0,4	0,4	6,0	0,8	1,3	0,1	0,4	0,7	1,3	0,4	0,8	—	—	0,4	1,1	0,8	1,2
UK	5,7	9,7	25,9	12,7	3,9	9,8	7,6	7,6	15,9	9,3	4,9	9,9	76,8	36,5	6,8	8,1	11,9	11,7	11,3	12,5	—	—	5,9	9,1
Total intra-EC trade	55,4	76,8	59,3	52,3	37,9	57,0	50,9	65,0	46,8	62,7	30,9	65,7	82,4	80,3	34,5	57,9	58,3	80,6	38,9	72,4	21,7	54,6	37,2	63,1
Other European OECD countries	8,7	6,6	16,6	25,3	22,7	19,3	10,3	7,8	12,4	5,1	9,0	8,3	0,9	4,4	18,9	11,7	11,9	6,5	5,1	10,0	9,1	8,5	13,7	11,9
USA	9,4	3,6	9,3	5,1	7,3	5,5	13,6	5,3	10,1	6,6	5,9	4,8	5,7	6,0	9,9	7,9	5,6	2,6	8,3	5,5	8,8	10,3	7,9	5,9
Canada	1,1	0,4	0,7	0,7	1,2	0,6	0,3	0,6	1,3	0,8	0,8	0,9	0,7	0,6	1,2	1,1	0,8	0,4	1,1	0,9	5,8	2,2	2,3	0,9
Japan	0,6	1,2	0,2	4,1	0,9	1,9	1,4	1,5	1,7	1,0	0,3	1,8	0,0	1,5	0,3	2,3	0,4	0,8	0,5	1,1	0,6	2,2	0,6	1,8
Australia	0,5	0,2	0,3	0,6	1,0	0,7	0,1	0,6	0,3	0,3	0,5	0,4	0,1	0,5	0,8	0,9	0,7	0,3	0,6	0,4	7,2	1,7	2,4	0,7
Developing countries of which:	18,0	8,7	9,3	9,2	20,9	9,3	7,2	12,8	18,4	19,8	46,9	15,2	1,6	5,1	26,2	13,4	17,6	6,4	42,3	6,8	33,6	16,1	27,4	11,6
OPEC	3,3	1,3	2,3	2,2	4,8	2,6	0,9	3,7	2,6	3,5	21,3	3,9	0,2	1,8	7,5	4,5	4,5	1,9	2,0	0,7	7,0	5,0	7,6	3,2
Other developing countries	14,7	7,4	7,0	7,0	16,1	6,7	6,3	9,1	15,8	16,3	25,6	11,3	1,4	3,3	18,7	8,9	13,1	4,5	40,3	6,1	26,6	11,1	19,8	9,4
Centrally-planned economies	4,3	1,3	3,9	2,6	5,5	4,6	16,2	5,4	4,6	2,3	4,9	2,5	0,2	0,5	5,3	4,0	2,2	1,6	1,9	1,3	3,4	2,0	4,3	3,0
Rest of the world and unspecified	2,0	1,2	0,4	0,1	2,6	1,1	0,0	1,0	4,4	1,4	0,8	0,4	8,4	1,1	2,9	0,8	2,5	0,8	1,3	1,6	9,8	2,4	4,2	1,1
World (excluding EC)	44,6	23,2	40,7	47,7	62,1	43,0	49,1	35,0	53,2	37,3	69,1	34,3	17,6	19,7	65,5	42,1	41,7	19,4	61,1	27,6	78,3	45,4	62,8	36,9
World (including EC)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 45

Structure of EC imports by country and region, 1958 and 1989

(Percentage of total imports)

Import of / from	B/L		DK		D		GR		E		F		IRL		I		NL		P		UK		EUR 12	
	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989	1958	1989
B/L	—	—	3,8	3,4	4,5	8,1	3,3	4,0	1,8	3,2	5,4	11,3	1,8	2,4	2,0	5,1	17,8	14,0	7,3	4,0	1,6	4,6	4,4	6,9
DK	0,5	0,6	—	—	3,4	2,0	0,7	1,3	1,3	0,7	0,6	0,9	0,7	0,9	2,2	1,0	0,7	1,1	0,8	0,9	3,1	1,9	2,0	1,3
D	17,2	22,8	19,9	24,5	—	—	20,3	18,5	8,7	15,7	11,6	21,3	4,0	8,4	12,0	21,8	19,5	25,3	17,6	14,5	3,6	16,9	8,7	15,5
GR	0,1	0,2	0,0	0,2	0,7	0,7	—	—	0,2	0,2	0,6	0,4	0,2	0,1	0,4	1,2	0,2	0,2	0,1	0,2	0,2	0,3	0,4	0,5
E	0,5	1,4	0,7	0,9	1,6	2,1	0,1	1,9	—	—	1,2	4,3	0,4	1,1	0,4	2,5	0,4	1,3	0,4	14,7	1,0	2,2	0,9	2,4
F	11,6	14,5	3,4	4,6	7,6	10,9	5,4	6,7	6,8	13,0	—	—	1,6	4,1	4,8	15,1	2,8	8,1	7,7	11,7	2,7	9,3	4,4	9,2
IRL	0,1	0,7	0,0	0,5	0,1	0,9	0,0	0,6	0,6	0,6	0,0	1,1	—	—	0,0	0,7	0,0	1,0	0,1	0,3	2,9	3,6	0,9	1,3
I	2,1	4,1	1,7	3,6	5,5	9,3	8,8	15,8	1,8	10,5	2,4	12,5	0,8	2,5	—	—	1,8	3,6	3,7	9,2	2,1	5,8	2,7	6,9
NL	15,7	17,7	7,3	7,8	8,1	12,5	4,8	7,1	2,6	3,7	2,5	6,9	2,9	5,2	2,6	5,7	—	—	2,9	5,5	4,2	7,6	5,2	8,2
P	0,4	0,4	0,3	1,0	0,4	0,8	0,3	0,4	0,3	2,5	0,4	1,0	0,2	0,3	0,4	0,4	0,2	0,6	—	—	0,4	0,9	0,3	0,8
UK	7,4	7,6	22,8	7,2	4,3	6,8	9,9	5,7	7,8	6,3	3,5	7,6	56,3	48,3	5,5	5,0	7,4	7,8	12,9	7,5	—	—	5,4	6,3
Total intra-EC trade	55,5	69,9	60,0	53,8	36,3	54,1	53,7	61,9	31,8	56,3	28,3	66,4	68,9	73,4	30,2	58,4	50,7	63,0	53,4	68,5	21,8	53,0	35,2	59,5
Other European OECD countries	7,7	5,7	18,6	23,8	15,2	15,8	11,5	8,7	8,4	6,3	6,7	7,9	3,4	3,9	13,1	11,1	7,2	7,3	8,6	6,3	8,7	12,9	10,1	11,0
USA	9,9	5,4	9,1	5,5	13,6	6,3	13,7	3,2	21,6	8,9	10,0	5,3	7,0	12,3	16,4	5,1	11,3	6,8	7,0	4,3	9,4	10,1	11,4	6,7
Canada	1,4	0,6	0,2	0,4	3,1	0,8	0,8	0,4	0,5	0,5	1,0	0,6	3,0	0,5	1,5	0,7	1,4	0,6	0,5	0,8	8,2	1,9	3,6	0,9
Japan	0,6	3,3	1,5	2,5	0,6	6,0	2,0	7,2	0,7	4,5	0,2	3,1	1,1	3,8	0,4	2,3	0,8	3,2	0,0	3,1	0,9	5,7	0,7	4,2
Australia	1,7	0,5	0,0	0,3	1,2	0,4	0,3	0,1	0,8	0,3	2,4	0,5	1,2	0,1	3,0	0,5	0,2	0,4	0,9	0,3	5,4	0,7	2,6	0,5
Developing countries of which:	19,2	10,5	5,9	9,8	23,9	11,4	9,6	13,1	32,0	19,3	45,6	12,5	9,3	3,6	29,4	14,3	24,4	15,3	27,6	14,8	34,7	11,4	29,5	12,6
OPEC	5,7	2,1	0,3	2,1	6,7	2,3	1,7	5,2	17,7	7,8	19,7	4,4	0,7	0,3	13,9	5,7	11,5	6,8	6,3	6,1	11,3	1,6	10,8	3,8
Other developing countries	13,5	8,4	5,6	7,7	17,2	9,1	7,9	7,9	14,3	11,5	25,9	8,1	8,6	3,3	15,5	8,6	12,9	8,5	21,3	8,7	23,4	9,8	18,7	8,8
Centrally-planned economies	2,2	2,2	4,6	3,8	4,5	4,5	8,1	4,8	4,0	3,1	4,2	2,9	1,8	1,4	3,7	5,2	3,1	3,1	0,7	1,0	3,7	2,3	3,8	3,4
Rest of the world and unspecified	1,8	1,9	0,1	0,1	1,6	0,7	0,3	0,6	0,2	0,8	1,6	0,8	4,3	1,0	2,3	2,4	0,9	0,3	1,3	0,9	7,2	2,0	3,1	1,2
World (excluding EC)	44,5	30,1	40,0	46,2	63,7	45,9	46,3	38,1	68,2	43,7	71,7	33,6	31,1	26,6	69,8	41,6	49,3	37,0	46,6	31,5	78,2	47,0	64,8	40,5
World (including EC)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Table 46

Money supply (M2/M3)

(End year; annual percentage change)

	B	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 10	EUR 12	USA	J
1960	4,3	8,0	11,1	20,2	:	16,7	5,5	19,6	7,0	:	:	:	:	4,9	20,1
1961	9,9	9,8	12,9	17,0	:	17,2	7,3	14,9	5,4	:	:	:	:	7,4	20,2
1962	7,4	8,5	10,4	21,5	:	18,7	9,6	17,0	6,6	:	:	:	:	8,1	20,3
1963	10,3	12,5	9,9	21,4	:	14,1	5,8	13,5	9,8	:	:	:	:	8,4	24,0
1964	7,6	11,1	9,4	16,1	:	9,8	9,4	12,7	10,4	:	7,6	9,7	:	8,0	18,7
1965	9,6	9,7	10,6	12,9	:	10,9	6,7	15,2	6,2	:	9,4	10,9	:	8,1	18,0
1966	8,2	12,8	8,3	18,2	:	10,6	10,6	13,0	5,9	:	6,5	9,2	:	4,5	16,3
1967	7,1	9,8	12,0	16,1	:	13,1	12,7	13,7	10,9	11,7	12,8	12,5	:	9,2	15,5
1968	8,6	14,5	11,8	17,8	:	11,6	16,9	13,1	14,8	14,1	8,5	11,4	:	8,0	14,8
1969	7,0	10,2	9,4	16,2	:	6,1	11,2	12,5	10,2	17,8	5,1	8,4	:	4,1	18,5
1970	10,0	3,3	9,1	19,3	15,4	15,3	14,0	15,9	11,0	12,4	12,0	12,5	12,7	6,6	16,9
1961-70	8,6	10,2	10,4	17,6	:	12,7	10,4	14,1	9,1	:	:	:	:	7,2	18,3
1971	12,9	8,5	13,5	22,4	24,3	18,0	12,9	17,2	9,0	21,0	16,2	15,5	16,3	13,5	24,3
1972	17,0	15,0	14,4	23,6	23,1	18,8	14,2	19,0	11,9	23,4	23,2	18,2	18,7	13,0	24,7
1973	15,4	12,6	10,1	14,5	25,0	14,7	26,0	23,1	21,9	28,9	21,8	17,1	17,9	6,9	16,8
1974	14,0	8,9	8,5	20,9	19,9	15,6	20,6	15,7	20,0	12,1	10,8	13,0	13,6	5,5	11,5
1975	15,1	25,1	8,6	26,5	19,3	18,1	18,9	23,7	5,7	13,1	11,7	14,9	15,3	12,6	16,5
1976	14,3	10,9	8,4	26,7	19,0	12,3	14,5	20,8	22,7	16,4	11,3	13,7	14,2	13,7	15,4
1977	10,3	9,9	11,2	22,7	18,6	14,2	17,1	21,7	3,6	21,8	14,8	14,4	14,9	10,6	13,4
1978	10,2	8,7	11,0	26,0	19,7	12,4	29,0	22,6	4,2	26,0	15,0	14,3	15,0	8,0	14,0
1979	8,2	10,8	6,0	18,4	18,3	14,0	18,7	20,8	6,9	31,0	14,4	12,9	13,7	7,8	10,8
1980	6,5	8,1	6,2	24,7	16,9	9,7	17,7	12,7	4,4	28,6	17,1	10,9	11,7	8,9	9,5
1971-80	12,4	11,8	9,8	22,6	20,4	14,8	19,0	19,7	11,0	22,2	15,6	14,5	15,1	10,1	15,7
1981	10,0	9,1	5,0	34,7	17,0	11,0	17,4	10,0	5,3	23,8	20,4	11,3	12,0	10,0	11,0
1982	7,5	11,4	7,1	29,0	16,6	11,4	13,0	18,0	7,6	24,6	12,0	11,8	12,4	8,9	7,9
1983	7,1	25,4	5,3	20,3	16,2	11,5	5,6	12,3	10,4	16,3	13,3	10,7	11,2	12,0	7,3
1984	6,2	17,8	4,7	29,4	13,3	9,5	10,1	12,1	7,6	24,5	13,6	10,0	10,5	8,6	7,8
1985	6,7	15,8	5,0	26,8	12,9	6,8	5,3	11,1	11,1	29,8	13,0	9,3	9,9	8,2	8,7
1986	10,7	8,4	6,6	19,0	12,2	6,3	−1,0	9,4	5,1	25,8	15,9	9,3	9,8	9,3	9,2
1987	9,9	4,4	5,9	25,2	13,6	7,3	10,9	8,4	4,4	16,8	16,3	9,3	9,8	3,6	10,8
1988	6,6	3,5	6,9	22,6	10,3	7,3	6,3	8,5	13,1	14,8	17,6	10,1	10,2	5,6	10,2
1989	11,0	5,9	5,5	23,7	12,9	7,9	5,0	10,8	14,5	8,8	18,4	10,8	11,0	4,8	12,0

Table 47

Nominal short-term interest rates

(%)

	B	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12	USA	J
1960	:	:	5,1	:	:	4,1	:	3,5	2,1	:	:	:	:	:
1961	4,6	6,3	3,6	:	:	3,6	:	3,5	1,1	:	5,2	4,0	2,4	:
1962	3,4	6,5	3,4	:	:	3,6	:	3,5	1,9	:	4,1	3,6	2,8	:
1963	3,6	6,1	4,0	:	:	4,0	:	3,5	2,0	:	3,7	3,7	3,2	:
1964	4,9	6,2	4,1	:	:	4,7	:	3,5	3,5	:	5,0	4,4	3,6	:
1965	5,0	6,5	5,1	:	:	4,2	:	3,5	4,0	:	6,8	5,1	4,0	:
1966	5,5	6,5	6,6	:	:	4,8	:	3,5	4,9	3,0	7,0	5,6	4,9	:
1967	5,5	6,6	4,3	:	:	4,8	:	3,5	4,7	3,1	6,3	4,8	4,3	:
1968	4,5	6,6	3,8	:	:	6,2	:	3,5	4,6	3,4	7,9	5,3	5,4	:
1969	7,3	8,2	5,8	:	:	9,3	:	3,7	5,7	3,4	9,2	7,0	6,7	:
1970	8,1	9,0	9,3	:	:	8,6	:	5,3	6,2	4,0	8,1	7,8	6,3	:
1961-70	5,2	6,8	5,0	:	:	5,4	:	3,7	3,8	:	6,3	5,1	4,3	:
1971	5,3	7,6	7,1	:	:	6,0	6,6	5,7	4,5	4,3	6,2	6,1	4,3	6,5
1972	4,2	7,3	5,7	:	:	5,3	7,1	5,2	2,7	4,4	6,8	5,5	4,2	5,2
1973	6,6	7,6	12,2	:	:	9,2	12,2	7,0	7,5	4,4	11,8	9,8	7,2	8,3
1974	10,6	10,0	9,8	:	:	13,0	14,5	14,9	10,4	5,3	13,4	12,3	7,9	14,7
1975	7,0	8,0	4,9	:	:	7,6	10,9	10,4	5,3	6,8	10,6	8,1	5,8	10,1
1976	10,1	8,9	4,3	:	:	8,7	11,7	16,0	7,4	8,4	11,5	9,6	5,0	7,3
1977	7,3	14,5	4,3	:	15,5	9,1	8,4	14,0	4,8	11,1	8,0	9,1	5,3	6,4
1978	7,3	15,4	3,7	:	17,6	7,8	9,9	11,5	7,0	15,5	9,4	8,9	7,4	5,1
1979	10,9	12,5	6,9	:	15,5	9,7	16,0	12,0	9,6	16,1	13,9	11,0	10,1	5,8
1980	14,2	16,9	9,5	:	16,5	12,0	16,2	16,9	10,6	16,3	16,8	13,8	11,6	10,7
1971-80	8,4	10,9	6,8	:	:	8,8	11,4	11,3	7,0	9,3	10,8	9,4	6,9	8,0
1981	15,6	14,8	12,3	16,8	16,2	15,3	16,7	19,3	11,8	16,0	14,1	15,1	14,0	7,4
1982	14,1	16,4	8,8	18,9	16,3	14,6	17,5	19,9	8,2	16,8	12,2	13,8	10,6	6,8
1983	10,5	12,0	5,8	16,6	20,1	12,5	14,0	18,3	5,7	20,9	10,1	12,1	8,7	6,5
1984	11,5	11,5	6,0	15,7	14,9	11,7	13,2	17,3	6,1	22,5	10,0	11,3	9,5	6,3
1985	9,5	10,0	5,4	17,0	12,2	9,9	12,0	15,0	6,3	21,0	12,2	10,6	7,5	6,5
1986	8,1	9,1	4,6	19,8	11,7	7,7	12,4	12,8	5,7	15,6	10,9	9,1	6,0	5,0
1987	7,0	9,9	4,0	14,9	15,8	8,3	11,0	11,4	5,4	13,9	9,7	8,9	5,9	3,9
1988	6,7	8,3	4,3	15,9	11,6	7,9	8,1	11,3	4,8	13,0	10,3	8,6	6,9	4,0
1989	8,8	9,4	7,1	18,7	15,0	9,4	9,8	12,7	7,4	12,6	10,9	11,0	8,4	5,4
1990	9,5	10,8	8,3	17,9	15,1	10,1	11,2	12,0	8,5	13,4	14,7	11,5	7,8	7,8
1981-90	10,1	11,2	6,7	17,2	14,9	10,7	12,6	15,0	7,0	16,6	11,5	11,2	8,5	6,0

Table 48

Nominal long-term interest rates

(%)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 12	USA	J
1960	:	:	6,3	:	:	5,7	:	5,3	:	4,2	:	5,4	:	:	:
1961	5,9	6,6	5,9	:	:	5,5	:	5,2	:	3,9	:	6,3	5,7	3,9	:
1962	5,2	6,6	5,9	:	:	5,4	:	5,8	:	4,2	:	5,9	5,7	3,9	:
1963	5,0	6,5	6,1	:	:	5,3	:	6,1	:	4,2	:	5,4	5,6	4,0	:
1964	5,6	7,1	6,2	:	:	5,4	:	7,4	:	4,9	:	6,0	6,1	4,1	:
1965	6,4	8,6	7,1	:	:	6,2	:	6,9	:	5,2	:	6,6	6,6	4,2	:
1966	6,7	8,7	8,1	:	:	6,6	:	6,5	:	6,2	:	6,9	7,1	4,7	:
1967	6,7	9,1	7,0	:	:	6,7	:	6,6	:	6,0	:	6,8	6,8	4,9	:
1968	6,5	8,7	6,5	:	:	7,0	:	6,7	:	6,2	:	7,6	6,9	5,3	:
1969	7,3	9,7	6,8	:	:	7,9	:	6,9	:	7,0	:	9,1	7,7	6,2	:
1970	7,8	11,1	8,3	:	:	8,6	:	9,0	:	7,8	:	9,3	8,7	6,6	:
1961-70	6,3	8,3	6,8	:	:	6,5	:	6,7	:	5,6	:	7,0	6,7	4,8	:
1971	7,3	11,0	8,0	:	:	8,4	9,2	8,3	:	7,0	:	8,9	8,4	5,7	:
1972	7,0	11,0	7,9	:	:	8,0	9,1	7,5	:	6,7	:	9,0	8,0	5,6	6,9
1973	7,5	12,6	9,3	9,3	:	9,0	10,7	7,4	6,8	7,3	:	10,8	9,1	6,3	7,0
1974	8,8	15,9	10,4	10,5	:	11,0	14,6	9,9	7,3	10,7	:	15,0	11,5	7,0	8,1
1975	8,5	12,7	8,5	9,4	:	10,3	14,0	11,5	6,7	9,1	:	14,5	11,0	7,0	8,4
1976	9,1	14,9	7,8	10,2	:	10,5	14,6	13,1	7,2	9,2	:	14,6	11,2	6,8	8,2
1977	8,8	16,2	6,2	9,5	:	11,0	12,9	14,6	7,0	8,5	:	12,5	10,7	7,1	7,4
1978	8,5	16,8	5,7	10,0	:	10,6	12,8	13,7	6,6	8,1	:	12,6	10,4	7,9	6,3
1979	9,7	16,7	7,4	11,2	13,3	10,9	15,1	14,1	6,8	9,2	:	13,0	11,2	8,7	8,3
1980	12,2	18,7	8,5	17,1	16,0	13,1	15,4	16,1	7,4	10,7	:	13,9	13,0	10,8	8,9
1971-80	8,7	14,6	8,0	:	:	10,3	12,8	11,6	:	8,7	:	12,5	10,4	7,3	:
1981	13,8	19,3	10,4	17,6	15,8	15,8	17,3	20,6	8,7	12,2	:	14,8	15,1	12,9	8,4
1982	13,4	20,5	9,0	15,4	16,0	15,6	17,0	20,9	10,3	10,5	:	12,7	14,3	12,2	8,3
1983	11,8	14,4	7,9	18,2	16,9	13,6	13,9	18,0	9,8	8,8	:	10,8	12,7	10,8	7,8
1984	12,0	14,0	7,8	18,5	16,5	12,5	14,6	15,0	10,3	8,6	:	10,7	11,8	12,0	7,3
1985	10,6	11,6	6,9	15,8	13,4	10,9	12,7	14,3	9,5	7,3	25,4	10,6	10,9	10,8	6,5
1986	7,9	10,5	5,9	15,8	11,4	8,4	11,1	11,7	8,7	6,4	17,9	9,8	9,2	8,1	5,2
1987	7,8	11,9	5,8	17,4	12,8	9,4	11,3	11,3	8,0	6,4	15,4	9,5	9,4	8,7	4,7
1988	7,9	10,6	6,1	16,6	11,8	9,0	9,4	12,1	7,1	6,3	14,2	9,3	9,4	9,0	4,7
1989	8,7	10,2	7,0	:	13,8	8,8	9,0	12,9	7,7	7,2	14,9	9,6	9,9	8,5	5,2
1990	10,1	11,0	8,9	:	14,8	10,0	10,1	13,3	8,6	9,0	15,4	11,2	11,2	8,7	7,6
1981-90	10,4	13,4	7,6	:	14,3	11,4	12,6	15,0	8,9	8,3	:	10,9	11,4	10,2	6,6

Table 49

Gross official reserves

(End year: Mrd ECU)

	B	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12
1960	1,438	0,271	6,671	0,228	0,513	2,166	0,305	3,097	1,776	0,607	3,548	20,620
1961	1,692	0,264	6,681	0,249	0,827	3,140	0,318	3,545	1,826	0,515	3,096	22,153
1962	1,635	0,239	6,485	0,267	0,974	3,775	0,334	3,792	1,813	0,634	3,085	23,033
1963	1,838	0,438	7,133	0,272	1,070	4,577	0,378	3,375	1,959	0,683	2,936	24,659
1964	2,076	0,601	7,359	0,262	1,413	5,346	0,416	3,570	2,192	0,813	2,164	26,212
1965	2,182	0,548	6,943	0,234	1,329	5,930	0,381	4,484	2,256	0,877	2,808	27,972
1966	2,205	0,559	7,529	0,256	1,176	6,322	0,462	4,604	2,298	1,010	2,908	29,329
1967	2,516	0,519	7,920	0,278	1,069	6,803	0,425	5,304	2,547	1,199	2,617	31,197
1968	2,420	0,459	10,553	0,340	1,269	4,832	0,546	5,759	2,724	1,491	2,640	33,033
1969	2,347	0,437	7,008	0,311	1,260	3,775	0,677	4,960	2,488	1,421	2,484	27,168
1970	2,874	0,476	13,537	0,310	1,806	5,071	0,681	5,410	3,279	1,526	2,847	37,817
1971	3,366	0,662	17,468	0,484	3,029	7,976	0,903	6,589	3,711	1,892	8,101	54,181
1972	4,562	0,820	24,443	1,022	4,896	11,544	1,034	7,530	5,663	2,754	5,637	69,905
1973	6,819	1,228	35,066	1,094	6,580	13,206	0,894	10,341	8,766	4,038	6,730	94,762
1974	9,097	0,953	39,322	1,160	6,809	18,627	1,062	14,988	11,777	5,068	7,946	116,805
1975	8,579	0,908	36,703	1,265	6,451	19,431	1,354	11,139	10,745	3,683	6,486	106,744
1976	8,121	0,961	40,608	1,215	5,867	17,026	1,664	12,761	11,065	3,456	5,497	108,241
1977	8,950	1,558	44,286	1,359	6,826	18,494	1,984	17,790	12,050	3,547	19,422	136,268
1978	9,886	2,601	54,763	1,570	9,743	23,515	2,015	21,745	12,706	4,272	15,410	158,228
1979	10,406	2,592	57,593	1,466	12,283	29,443	1,617	26,692	14,516	5,324	17,394	179,326
1980	20,536	3,277	76,565	2,494	15,257	57,097	2,245	45,935	27,502	10,025	23,689	284,622
1981	18,281	3,014	79,810	2,191	15,842	52,522	2,594	45,476	26,260	9,405	22,134	277,529
1982	16,239	2,938	82,135	2,309	13,268	46,296	2,841	39,018	26,524	8,573	19,713	259,854
1983	20,941	5,167	98,195	2,949	15,917	63,694	3,333	56,310	33,245	10,207	23,168	333,126
1984	21,973	4,994	100,903	3,212	23,505	66,181	3,030	59,666	32,886	9,953	22,513	348,816
1985	19,022	6,775	88,940	2,625	19,619	62,530	3,454	44,240	29,545	9,742	21,023	307,515
1986	17,704	4,788	84,315	2,638	17,973	59,706	3,160	43,349	26,522	8,690	23,436	292,281
1987	20,554	8,301	96,134	3,381	28,307	57,529	3,833	49,446	29,441	10,274	37,636	344,836
1988	20,177	9,817	85,818	4,388	36,819	51,440	4,410	53,951	29,600	10,184	45,462	352,066
1989	19,176	5,900	82,535	3,869	40,038	47,648	3,462	61,358	28,454	13,700	39,143	345,283

Table 50

Exchange rates

(Annual average, national currency units per ECU)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	USA	J
1960	52,810	7,2954	4,4361	31,69	63,37	5,2145	0,37722	660,1	4,0136	30,37	0,37722	1,0562	380,23
1961	53,367	7,3722	4,3074	32,02	64,04	5,2695	0,38119	667,1	3,8985	30.69	0,38119	1,0673	384,24
1962	53,490	7,3893	4,2792	32,09	64,14	5,2817	0,38207	668,6	3,8727	30,76	0,38207	1,0698	385,13
1963	53,490	7,3893	4,2792	32,09	64,14	5,2817	0,38207	668,6	3,8727	30,76	0,38207	1,0698	385,13
1964	53,490	7,3893	4,2792	32,09	64,14	5,2817	0,38207	668,6	3,8727	30,76	0,38207	1,0698	385,13
1965	53,490	7,3893	4,2792	32,09	64,14	5,2817	0,38207	668,6	3,8727	30,76	0,38207	1,0698	385,13
1966	53,490	7,3893	4,2792	32,09	64,14	5,2817	0,38207	668,6	3,8727	30,76	0,38207	1,0698	385,13
1967	53,240	7,4229	4,2592	31,94	65,11	5,2570	0,38765	665,5	3,8546	30,61	0,38765	1,0648	383,33
1968	51,444	7,7166	4,1155	30,87	75,02	5,0797	0,42870	643,1	3,7246	29,58	0,42870	1,0289	370,40
1969	51,109	7,6664	4,0262	30,67	71,55	5,2903	0,42591	638,9	3,7003	29,39	0,42591	1,0222	367,99
1970	51,112	7,6668	3,7414	30,67	71,36	5,6777	0,42593	638,9	3,7005	29,38	0,42593	1,0222	368,00
1971	50,866	7,7526	3,6457	31,43	72,57	5,7721	0,42858	647,4	3,6575	29,64	0,42858	1,0478	363,83
1972	49,361	7,7891	3,5768	33,65	72,00	5,6572	0,44894	654,3	3,5999	30,48	0,44894	1,1218	339,72
1973	47,801	7,4160	3,2764	36,95	71,81	5,4678	0,50232	716,5	3,4285	30,27	0,50232	1,2317	333,17
1974	45,912	7,1932	3,0876	35,78	68,84	5,6745	0,51350	791,7	3,1714	29,93	0,51350	1,2021	339,68
1975	45,569	7,1227	3,0494	39,99	70,27	5,3192	0,55981	809,5	3,1349	31,44	0,56003	1,2408	360,73
1976	43,166	6,7618	2,8155	40,88	74,74	5,3449	0,62192	930,2	2,9552	33,62	0,62158	1,1180	331,21
1977	40,883	6,8557	2,6483	42,16	86,82	5,6061	0,65370	1 006,8	2,8001	43,62	0,65370	1,1411	305,81
1978	40,061	7,0195	2,5561	46,80	97,42	5,7398	0,66389	1 080,2	2,7541	55,87	0,66391	1,2741	267,08
1979	40,165	7,2079	2,5110	50,76	91,97	5,8298	0,66945	1 138,4	2,7488	67,01	0,64630	1,3705	300,46
1980	40,598	7,8274	2,5242	59,42	99,70	5,8690	0,67600	1 189,2	2,7603	69,55	0,59849	1,3923	315,04
1981	41,295	7,9226	2,5139	61,62	102,68	6,0399	0,69102	1 263,2	2,7751	68,49	0,55311	1,1164	245,38
1982	44,712	8,1569	2,3760	65,34	107,56	6,4312	0,68961	1 323,8	2,6139	78,01	0,56046	0,9797	243,55
1983	45,438	8,1319	2,2705	78,09	127,50	6,7708	0,71496	1 349,9	2,5372	98,69	0,58701	0,8902	211,35
1984	45,442	8,1465	2,2381	88,42	126,57	6,8717	0,72594	1 381,4	2,5234	115,68	0,59063	0,7890	187,09
1985	44,914	8,0188	2,2263	105,74	129,13	6,7950	0,71517	1 448,0	2,5110	130,25	0,58898	0,7631	180,56
1986	43,798	7,9357	2,1282	137,42	137,46	6,7998	0,73353	1 461,9	2,4009	147,09	0,67154	0.9842	165,00
1987	43,041	7,8847	2,0715	156,27	142,16	6,9291	0,77545	1 494,9	2,3342	162,62	0,70457	1,1544	166,60
1988	43,429	7,9515	2,0744	167,58	137,60	7,0364	0,77567	1 537,3	2,3348	170,06	0,66443	1,1825	151,46
1989	43,381	8,0493	2,0702	178,84	130,41	7,0239	0,77682	1 510,5	2,3353	173,41	0,67330	1,1017	151,94
1990	42,527	7,8749	2,0522	200,58	129,11	6,9292	0,76966	1 519,7	2,3198	181,49	0,71389	1,2560	184,50

Table 51

Central rates against the ECU

(National currency units per ECU)

Date	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK
13.3.1979	39,4582	7,08592	2,51064	:	:	5,79831	0,662638	1 148,15	2,72077	:	(0,663247)
24.9.1979	39,8456	7,36594	2,48557	:	:	5,85522	0,669141	1 159,42	2,74748	:	(0,649821)
30.11.1979	39,7897	7,72336	2,48208	:	:	5,84700	0,668201	1 157,79	2,74362	:	(0,648910)
23.3.1981	40,7985	7,91917	2,54502	:	:	5,99526	0,685145	1 262,92	2,81318	:	(0,542122)
5.10.1981	40,7572	7,91117	2,40989	:	:	6,17443	0,684452	1 300,67	2,66382	:	(0,601048)
22.2.1982	44,6963	8,18382	2,41815	:	:	6,19564	0,686799	1 305,13	2,67296	:	(0,557037)
14.6.1982	44,9704	8,23400	2,33379	:	:	6,61387	0,691011	1 350,27	2,57971	:	(0,560453)
21.3.1983	44,3662	8,04412	2,21515	:	:	6,79271	0,717050	1 386,78	2,49587	:	(0,629848)
18.5.1983	44,9008	8,14104	2,24184	:	:	6,87456	0,725690	1 403,49	2,52595	:	(0,587087)
17.9.1984	44,9008	8,14104	2,24184	(87,481)	:	6,87456	0,725690	1 403,49	2,52595	:	(0,585992)
22.7.1985	44,8320	8,12857	2,23840	(100,719)	:	6,86402	0,724578	1 520,60	2,52208	:	(0,555312)
7.4.1986	43,6761	7,91896	2,13834	(135,659)	:	6,96280	0,712956	1 496,21	2,40935	:	(0,630317)
4.8.1986	43,1139	7,81701	2,11083	(137,049)	:	6,87316	0,764976	1 476,95	2,37833	:	(0,679256)
12.1.1987	42,4582	7,85212	2,05853	(150,792)	:	6,90403	0,768411	1 483,58	2,31943	:	(0,739615)
19.6.1989	42,4582	7,85212	2,05853	(150,792)	133,804	6,90403	0,768411	1 483,58	2,31943	:	(0,739615)
21.9.1989	42,4582	7,85212	2,05853	(150,792)	133,804	6,90403	0,768411	1 483,58	2,31943	(172,085)	(0,728627)
8.1.1990	42,1679	7,79845	2,04446	(187,934)	132,889	6,85684	0,763159	1 529,70	2,30358	(177,743)	(0,728615)
8.10.1990	42,4032	7,84195	2,05586	(205,311)	133,631	6 89509	0,767417	1 538,24	2,31643	(178,735)	(0,696904)

Table 52

Bilateral central rates since 8 October 1990

		BFR/LFR (Bruxelles)	DKR (København)	DM (Frankfurt)	PTA (Madrid)	FF (Paris)	IRL (Dublin)	LIT (Roma)	HFL (Amsterdam)	UKL (London)
BFR/LFR 100	±2,25	100	18,4938	4,84837	315,143	16,2608	1,80981	3 627,64	5,46286	1,64352
DKR 100	±2,25	540,723	100	26,2162	1 704,05	87,9257	9,78604	19 615,4	29,5389	8,88687
DM 100	±2,25	2 062,55	381,443	100	6 500	335,386	37,3281	74 821,7	112,673	33,8984
PTA 100	±6,00	31,7316	5,86837	1,53847	100	5,15981	0,574281	1 151,11	1,73345	0,521514
FF 100	±2,25	614,977	113,732	29,8164	1 938,06	100	11,1299	22 309,1	33,5953	10,1073
IRL 1	±2,25	55,2545	10,2186	2,67894	174,131	8,9848	1	2 004,43	3,01848	0,908116
LIT 1 000	±2,25	27,5661	5,09803	1,33651	86,8726	4,48247	0,498895	1 000	1,5059	0,453053
HFL 100	±2,25	1 830,54	338,537	88,7526	5 768,83	297,661	33,1293	66 405,3	100	30,0853
UKL 1	±6,00	60,8451	11,2526	2,95	191,75	9,89389	1,10118	2 207,25	3,32389	1

Table 53

Nominal effective exchange rates
relative to 19 industrial countries; double export weights

(1980 = 100)

	B/L	DK	D	GR	E	F	IRL	I	NL	P	UK	EUR 12	USA	J
1960	82,6	104,1	52,8	192,6	150,4	117,1	149,7	196,9	74,8	214,5	158,6	98,4	125,0	71,8
1961	81,7	103,1	54,7	191,1	149,6	116,1	149,4	195,2	77,1	213,4	157,8	99,9	125,3	71,4
1962	81,7	103,1	54,9	190,9	150,0	116,1	149,8	195,0	77,6	213,8	158,3	100,5	126,3	71,5
1963	81,5	103,2	55,2	191,0	150,1	116,2	149,7	194,8	77,7	213,4	158,0	100,6	126,6	71,5
1964	81,7	103,0	55,3	191,0	150,1	116,2	149,5	193,9	77,5	212,9	157,5	100,5	126,7	71,4
1965	82,0	103,1	55,1	191,2	150,2	116,2	149,6	193,9	77,7	213,1	157,8	100,4	126,7	71,5
1966	81,9	103,3	55,1	191,4	150,2	116,1	149,6	194,3	77,4	213,3	157,8	100,3	126,8	71,4
1967	82,1	102,6	55,4	191,8	147,9	116,2	148,6	194,8	77,9	214,1	155,3	100,1	127,2	71,6
1968	82,9	99,0	56,4	195,1	132,2	117,9	139,5	198,7	79,1	222,8	137,1	96,5	130,0	73,1
1969	83,1	98,6	57,9	195,4	132,3	112,1	139,6	198,3	79,2	224,6	137,2	96,2	130,2	73,7
1970	83,2	97,8	62,8	192,6	131,8	103,1	139,4	196,1	78,0	223,4	136,7	97,5	128,5	73,3
1971	83,1	96,9	64,7	188,2	130,2	100,8	139,5	194,3	78,7	222,0	136,7	98,3	125,1	74,5
1972	85,5	97,6	66,4	176,2	132,6	103,2	136,7	193,0	79,8	219,6	131,8	100,3	116,7	82,8
1973	86,7	103,6	73,4	162,2	134,7	106,7	127,3	173,3	82,4	223,5	118,0	103,0	107,4	87,4
1974	87,9	104,0	77,4	162,6	138,7	99,5	124,1	156,4	86,7	220,5	113,9	101,1	109,6	81,6
1975	89,2	107,6	78,6	146,7	135,2	109,3	117,0	149,9	88,8	213,9	104,8	102,5	108,7	79,3
1976	91,3	110,0	83,1	138,7	124,2	105,2	105,1	124,3	91,2	195,4	89,7	92,8	114,4	83,3
1977	96,5	109,4	89,7	134,7	108,7	100,2	101,5	114,4	96,0	153,1	85,5	91,9	113,6	92,4
1978	99,3	109,4	95,0	122,4	98,3	98,9	102,0	107,3	98,3	121,9	85,7	92,4	103,1	112,5
1979	100,5	108,5	99,6	115,5	107,4	99,6	102,2	103,7	99,8	103,3	90,9	98,4	100,2	104,2
1980	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1981	94,2	92,5	94,4	89,8	90,4	91,2	91,3	87,6	95,7	96,2	100,2	83,9	112,8	113,6
1982	85,5	88,4	99,1	82,7	84,9	83,6	90,3	81,6	100,5	83,8	95,8	78,0	126,3	107,9
1983	83,1	87,9	103,1	67,7	70,3	77,6	86,6	78,5	102,6	66,1	89,1	71,4	133,6	119,7
1984	81,3	84,7	101,4	58,0	68,6	73,9	82,9	73,9	101,0	54,6	84,9	64,8	144,0	126,6
1985	82,0	85,7	101,7	48,8	67,1	74,7	83,9	70,1	101,2	48,3	84,8	63,5	149,9	130,5
1986	86,5	91,1	112,6	38,4	66,0	78,0	87,0	72,7	109,0	44,6	78,6	69,7	121,3	166,0
1987	90,0	95,0	120,4	34,6	66,2	78,9	85,2	73,5	114,6	41,4	77,8	74,5	106,7	179,7
1988	88,9	93,2	119,5	32,1	68,2	77,0	84,0	70,9	114,1	39,3	82,3	73,3	100,2	198,4
1989	88,1	90,7	118,0	29,7	71,0	76,0	83,0	71,2	112,9	38,1	79,5	71,1	105,1	189,7
1990	92,4	97,2	124,5	27,4	74,7	80,4	87,5	73,9	116,8	37,5	78,7	78,9	99,6	168,4

Table 54

Current receipts: general government

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 9	EUR 12
1960	27,5	27,3	35,1	21,1	:	34,9	24,8	28,8	32,5	33,9	:	30,1	32,1	:
1961	28,4	26,6	36,3	22,0	:	36,2	25,7	28,2	34,1	34,9	:	31,3	32,9	:
1962	29,2	28,2	36,6	23,2	:	36,3	25,2	29,1	33,5	34,4	:	32,9	33,7	:
1963	29,4	29,9	36,9	23,2	:	37,1	26,1	29,5	33,6	35,6	:	31,5	33,7	:
1964	30,0	29,7	36,4	24,0	:	38,0	26,9	30,6	33,5	35,7	:	31,5	34,0	:
1965	30,7	31,2	35,7	23,7	:	38,4	27,9	30,1	35,2	37,3	:	33,2	34,4	:
1966	32,4	33,5	36,2	25,3	:	38,4	30,0	30,1	35,8	39,2	:	34,4	35,1	:
1967	33,2	34,1	36,9	26,2	:	38,2	30,6	31,0	35,7	40,6	:	36,3	35,9	:
1968	33,8	36,9	38,0	27,3	:	38,8	31,0	31,6	34,5	42,4	:	37,7	36,9	:
1969	34,3	37,2	39,4	27,2	:	39,8	31,6	30,7	34,3	43,2	:	39,6	37,9	:
1970	35,2	41,7	38,3	26,8	:	39,0	35,3	30,4	35,0	44,5	:	40,5	37,8	:
1961-1970	31,7	32,9	37,1	24,9	:	38,0	29,0	30,1	34,5	38,8	:	34,9	35,2	:
1970	37,0	46,2	38,9	:	22,8	39,3	33,2	28,8	35,8	41,1	:	39,8	37,4	:
1971	37,6	46,9	40,0	:	23,0	38,6	34,1	29,5	39,1	43,5	:	38,1	37,5	:
1972	38,2	46,5	40,4	:	23,4	38,8	32,9	29,4	39,2	44,6	:	36,0	37,3	:
1973	38,8	47,3	42,9	:	24,2	38,9	32,2	28,5	39,3	46,4	:	35,4	37,7	:
1974	39,9	49,1	43,4	26,7	23,4	39,5	34,3	28,0	40,4	47,1	:	39,3	38,8	:
1975	42,8	46,8	43,4	27,1	25,1	40,8	33,7	28,5	49,6	49,4	:	40,0	39,6	:
1976	42,6	47,6	44,6	29,2	26,0	42,9	36,9	29,7	50,9	49,8	:	39,4	40,5	:
1977	44,3	48,3	45,7	29,6	27,2	42,8	35,5	30,6	55,2	50,6	:	38,6	40,8	:
1978	45,1	50,3	45,4	29,9	27,8	42,5	34,3	31,8	56,7	51,1	:	37,2	40,7	:
1979	45,8	51,5	45,1	30,4	29,1	44,1	35,0	31,3	53,6	52,1	:	37,8	41,1	:
1980	45,2	52,9	45,4	30,2	30,6	46,1	37,7	33,3	54,4	53,5	30,9	39,7	42,5	41,0
1971-80	42,0	48,7	43,6	:	26,0	41,5	34,7	30,1	47,8	48,8	:	38,2	39,6	:
1981	46,0	52,9	45,6	28,8	32,1	46,7	38,4	34,3	55,1	53,8	32,4	41,8	43,3	41,9
1982	47,8	52,0	46,1	32,0	32,3	47,6	40,7	36,1	54,8	54,2	33,4	42,3	44,2	42,8
1983	47,0	54,4	45,8	33,2	34,5	48,2	42,4	37,9	57,1	55,6	37,0	41,6	44,6	43,4
1984	48,1	56,2	46,1	34,2	34,3	49,2	42,5	37,7	55,1	54,5	34,6	41,5	44,8	43,5
1985	48,3	57,3	46,4	34,2	35,5	49,3	42,4	38,2	57,0	54,9	33,4	41,5	45,0	43,9
1986	47,5	59,4	45,6	35,4	36,1	48,8	42,4	39,3	55,6	53,7	37,3	40,7	44,7	43,7
1987	48,1	60,3	45,1	36,1	37,8	49,3	42,7	39,4	56,5	54,7	36,2	40,1	44,7	43,8
1988	46,8	60,5	44,5	33,9	37,8	48,9	43,9	40,1	56,6	54,3	37,6	39,8	44,4	43,5
1989	45,1	58,9	45,4	31,7	39,3	48,6	39,9	41,6	54,4	51,6	38,6	39,1	44,5	43,7
1990	45,4	57,5	43,7	33,7	38,9	48,9	39,4	42,6	54,8	51,4	37,4	38,8	44,3	43,5
1981-90	47,0	56,9	45,4	33,3	35,9	48,6	41,5	38,7	55,7	53,9	35,8	40,7	44,4	43,4
1991	45,1	56,9	43,7	35,2	39,8	48,9	39,6	43,8	52,4	52,1	38,0	38,5	44,5	43,8

Table 55

Total expenditure; general government

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 9	EUR 12
1960	30,3	24,8	32,5	:	:	34,6	28,0	30,1	30,5	33,7	:	32,4	32,3	:
1961	29,8	27,1	33,8	:	:	35,7	29,7	29,4	30,3	35,4	:	33,1	33,0	:
1962	30,5	28,1	35,6	:	:	37,0	29,5	30,5	32,2	35,6	:	34,0	34,2	:
1963	31,5	28,6	36,4	:	:	37,8	30,5	31,1	32,1	37,6	:	35,4	35,2	:
1964	30,8	28,4	36,1	:	:	38,0	31,8	31,8	32,3	37,8	:	33,7	34,8	:
1965	32,3	29,9	36,7	:	:	38,4	33,1	34,3	33,3	38,7	:	36,2	36,3	:
1966	33,5	31,7	36,9	:	:	38,5	33,6	34,3	35,0	40,7	:	35,4	36,3	:
1967	34,5	34,3	38,8	:	:	39,0	34,8	33,7	37,5	42,5	:	38,3	37,7	:
1968	36,3	36,3	39,2	:	:	40,3	35,2	34,7	37,3	43,9	:	39,3	38,7	:
1969	36,1	36,3	38,8	:	:	39,6	36,6	34,2	34,1	44,4	:	41,3	38,8	:
1970	36,5	40,2	38,6	:	:	38,9	39,6	34,2	33,1	46,0	:	39,2	38,4	:
1961-70	33,2	32,1	37,1	:	:	38,3	33,5	32,8	33,7	40,3	:	36,6	36,3	:
1970	39,2	42,1	38,7	:	22,0	38,4	37,5	32,1	33,1	42,3	:	36,8	37,2	:
1971	40,8	43,0	40,2	:	23,5	37,8	38,3	34,3	36,8	44,5	:	36,7	38,1	:
1972	41,9	42,6	40,9	:	23,1	38,0	37,0	36,4	37,2	45,0	:	37,3	38,9	:
1973	42,1	42,1	41,7	:	22,9	37,9	36,8	35,0	36,1	45,7	:	38,1	39,0	:
1974	42,5	45,9	44,7	:	23,2	38,9	42,5	34,4	35,6	47,4	:	43,1	41,2	:
1975	47,6	48,2	49,0	:	24,9	43,0	46,3	39,1	48,5	52,2	:	44,5	44,9	:
1976	48,2	47,8	48,0	:	26,2	43,4	45,5	37,8	49,1	52,4	:	44,4	44,5	:
1977	49,9	48,8	48,1	:	27,7	43,6	43,1	37,7	51,9	52,4	:	41,8	44,1	:
1978	51,2	50,6	47,8	:	29,6	44,6	44,0	40,4	51,3	53,8	:	41,6	44,8	:
1979	53,0	53,2	47,7	:	30,8	45,0	46,4	39,7	52,5	55,8	:	41,1	44,8	:
1980	54,3	56,2	48,3	:	33,2	46,1	50,4	41,9	54,8	57,5	:	43,1	46,4	:
1971-80	47,2	47,8	45,6	:	26,5	41,8	43,0	37,7	45,4	50,7	:	41,2	42,7	:
1981	58,8	59,8	49,2	39,9	36,0	48,6	51,8	45,8	58,5	59,3	41,7	44,4	48,6	47,2
1982	58,8	61,2	49,4	39,7	38,0	50,3	54,6	47,4	55,8	61,3	43,8	44,8	49,5	48,3
1983	58,3	61,6	48,4	41,5	39,3	51,4	54,2	48,6	55,1	62,0	46,1	44,9	49,8	48,7
1984	57,1	60,3	48,0	44,3	39,8	51,9	52,3	49,3	51,8	60,7	46,6	45,5	49,9	48,9
1985	56,9	59,3	47,5	48,1	42,6	52,1	53,7	50,8	51,7	59,6	43,5	44,3	49,8	49,1
1986	56,6	56,0	46,9	48,0	42,2	51,5	53,6	50,9	52,3	59,7	44,6	43,1	49,2	48,5
1987	55,1	57,9	47,0	48,4	41,0	51,2	51,9	50,5	55,2	61,3	43,0	41,4	48,8	48,0
1988	53,4	60,2	46,6	49,5	41,1	50,6	49,2	51,0	54,5	59,4	43,0	38,7	47,9	47,2
1989	51,7	59,6	45,1	50,1	42,0	50,1	43,4	51,9	51,2	56,8	42,3	38,2	47,3	46,8
1990	51,2	58,9	46,8	52,1	41,9	50,1	42,8	52,7	51,4	56,8	43,3	39,0	48,0	47,4
1981-90	55,8	59,5	47,5	46,2	40,4	50,8	50,7	49,9	53,7	59,7	43,8	42,4	48,9	48,0
1991	51,2	58,5	48,5	52,1	41,7	50,0	43,1	53,2	51,3	56,8	43,5	39,2	48,6	47,9

Table 56

Net lending (+) or net borrowing (−); general government

(Percentage of GDP at market prices)

	B	DK	D	GR	E	F	IRL	I	L	NL	P	UK	EUR 9	EUR 12
1960	−2,8	3,1	3,0	:	:	0,9	−2,4	−0,9	3,1	0,8	:	−1,0	0,6	:
1961	−1,3	0,1	2,8	:	:	1,0	−3,2	−0,8	4,8	0,1	:	−0,7	0,5	:
1962	−1,3	0,6	1,4	:	:	−0,1	−3,6	−1,0	2,3	−0,6	:	0,0	0,1	:
1963	−2,1	1,9	0,9	:	:	−0,1	−3,6	−1,2	2,6	−1,3	:	−2,8	−0,8	:
1964	−0,8	1,8	0,7	:	:	0,7	−4,1	−0,8	2,2	−1,5	:	−1,1	−0,2	:
1965	−1,6	1,8	−0,6	:	:	0,7	−4,3	−3,8	2,9	−0,8	:	−2,0	−1,2	:
1966	−1,0	2,3	−0,2	:	:	0,6	−2,8	−3,8	1,9	−0,9	:	0,0	−0,6	:
1967	−1,3	0,4	−1,4	:	:	0,0	−3,3	−2,2	−0,7	−1,3	:	−1,0	−1,1	:
1968	−2,5	1,1	−0,8	:	:	−0,8	−3,3	−2,8	−1,7	−0,9	:	−0,5	−1,1	:
1969	−1,8	1,4	1,1	:	:	0,9	−4,2	−3,1	1,2	−0,5	:	−0,6	−0,3	:
1970	−1,3	2,1	0,2	:	:	0,9	−3,7	−3,5	2,8	−0,8	:	2,5	0,1	:
1961-70	−1,5	1,3	0,4	:	:	0,4	−3,6	−2,3	1,8	−0,8	:	−0,6	−0,5	:
1970	−2,2	4,1	0,2	:	0,7	0,9	−4,3	−3,3	2,7	−1,2	:	3,0	0,2	:
1971	−3,2	3,9	−0,2	:	−0,6	0,7	−4,2	−4,8	2,3	−1,0	:	1,3	−0,6	:
1972	−3,7	3,9	−0,5	:	0,3	0,8	−4,1	−7,0	2,0	−0,4	:	−1,3	−1,7	:
1973	−3,3	5,2	1,2	:	1,1	0,9	−4,6	−6,5	3,3	0,8	:	−2,7	−1,3	:
1974	−2,7	3,1	−1,3	:	0,2	0,6	−8,2	−6,4	4,7	−0,2	:	−3,8	−2,4	:
1975	−4,8	−1,4	−5,6	:	0,0	−2,2	−12,5	−10,6	1,1	−2,9	:	−4,5	−5,4	:
1976	−5,6	−0,2	−3,4	:	−0,3	−0,5	−8,6	−8,1	1,7	−2,6	:	−4,9	−4,0	:
1977	−5,6	−0,5	−2,4	:	−0,6	−0,8	−7,6	−7,0	3,3	−1,8	:	−3,2	−3,2	:
1978	−6,1	−0,3	−2,4	:	−1,7	−2,1	−9,7	−8,5	5,3	−2,8	:	−4,4	−4,1	:
1979	−7,3	−1,7	−2,6	:	−1,7	−0,8	−11,4	−8,3	1,2	−3,7	:	−3,3	−3,8	:
1980	−9,2	−3,3	−2,9	:	−2,6	0,0	−12,7	−8,6	−0,4	−4,0	:	−3,4	−3,9	:
1971-80	−5,1	0,9	−2,0	:	−0,6	−0,3	−8,4	−7,6	2,5	−1,9	:	−3,0	−3,0	:
1981	−12,8	−6,9	−3,7	−11,0	−3,9	−1,9	−13,4	−11,4	−3,4	−5,5	−9,3	−2,6	−5,3	−5,3
1982	−11,0	−9,1	−3,3	−7,7	−5,6	−2,8	−13,8	−11,3	−1,0	−7,1	−10,4	−2,5	−5,4	−5,5
1983	−11,3	−7,2	−2,5	−8,3	−4,8	−3,1	−11,8	−10,6	2,0	−6,4	−9,0	−3,3	−5,2	−5,3
1984	−9,0	−4,1	−1,9	−10,0	−5,5	−2,8	−9,8	−11,6	3,3	−6,3	−12,0	−3,9	−5,1	−5,3
1985	−8,5	−2,0	−1,1	−13,8	−7,0	−2,9	−11,3	−12,5	5,3	−4,8	−10,1	−2,8	−4,8	−5,2
1986	−9,1	3,4	−1,3	−12,7	−6,1	−2,8	−11,2	−11,7	3,3	−6,0	−7,2	−2,4	−4,5	−4,8
1987	−7,1	2,5	−1,9	−12,3	−3,2	−1,9	−9,1	−11,1	1,3	−6,6	−6,8	−1,3	−4,1	−4,2
1988	−6,6	0,2	−2,1	−15,6	−3,2	−1,7	−5,3	−10,9	2,1	−5,2	−5,4	1,1	−3,5	−3,7
1989	−6,6	−0,7	0,2	−18,4	−2,7	−1,5	−3,5	−10,2	3,2	−5,2	−3,8	0,9	−2,8	−3,0
1990	−5,8	−1,4	−3,2	−18,4	−3,1	−1,2	−3,4	−10,1	3,3	−5,4	−6,0	−0,3	−3,8	−4,0
1981-90	−8,8	−2,5	−2,1	−12,8	−4,5	−2,3	−9,2	−11,1	2,0	−5,8	−8,0	−1,7	−4,4	−4,6
1991	−6,1	−1,6	−4,8	−16,9	−1,9	−1,1	−3,5	−9,4	1,1	−4,7	−5,6	−0,7	−4,1	−4,1

Table 57

Budgetary expenditure of the European Communities

(Mio UA/EUA/ECU) (a)

	ECSC operational budget	European Development Fund	Euratom (b)	EC general budget							Total
				EAGGF (c)	Social Fund	Regional Fund	Industry, Energy, Research	Administration (d)	Other	Total EC	
1958	21,7	—	7,9	—	—	—	—	8,6	0,0	8,6	35,5
1959	30,7	51,2	39,1	—	—	—	—	20,3	4,9	25,2	146,2
1960	23,5	63,2	20,0	—	—	—	—	23,4	4,9	28,3	135,0
1961	26,5	172,0	72,5	—	8,6	—	—	27,9	2,9	39,4	305,0
1962	13,6	162,3	88,6	—	11,3	—	—	34,2	46,8	92,3	356,8
1963	21,9	55,5	106,4	—	4,6	—	—	37,2	42,3	84,1	267,9
1964	18,7	35,0	124,4	—	7,2	—	—	43,0	42,9	93,1	271,1
1965	37,3	248,8	120,0	102,7	42,9	—	—	48,1	7,4	201,1	607,2
1966	28,1	157,8	129,2	310,3	26,2	—	—	55,4	10,4	402,3	717,3
1967	10,4	105,8	158,5	562,0	35,6	—	—	60,4	17,1	675,1	949,8
1968	21,2	121,0	73,4	2 250,4	43,0	—	—	91,8	23,5	2 408,7	2 624,2
1969	40,7	104,8	59,2	3 818,0	50,5	—	—	105,6	77,1	4 051,2	4 255,9
1970	56,2	10,5	63,4	5 228,3	64,0	—	—	114,7	41,4	5 448,4	5 578,5
1971	37,4	236,1	—	1 883,6	56,5	—	65,0	132,1	152,2	2 289,3	2 562,8
1972	43,7	212,7	—	2 477,6	97,5	—	75,1	177,2	247,1	3 074,5	3 330,9
1973	86,9	210,0	—	3 768,8	269,2	—	69,1	239,4	294,4	4 641,0	4 937,9
1974	92,0	157,0	—	3 651,3	292,1	—	82,8	336,7	675,2	5 038,2	5 287,2
1975	127,4	71,0	—	4 586,6	360,2	150,0	99,0	375,0	642,8	6 213,6	6 412,0
1976	94,0	320,0	—	6 033,3	176,7	300,0	113,3	419,7	909,5	7 952,6	8 366,6
1977	93,0	244,7	—	6 463,5	325,2	372,5	163,3	497,0	883,4	8 704,9	9 042,6
1978	159,1	394,5	—	9 602,2	284,8	254,9	227,2	676,7	1 302,4	12 348,2	12 901,8
1979	173,9	480,0	—	10 735,5	595,7	671,5	288,0	863,9	1 447,9	14 602,5	15 256,4
1980	175,7	508,5	—	11 596,1	502,0	751,8	212,8	938,8	2 056,1	16 057,5(e)	16 741,7
1981	261,0	658,0	—	11 446,0	547,0	2 264,0	217,6	1 035,4	3 024,6	18 546,0(f)	19 465,0
1982	243,0	750,0	—	12 792,0	910,0	2 766,0(g)	346,0	1 103,3	3 509,7	21 427,0(h)	22 420,0
1983	300,0	752,0	—	16 331,3	801,0	2 265,5	1 216,2	1 161,6	2 989,9	24 765,5(i)	25 817,5
1984	408,0	810,0	—	18 985,8	1 116,4	1 283,3	1 346,4	1 236,6	2 150,8	26 119,3(j)	27 337,3
1985	453,0	710,0	—	20 546,4	1 413,0	1 624,3	706,9	1 332,6	2 599,8	28 223,0(k)	29 386,0
1986	439,0	897,0	—	23 067,7	2 533,0	2 373,0	760,1	1 603,2	4 526,2	34 863,2	36 199,2
1987	399,3	837,9	—	23 939,4	2 542,2	2 562,3	964,8	1 740,0	3 720,5	35 469,2	36 706,4
1988	567,0	1 000,0	—	27 531,9	2 298,8	3 092,8	1 203,7	1 947,0	6 186,8	42 261,0	43 828,0
1989	404,0	1 297,0	—	25 868,8	2 676,1	3 920,0	1 353,0	2 063,0	9 978,9(l)	45 899,8	47 600,8
1990	488,0	1 371,0	—	29 525,5	3 677,4	5 007,5	1 763,5	2 362,1	4 341,3	46 677,3(m)	48 536,3
1991	495,0	1 467,0	—	34 236,0	4 069,0	6 309,0	2 018,9	2 560,3	3 330,7	52 423,9(n)	54 385,9

Table 58

Budgetary receipts of the European Communities

(Mio UA/EUA/ECU) (a)

	ECSC levies and other	European Dev. Fund contributions	Euratom contributions (research only)	EC budget						Total
				Miscellaneous and contributions under special keys	Own resources				Total EC	
					Miscellaneous	Agricultural levies	Import duties	GNP contributions or VAT (b) (c)		
1958	44,0	116,0	7,9	0,02	—	—	—	5,9	5,9	173,8
1959	49,6	116,0	39,1	0,1	—	—	—	25,1	25,2	229,9
1960	53,3	116,0	20,0	0,2	—	—	—	28,1	28,3	217,6
1961	53,1	116,0	72,5	2,8	—	—	—	31,2	34,0	275,6
1962	45,3	116,0	88,6	2,1	—	—	—	90,2	92,3	342,2
1963	47,1	—	106,4	6,7	—	—	—	77,4	84,1	237,5
1964	61,3	—	124,4	2,9	—	—	—	90,1	93,1	278,7
1965	66,1	—	98,8	3,5	—	—	—	197,6	201,1	366,0
1966	71,2	—	116,5	3,9	—	—	—	398,3	402,2	590,0
1967	40,3	40,0	158,5	4,2	—	—	—	670,9	675,1	913,9
1968	85,4	90,0	82,0	—	—	—	—	—	2 408,6	2 666,0
1969	106,8	110,0	62,7	78,6	—	—	—	3 972,6	4 051,2	4 330,7
1970	100,0	130,0	67,7	121,1	—	—	—	5 327,3	5 448,4	5 746,1
1971	57,9	170,0	—	—	69,5	713,8	582,2	923,8	2 289,3	2 517,2
1972	61,1	170,0	—	—	80,9	799,6	957,4	1 236,6	3 074,5	3 305,6
1973	120,3	150,0	—	—	511,0	478,0	1 564,7	2 087,3	4 641,0	4 911,3
1974	124,6	150,0	—	—	65,3	323,6	2 684,4	1 964,8	5 038,2	5 312,8
1975	189,5	220,1	—	—	320,5	590,0	3 151,0	2 152,0	6 213,6	6 623,1
1976	129,6	311,0	—	—	282,8	1 163,7	4 064,6	2 482,1	7 993,1(d)	8 433,7
1977	123,0	410,0	—	—	504,7	1 778,5	3 927,2	2 494,5	8 704,9	9 237,9
1978	164,9	147,5	—	—	344,4	2 283,3	4 390,9	5 329,7	12 348,2	12 660,6
1979	168,4	480,0	—	—	230,3	2 143,4	5 189,1	7 039,8	14 602,5	15 251,0
1980	226,2	555,0	—	—	1 055,9(e)	2 002,3	5 905,8	7 093,5	16 057,5(f)	16 838,7
1981	264,0	658,0	—	—	1 219,0	1 747,0	6 392,0	9 188,0	18 546,0(g)	19 468,0
1982	243,0	750,0	—	—	187,0	2 228,0	6 815,0	12 197,0	21 427,0	22 420,0
1983	300,0	700,0	—	—	1 565,0	2 295,0	6 988,7	13 916,8	24 765,5(h)	25 765,5
1984	408,0	810,0	—	—	1 060,7(i)	2 436,3	7 960,8	14 594,6	26 052,4(j)	27 270,4
1985	453,0	710,0	—	—	2 491,0(k)	2 179,0	8 310,0	15 218,0	28 198,0	29 361,0
1986	439,0	897,0	—	—	396,5	2 287,0	8 172,9	22 810,8	33 667,2	35 003,2
1987	399,3	837,9	—	—	74,8	3 097,9	8 936,5	23 674,1	35 783,3	37 020,5
1988	567,0	1 000,0	—	—	1 377,0	2 606,0	9 310,0	28 968,0	42 261,0	43 828,0
1989	404,0	1 297,0	—	—	4 018,4	2 397,9	10 312,9	29 170,6	45 899,8	47 600,8
1990	488,0	1 371,0	—	—	5 419,0	2 283,2	11 349,9	27 625,2	46 677,3(l)	48 536,3
1991	495,0	1 467,0	—	—	561,0	2 187,6	11 872,8	37 802,5	52 423,9(m)	54 385,9

Table 59

Borrowing operations of the European Communities and of the European Investment Bank

(Mio UA/EUA/ECU) (a)

	ECSC	EIB	Euratom	EEC(b)	EEC-NCI(c)	Total
1958	50	—	—	—	—	50
1959	—	—	—	—	—	—
1960	35	—	—	—	—	35
1961	23	21	—	—	—	44
1962	70	32	—	—	—	102
1963	33	35	5(d)	—	—	73
1964	128	67	8(d)	—	—	203
1965	54	65	11(d)	—	—	130
1966	103	139	14(d)	—	—	256
1967	58	195	3(d)	—	—	256
1968	108	213	—	—	—	321
1969	52	146	—	—	—	198
1970	60	169	—	—	—	229
1971	102	413	1(d)	—	—	516
1972	230	462	—	—	—	692
1973	263	608	—	—	—	871
1974	528	826	—	—	—	1 354
1975	731	814	—	—	—	1 545
1976	956	732	—	1 249	—	2 937
1977	729	1 030	99	571	—	2 429
1978	981	1 863	72	—	—	2 916
1979	837	2 437	153	—	178	3 605
1980	1 004	2 384	181	—	305	3 874
1981	325	2 243	373	—	339	3 280
1982	712	3 146	363	—	773	4 994
1983	750	3 508	369	—	1 617	6 244
1984	822	4 339(e)	214	—	967	6 342
1985	1 265	5 699(e)	344	—	860	8 168
1986	1 517	6 766	488	875	541	10 187
1987	1 487	5 573	853	875	611	9 399
1988	880(f)	7 666	93	—	945(f)	9 584
1989	913	9 034(g)	—	—	522	10 469

Table 60

Net outstanding borrowing of the European Communities and of the European Investment Bank

(Mio UA/EUA/ECU) (a)

	ECSC	EIB	Euratom	EEC(b)	EEC-NCI(c)	Total
1958	212	—	—	—	—	212
1959	209	—	—	—	—	209
1960	236	—	—	—	—	236
1961	248	21	—	—	—	269
1962	304	54	—	—	—	358
1963	322	88	—	—	—	410
1964	436	154	—	—	—	590
1965	475	217	—	—	—	692
1966	560	355	—	—	—	915
1967	601	548	—	—	—	1 149
1968	686	737	—	—	—	1 423
1969	719	883	—	—	—	1 602
1970	741	1 020	—	—	—	1 761
1971	802	1 423	—	—	—	2 225
1972	963	1 784	—	—	—	2 747
1973	1 157	2 287	—	—	—	3 444
1974	1 615	3 124	—	—	—	4 739
1975	2 391	3 926	—	—	—	6 317
1976	3 478	4 732	—	1 161	—	9 371
1977	3 955	5 421	99	1 500	—	10 975
1978	4 416	6 715	172	1 361	—	12 664
1979	4 675	8 541	323	965	178	14 682
1980	5 406	10 604	502	1 016	491	18 019
1981	5 884	13 482	902	1 062	894	22 224
1982	6 178	16 570	1 272	591	1 747	26 358
1983	6 539	20 749	1 680	4 610	3 269	36 847
1984	7 119	25 007	1 892	4 932	4 432	43 382
1985	7 034	26 736	2 013	3 236	4 960	43 979
1986	6 761	30 271	2 168	1 890	5 202	46 292
1987	6 689	31 957	2 500	2 997	5 229	49 372
1988	6 825	36 928	2 164	2 459	5 514	53 890
1989	6 738	41 332	1 945	2 075	5 122	57 212

Table 61

Main economic indicators, 1961-90[1]

EUR 12

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	10,2	14,2	10,2	9,4	8,7	8,3	7,1	8,4	8,6	8,8	7,9
— At constant prices	4,8	1,9	1,6	2,3	2,5	2,6	2,9	3,8	3,3	2,9	2,2
— Price deflator	5,2	12,0	8,5	6,9	6,0	5,5	4,1	4,5	5,1	5,7	5,5
2. Gross fixed capital formation[2]											
— Total	5,7	−0,5	−0,0	1,3	2,4	3,8	5,5	8,4	6,8	4,4	2,9
— Construction[3]	:	−1,3	−0,1	−0,4	−1,7	3,7	3,1	6,4	4,7	3,6	2,1
— Equipment[3]	:	1,0	−0,3	4,0	8,4	3,5	8,4	10,4	9,1	5,3	3,7
3. Share of gross fixed capital formation in GDP[4]											
— Total	23,1	21,8	19,6	19,2	19,1	18,9	19,3	20,1	20,6	20,8	20,8
— General government[5]	:	3,3	2,9	2,8	2,9	2,8	2,7	2,6	2,8	2,9	3,0
— Other sectors[5]	:	18,5	16,6	16,4	16,2	16,1	16,6	17,4	17,7	17,7	17,7
4. Final national uses incl. stocks[2]											
— EUR 12	4,9	1,5	1,1	1,8	2,3	3,8	4,1	4,8	3,6	3,0	2,3
— EUR 12 against 9 other OECD countries	−0,5	−0,3	−0,6	−4,3	−2,0	0,0	−0,2	−0,2	−0,2	0,6	0,7
5. Inflation (Price deflator private consumption)	4,7	12,1	8,6	7,3	5,9	3,8	3,5	3,7	4,9	5,1	5,3
6. Compensation per employee											
— Nominal	9,9	14,5	9,8	7,5	7,0	6,2	5,5	5,6	6,0	7,5	7,0
— Real, deflator private consumption	5,0	2,1	1,1	0,1	1,0	2,3	2,0	1,8	1,1	2,2	1,6
— Real, deflator GDP	4,5	2,2	1,2	0,6	0,9	0,7	1,3	1,1	0,9	1,6	1,4
7. Productivity[6]	4,4	2,1	2,3	2,3	1,9	1,9	1,5	2,2	1,7	1,2	1,6
8. Real unit labour costs[7]											
— Index: 1961-73 = 100	100,0	103,7	101,3	99,6	98,6	97,4	97,2	96,2	95,5	95,8	95,7
— Annual percentage change	0,1	0,2	−1,1	−1,7	−1,0	−1,2	−0,2	−1,1	−0,7	0,4	−0,2
9. Relative unit labour costs in common currency against 9 other OECD countries											
— Index: 1961-73 = 100	100,0	106,6	91,4	84,5	84,3	92,5	99,5	97,9	94,9	106,0	107,7
— Annual percentage change	1,1	−1,0	−5,7	−7,6	−0,3	9,7	7,6	−1,7	−3,0	11,7	1,5
10. Employment	0,3	−0,1	−0,7	0,0	0,6	0,7	1,3	1,5	1,6	1,6	0,6
11. Unemployment rate[8]	2,2	5,6	9,9	10,7	10,8	10,7	10,3	9,7	8,9	8,5	8,7
12. Current balance[9]	0,4	−0,4	0,1	0,3	0,7	1,4	0,7	0,2	0,2	−0,3	−0,8
13. Net lending (+) or net borrowing (−) of general government[9, 10]	−0,7	−3,7	−5,3	−5,3	−5,2	−4,8	−4,2	−3,7	−3,0	−4,0	−4,1
14. Gross debt general government[9, 10]	:	39,8	51,6	54,8	57,3	58,5	59,8	59,7	59,0	58,9	59,2
15. Interest payments by general government[9, 10]	:	2,8	4,4	4,7	5,0	5,1	4,8	4,8	4,8	5,0	5,2
16. Money supply (end of year)[11]	11,9	13,6	11,2	10,5	9,9	9,8	9,8	10,2	11,0	:	:
17. Long-term interest rate[12]	7,1	12,0	12,7	11,8	10,9	9,2	9,4	9,4	9,9	11,2	:
18. Profitability (index: 1961-73 = 100)	100,0	71,6	70,1	74,5	77,6	82,6	84,5	88,6	91,2	91,1	91,6

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, May/June 1990.
2 At constant prices.
3 1974-81: EUR 12 excl. Portugal.
4 At current prices.
5 EUR 12 excl. Greece and Portugal.
6 GDP at constant market prices per person employed.
7 Deflator GDP.
8 Percent of civilian labour force.
1961-73: EUR 12 excl. Greece, Spain and Portugal.
9 Percent of GDP.
10 1974-81: EUR 12 excl. Greece and Portugal.
11 Broad money supply M2 or M3 according to country.
1961-73: EUR 12 excl. Spain and Portugal.
12 Levels.

Table 62

Main economic indicators, 1961-90[1]

Belgium

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	9,2	9,2	6,0	7,5	6,9	5,2	4,0	6,4	8,7	6,9	6,7
— At constant prices	4,9	2,0	0,4	2,1	0,9	1,6	1,9	4,3	4,0	3,5	2,2
— Price deflator	4,1	7,1	5,6	5,2	6,0	3,5	2,1	2,0	4,5	3,3	4,4
2. Gross fixed capital formation[2]											
— Total	5,1	−0,7	−4,4	−1,7	0,6	4,2	5,2	16,0	13,6	7,0	3,5
— Construction	:	−2,0	−6,4	−6,1	−0,8	3,1	3,3	15,0	9,6	4,7	−0,2
— Equipment	:	3,0	−2,6	13,6	2,3	4,9	5,8	17,7	19,0	10,0	8,0
3. Share of gross fixed capital formation in GDP[3]											
— Total	21,8	20,9	16,2	16,0	15,6	15,7	16,0	17,8	19,5	19,8	20,1
— General government	:	3,7	3,0	2,6	2,2	2,0	1,9	1,8	1,6	1,5	1,5
— Other sectors	:	17,1	13,2	13,4	13,4	13,6	14,1	15,9	17,9	18,4	18,6
4. Final national uses incl. stocks											
— At constant prices	4,8	1,6	−2,5	2,3	0,6	3,0	3,6	4,3	5,0	4,0	2,6
— Relative against 19 competitors	−0,1	0,0	−3,8	−1,0	−2,2	−0,6	0,2	0,1	1,6	1,2	0,6
— Relative against other member countries	−0,1	0,1	−3,9	0,4	−1,6	−0,5	0,2	0,2	1,7	1,0	0,4
5. Inflation (Price deflator private consumption)	3,7	7,9	7,2	5,7	5,9	0,3	1,8	1,8	3,4	3,6	4,5
6. Compensation per employee											
— Nominal	8,9	10,5	6,1	6,7	4,5	4,7	2,0	1,8	3,9	6,2	7,1
— Real, deflator private consumption	5,1	2,5	−1,0	0,9	−1,3	4,4	0,2	−0,1	0,5	2,6	2,5
— Real, deflator GDP	4,6	3,2	0,5	1,4	−1,4	1,1	−0,1	−0,3	−0,5	2,9	2,6
7. Productivity[4]	4,3	2,3	1,4	2,3	0,3	1,0	1,4	2,8	2,7	2,5	2,0
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	111,5	110,7	109,8	107,9	108,0	106,4	103,3	100,0	100,3	100,9
— Annual percentage change	0,3	0,9	−0,9	−0,8	−1,7	0,2	−1,5	−2,9	−3,1	0,3	0,5
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	109,8	88,2	87,2	88,6	93,8	95,4	91,3	89,0	92,4	92,8
— Annual percentage change	−0,3	−1,2	−2,5	−1,1	1,5	5,9	1,7	−4,3	−2,5	3,8	0,5
• Against other member countries											
— Index: 1961-73 = 100	100,0	107,1	89,5	90,5	92,0	95,1	95,0	91,2	89,6	90,6	90,7
— Annual percentage change	−0,7	−1,0	−1,0	1,2	1,7	3,3	−0,2	−4,0	−1,7	1,0	0,1
10. Employment	0,6	−0,3	−1,0	−0,2	0,6	0,6	0,5	1,5	1,3	0,9	0,2
11. Unemployment rate[6]	:	6,7	12,5	12,5	11,6	11,6	11,4	10,0	8,5	7,8	7,7
12. Current balance[7]	1,1	−1,8	−0,8	−0,6	0,3	2,0	1,2	1,0	1,0	0,3	−0,3
13. Net lending (+) or net borrowing (−) of general government[7]	:	−7,2	−11,3	−9,0	−8,5	−9,1	−7,1	−6,6	−6,6	−5,8	−6,1
14. Gross debt of general government[7]	:	71,9	107,0	112,3	119,5	123,7	131,3	132,2	129,9	129,4	129,4
15. Interest payments by general government[7]	:	5,4	9,5	10,0	10,8	11,4	10,8	10,4	10,7	11,1	11,4
16. Money supply (end of year)[8]	10,1	10,7	7,1	6,2	6,7	10,7	9,9	6,6	11,0	:	:
17. Long-term interest rate[9]	6,5	10,3	11,8	12,0	10,6	7,9	7,8	7,9	8,7	10,1	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M2N.
9 Levels.

Table 63

Main economic indicators, 1961-90[1]

Denmark

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	11,7	11,6	10,4	10,3	8,8	7,9	4,3	4,5	5,9	3,9	3,3
— At constant prices	4,3	1,4	2,5	4,4	4,3	3,1	−0,7	−0,4	1,3	0,9	0,9
— Price deflator	7,0	10,0	7,6	5,7	4,3	4,7	5,1	4,9	4,5	3,0	2,3
2. Gross fixed capital formation[2]											
— Total	6,5	−4,0	1,9	12,9	12,6	16,2	−7,4	−6,5	−0,1	−2,6	0,0
— Construction	:	−6,5	1,9	8,8	8,9	18,0	−0,8	−3,1	−4,2	−6,1	−2,2
— Equipment	:	0,9	2,2	17,9	16,2	16,6	−14,5	−7,5	5,5	1,8	2,5
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,0	20,4	16,0	17,2	18,7	20,7	19,1	18,0	17,8	17,1	16,9
— General government	:	3,5	2,3	1,9	2,2	1,6	1,8	2,1	2,3	1,9	2,1
— Other sectors	:	16,8	13,7	15,3	16,6	19,1	17,3	15,9	15,5	15,1	14,8
4. Final national uses incl. stocks											
— At constant prices	4,6	0,4	1,4	5,1	5,4	5,5	−2,8	−2,2	0,8	0,8	−0,1
— Relative against 19 competitors	0,2	−1,0	1,4	0,1	2,0	1,8	−6,3	−6,2	−2,4	−3,3	−2,0
— Relative against other member countries	0,2	−0,9	−0,3	3,1	3,4	1,9	−6,3	−6,4	−2,5	−3,7	−2,4
5. Inflation (Price deflator private consumption)	6,6	10,9	6,8	6,4	4,3	3,5	4,4	4,9	5,0	2,8	3,3
6. Compensation per employee											
— Nominal	10,7	11,5	8,2	5,5	4,7	4,9	8,4	4,6	3,5	3,3	3,0
— Real, deflator private consumption	3,8	0,5	1,3	−0,8	0,4	1,4	3,9	−0,4	−1,3	0,4	−0,3
— Real, deflator GDP	3,4	1,3	0,5	−0,1	0,4	0,2	3,2	−0,3	−0,9	0,3	0,7
7. Productivity[4]	3,2	1,2	2,2	2,6	1,7	0,4	−1,2	0,2	1,8	1,1	0,9
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	101,6	97,5	94,9	93,6	93,4	97,6	97,1	94,4	93,6	93,4
— Annual percentage change	0,2	0,1	−1,7	−2,7	−1,3	−0,2	4,4	−0,5	−2,7	−0,8	−0,2
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	114,5	100,2	96,2	96,7	103,3	114,4	113,9	108,8	113,0	109,8
— Annual percentage change	2,1	−1,4	1,0	−4,1	0,5	6,8	10,8	−0,5	−4,4	−3,9	−2,9
• Against other member countries											
— Index: 1961-73 = 100	100,0	111,2	101,0	100,3	101,2	104,4	112,5	113,1	109,7	109,4	105,7
— Annual percentage change	1,7	−1,1	2,4	−0,7	1,0	3,1	7,8	0,5	−3,0	−0,3	−3,4
10. Employment	1,1	0,2	0,3	1,7	2,5	2,6	0,5	−0,6	−0,5	−0,2	0,0
11. Unemployment rate[6]	:	5,7	9,3	8,7	7,2	5,6	5,7	6,5	7,7	8,2	8,8
12. Current balance[7]	−2,0	−3,5	−2,6	−3,3	−4,6	−5,5	−3,0	−1,8	−1,3	0,0	0,3
13. Net lending (+) or net borrowing (−) of general government[7]	:	−2,3	−7,2	−4,1	−2,0	3,4	2,5	0,2	−0,7	−1,4	−1,6
14. Gross debt of general government[7]	:	27,6	74,3	78,0	74,6	67,2	63,9	64,0	63,3	62,8	63,3
15. Interest payments by general government[7]	:	3,0	8,1	9,6	9,9	8,8	8,3	8,1	7,5	7,6	7,5
16. Money supply (end of year)[8]	10,6	11,4	25,4	17,8	15,8	8,4	4,4	3,5	5,9	:	:
17. Long-term interest rate[9]	9,0	16,9	14,4	14,0	11,6	10,5	11,9	10,6	10,2	11,0	:

[1] 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
[2] At constant prices.
[3] At current prices.
[4] GDP at constant market prices per person employed.
[5] Deflator GDP.
[6] Percent of civilian labour force.
[7] Percent of GDP.
[8] M2.
[9] Levels.

Table 64

Main economic indicators, 1961-90[1]

Federal Republic of Germany

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	8,9	6,4	4,8	4,8	4,3	5,5	3,9	5,2	5,9	8,1	7,7
— At constant prices	4,4	1,6	1,5	2,8	2,0	2,3	1,8	3,7	3,3	4,3	3,1
— Price deflator	4,3	4,6	3,3	2,0	2,2	3,1	2,0	1,5	2,6	3,7	4,4
2. Gross fixed capital formation[2]											
— Total	4,0	−0,5	3,2	0,8	0,1	3,3	2,2	5,9	7,1	8,0	4,4
— Construction	:	−1,3	1,7	1,6	−5,6	2,7	0,3	4,7	5,1	5,2	2,1
— Equipment	:	1,1	5,6	−0,2	9,9	4,3	5,6	7,7	9,7	11,4	7,1
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,9	21,1	20,5	20,2	19,7	19,5	19,4	19,9	20,7	21,6	22,0
— General government	:	3,5	2,5	2,4	2,3	2,4	2,4	2,3	2,4	2,4	2,4
— Other sectors	:	17,6	18,0	17,8	17,4	17,1	17,0	17,5	18,3	19,2	19,6
4. Final national uses incl. stocks											
— At constant prices	4,5	1,3	2,3	2,0	0,9	3,5	2,9	3,8	2,7	3,7	3,3
— Relative against 19 competitors	−0,4	−0,4	1,3	−1,9	−2,3	−0,1	−0,7	−0,4	−0,8	1,0	1,4
— Relative against other member countries	−0,3	−0,3	1,6	0,0	−1,7	−0,1	−0,8	−0,5	−0,9	0,9	1,3
5. Inflation (Price deflator private consumption)	3,6	5,0	3,2	2,5	2,1	−0,2	0,8	1,3	3,2	2,8	3,9
6. Compensation per employee											
— Nominal	9,2	6,8	3,7	3,5	3,1	3,8	3,1	3,1	2,8	4,7	5,1
— Real, deflator private consumption	5,4	1,7	0,5	1,0	1,0	4,1	2,4	1,9	−0,3	1,9	1,2
— Real, deflator GDP	4,6	2,0	0,4	1,5	0,8	0,7	1,1	1,7	0,3	1,0	0,6
7. Productivity[4]	4,1	2,2	3,1	2,7	1,3	1,3	1,0	3,0	1,9	1,9	1,5
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	103,6	99,6	98,4	97,9	97,4	97,4	96,1	94,6	93,8	93,0
— Annual percentage change	0,5	−0,1	−2,5	−1,2	−0,5	−0,6	0,1	−1,3	−1,6	−0,9	−0,9
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	109,9	96,9	92,4	90,8	99,1	104,7	101,0	97,1	99,9	99,4
— Annual percentage change	2,3	−2,4	−0,8	−4,6	−1,8	9,2	5,6	−3,5	−3,9	2,9	−0,5
• Against other member countries											
— Index: 1961-73 = 100	100,0	108,8	101,0	99,3	97,5	103,4	106,3	102,6	99,4	97,8	96,5
— Annual percentage change	2,1	−2,2	1,6	−1,6	−1,9	6,0	2,9	−3,5	−3,1	−1,6	−1,4
10. Employment	0,2	−0,5	−1,5	0,1	0,7	1,0	0,8	0,6	1,4	2,4	1,6
11. Unemployment rate[6]	:	3,3	6,9	7,1	7,1	6,3	6,2	6,1	5,5	6,0	6,3
12. Current balance[7]	0,7	0,5	0,7	1,3	2,6	4,4	4,1	4,1	4,7	2,6	0,7
13. Net lending (+) or net borrowing (−) of general government[7]	:	−3,1	−2,5	−1,9	−1,1	−1,3	−1,9	−2,1	0,2	−3,2	−4,8
14. Gross debt of general government[7]	:	29,9	40,9	41,8	42,5	42,7	43,8	44,5	43,6	43,7	45,2
15. Interest payments by general government[7]	:	1,8	3,0	3,0	3,0	3,0	2,9	2,8	2,7	2,6	3,3
16. Money supply (end of year)[8]	10,9	8,0	5,3	4,7	5,0	6,6	5,9	6,9	5,5	:	:
17. Long-term interest rate[9]	7,2	8,2	7,9	7,8	6,9	5,9	5,8	6,1	7,0	8,9	:

[1] 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
[2] At constant prices.
[3] At current prices.
[4] GDP at constant market prices per person employed.
[5] Deflator GDP.
[6] Percent of civilian labour force.
[7] Percent of GDP.
[8] M3.
[9] Levels.

Table 65

Main economic indicators 1961-90[1]

Greece

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	12,5	20,4	19,6	23,6	21,3	18,7	14,1	19,0	18,5	22,3	18,9
— At constant prices	7,7	2,7	0,4	2,8	3,1	0,8	−0,1	4,0	2,6	1,2	1,0
— Price deflator	4,5	17,2	19,1	20,3	17,7	17,8	14,2	14,5	15,5	20,8	17,7
2. Gross fixed capital formation[2]											
— Total	10,0	−1,9	−1,3	−5,7	5,2	−6,2	−7,8	9,0	8,6	2,9	2,9
— Construction	:	−4,3	5,3	−6,9	3,1	−0,7	−8,0	7,6	2,1	2,0	2,0
— Equipment	:	1,6	−8,5	−4,2	7,7	−12,6	−7,7	10,8	17,3	4,0	4,0
3. Share of gross fixed capital formation in GDP[3]											
— Total	22,7	22,6	20,3	18,5	19,1	18,6	16,9	17,4	18,6	18,0	17,9
— General government	:	:	3,3	4,1	4,4	4,2	3,2	3,3	3,2	2,8	3,0
— Other sectors	:	:	16,9	14,3	14,7	14,4	13,7	14,1	15,5	15,2	14,9
4. Final national uses incl. stocks											
— At constant prices	8,1	1,8	0,5	0,6	4,9	−2,0	−1,1	5,6	4,2	2,1	1,1
— Relative against 19 competitors	3,1	0,2	−1,1	−3,0	2,1	−5,4	−4,6	1,3	0,8	−0,8	−1,1
— Relative against other member countries	3,3	0,3	−0,8	−1,5	2,8	−5,4	−4,5	1,3	0,9	−1,0	−1,3
5. Inflation (Price deflator private consumption)	3,5	17,3	18,1	17,9	18,3	22,0	15,6	14,0	14,4	20,5	18,5
6. Compensation per employee											
— Nominal	10,2	21,9	21,4	22,3	25,2	12,8	11,3	17,2	18,8	18,0	16,7
— Real, deflator private consumption	6,5	3,9	2,8	3,8	5,8	−7,5	−3,7	2,8	3,9	−2,1	−1,5
— Real, deflator GDP	5,5	4,0	1,9	1,7	6,4	−4,2	−2,5	2,3	2,9	−2,4	−0,8
7. Productivity[4]	8,2	1,6	−0,6	2,4	2,1	0,5	0,1	2,3	2,2	0,5	1,4
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	97,3	108,5	107,8	112,3	107,1	104,3	104,3	105,0	102,0	99,8
— Annual percentage change	−2,5	2,3	2,6	−0,7	4,2	−4,6	−2,6	0,0	0,7	−2,9	−2,2
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	79,3	82,3	81,5	81,3	69,5	67,6	70,1	73,1	75,5	75,9
— Annual percentage change	−4,2	1,8	−4,5	−1,0	−0,3	−14,5	−2,7	3,8	4,2	3,3	0,5
• Against other member countries											
— Index: 1961-73 = 100	100,0	76,9	84,9	86,4	86,3	71,6	68,0	70,9	74,7	74,5	74,5
— Annual percentage change	−4,7	2,3	−2,6	1,8	−0,2	−17,0	−5,0	4,3	5,3	−0,2	0,0
10. Employment	−0,5	1,1	1,0	0,3	1,0	0,3	−0,1	1,6	0,4	0,7	−0,4
11. Unemployment rate[6]	:	2,7	7,8	8,1	7,8	7,4	7,4	7,7	7,8	8,1	9,2
12. Current balance[7]	−2,9	−2,0	−5,0	−4,0	−8,2	−5,3	−3,1	−1,7	−4,8	−5,1	−5,1
13. Net lending (+) or net borrowing (−) of general government[7]	:	:	−8,3	−10,0	−13,8	−12,7	−12,3	−15,6	−18,4	−18,4	−16,9
14. Gross debt of general government[7]	:	28,1	44,3	53,2	62,5	65,3	71,5	79,7	85,1	89,5	94,3
15. Interest payments by general government[7]	:	2,0	3,7	4,6	5,3	5,8	7,4	8,2	8,1	11,1	12,1
16. Money supply (end of year)[8]	18,2	25,5	20,3	29,4	26,8	19,0	25,2	22,6	23,7	:	:
17. Long-term interest rate[9]	:	12,3	18,2	18,5	15,8	15,8	17,4	16,6	:	:	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M3.
9 Levels.

Table 66

Main economic indicators, 1961-90[1]

Spain

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	14,8	18,7	13,6	12,9	11,1	14,6	11,8	10,9	12,1	11,2	9,5
— At constant prices	7,2	1,7	1,8	1,8	2,3	3,3	5,5	5,0	4,9	3,5	2,5
— Price deflator	7,1	16,7	11,6	10,9	8,5	10,9	5,9	5,7	6,9	7,4	6,8
2. Gross fixed capital formation[2]											
— Total	10,4	−1,1	−2,5	−5,8	4,1	10,0	14,6	14,0	13,6	8,9	5,2
— Construction	:	−1,4	−2,0	−5,2	2,0	6,5	10,0	12,6	13,3	11,5	6,0
— Equipment	:	−0,2	−4,7	−7,3	9,1	15,8	24,2	16,5	14,1	5,4	4,0
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,3	23,6	20,6	18,8	18,9	19,2	20,7	22,5	23,9	24,9	25,4
— General government	:	2,3	2,8	3,0	3,7	3,7	3,5	3,9	4,4	4,8	5,0
— Other sectors	:	21,3	17,7	15,7	15,2	15,5	17,2	18,6	19,5	20,0	20,4
4. Final national uses incl. stocks											
— At constant prices	7,8	1,3	−0,3	−0,9	3,0	6,6	9,0	7,3	7,7	5,3	3,1
— Relative against 19 competitors	2,9	−0,3	−1,8	−4,4	0,2	2,8	5,1	2,9	4,3	2,5	1,0
— Relative against other member countries	3,0	−0,2	−1,4	−2,7	0,9	2,9	5,2	3,0	4,3	2,2	0,7
5. Inflation (Price deflator private consumption)	6,6	17,1	12,3	11,0	8,2	8,7	5,4	5,1	6,6	6,8	6,6
6. Compensation per employee											
— Nominal	14,6	20,4	13,8	10,0	9,4	9,5	6,4	6,4	5,8	8,2	7,4
— Real, deflator private consumption	7,5	2,8	1,3	−0,9	1,1	0,7	0,9	1,3	−0,8	1,3	0,7
— Real, deflator GDP	7,1	3,2	1,9	−0,9	0,8	−1,2	0,4	0,7	−1,0	0,8	0,6
7. Productivity[4]	6,5	3,2	2,3	4,3	3,7	1,0	0,1	2,0	0,7	0,8	1,0
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	104,4	101,8	96,7	94,1	92,0	92,3	91,1	89,4	89,4	89,0
— Annual percentage change	0,6	0,0	−0,3	−4,9	−2,8	−2,2	0,3	−1,3	−1,8	−0,0	−0,4
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	120,5	103,3	102,8	102,3	105,5	108,8	114,1	120,7	129,6	133,1
— Annual percentage change	1,8	0,9	−12,1	−0,5	−0,5	3,2	3,1	4,8	5,8	7,4	2,7
• Against other member countries											
— Index: 1961-73 = 100	100,0	114,8	105,1	107,9	107,6	106,8	107,1	112,8	120,8	124,9	127,5
— Annual percentage change	1,2	1,2	−10,0	2,7	−0,3	−0,7	0,3	5,3	7,2	3,4	2,1
10. Employment	0,7	−1,4	−0,5	−2,4	−1,3	2,3	5,4	2,9	4,1	2,7	1,5
11. Unemployment rate[6]	:	8,4	17,8	20,6	21,8	21,0	20,4	19,3	17,0	15,8	15,6
12. Current balance[7]	−0,2	−2,0	−1,5	1,4	1,6	1,7	0,1	−1,1	−2,9	−3,8	−4,0
13. Net lending (+) or net borrowing (−) of general government[7]	:	−1,8	−4,8	−5,5	−7,0	−6,1	−3,2	−3,2	−2,7	−3,1	−1,9
14. Gross debt of general government[7]	:	17,1	36,3	42,8	47,6	48,5	48,7	44,5	45,2	44,7	42,6
15. Interest payments by general government[7]	:	0,7	1,4	2,2	3,4	4,0	3,5	3,4	3,5	3,6	3,8
16. Money supply (end of year)[8]	:	18,4	16,2	13,3	12,9	12,2	13,6	10,3	12,9	:	:
17. Long-term interest rate[9]	:	:	16,9	16,5	13,4	11,4	12,8	11,8	13,8	14,8	:

[1] 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
[2] At constant prices.
[3] At current prices.
[4] GDP at constant market prices per person employed.
[5] Deflator GDP.
[6] Percent of civilian labour force.
[7] Percent of GDP.
[8] ALP.
[9] Levels.

Table 67

Main economic indicators, 1961-90[1]

France

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	10,7	13,8	10,5	8,9	7,8	7,5	4,9	6,7	7,1	6,0	6,1
— At constant prices	5,4	2,4	0,8	1,5	1,8	2,1	1,8	3,3	3,6	2,5	2,5
— Price deflator	5,1	11,2	9,6	7,3	5,8	5,2	3,0	3,3	3,4	3,5	3,4
2. Gross fixed capital formation[2]											
— Total	7,5	0,0	−3,3	−2,6	3,4	3,5	3,8	7,5	5,9	3,8	3,3
— Construction	:	−0,6	−3,4	−2,9	−0,4	3,1	3,7	6,2	4,5	3,0	2,1
— Equipment	:	0,8	−3,1	−0,6	10,0	2,8	4,1	8,9	6,9	4,5	4,1
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,0	23,1	20,2	19,3	19,3	19,2	19,5	20,1	20,5	20,6	20,7
— General government	:	3,4	3,3	3,0	3,0	3,2	3,0	3,2	3,3	3,4	3,4
— Other sectors	:	19,8	17,0	16,2	16,2	15,9	16,4	16,9	17,2	17,2	17,3
4. Final national uses incl. stocks											
— At constant prices	5,5	2,0	−0,6	0,5	2,3	3,9	3,0	3,5	3,1	2,9	2,6
— Relative against 19 competitors	0,7	0,4	−2,2	−3,3	−0,5	0,3	−0,8	−1,0	−0,4	0,1	0,6
— Relative against other member countries	0,9	0,6	−2,1	−1,7	0,3	0,3	−0,8	−1,0	−0,4	0,2	0,3
5. Inflation (Price deflator private consumption)	4,8	11,7	9,7	7,9	6,0	2,9	3,3	3,0	3,3	3,4	3,6
6. Compensation per employee											
— Nominal	9,9	14,8	10,1	8,2	6,6	4,3	3,5	4,0	4,9	5,4	4,7
— Real, deflator private consumption	4,8	2,8	0,4	0,4	0,6	1,4	0,2	1,0	1,5	2,0	1,0
— Real, deflator GDP	4,5	3,3	0,5	0,9	0,7	−0,9	0,5	0,7	1,4	1,9	1,2
7. Productivity[4]	4,6	2,2	1,2	2,4	2,1	2,0	1,6	2,7	2,4	1,3	1,7
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	106,2	107,2	105,6	104,2	101,2	100,1	98,1	97,2	97,8	97,3
— Annual percentage change	−0,1	1,0	−0,7	−1,5	−1,4	−2,8	−1,1	−2,0	−1,0	0,6	−0,5
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	95,7	87,9	85,7	87,4	89,9	89,5	86,2	84,2	88,2	86,4
— Annual percentage change	−0,8	−0,2	−3,2	−2,5	1,9	2,9	−0,4	−3,7	−2,3	4,7	−2,0
• Against other member countries											
— Index: 1961-73 = 100	100,0	93,7	91,6	92,1	94,1	93,5	90,5	87,5	86,3	86,9	84,5
— Annual percentage change	−1,2	0,3	−0,9	0,6	2,2	−0,6	−3,2	−3,4	−1,4	−0,7	−2,7
10. Employment	0,7	0,2	−0,4	−0,9	−0,3	0,1	0,2	0,6	1,2	1,2	0,8
11. Unemployment rate[6]	:	5,4	8,2	9,8	10,2	10,3	10,4	9,9	9,4	8,9	8,7
12. Current balance[7]	0,4	−0,3	−0,8	0,0	0,1	0,5	−0,3	−0,4	−0,2	−0,3	−0,4
13. Net lending (+) or net borrowing (−) of general government[7]	:	−1,2	−3,1	−2,8	−2,9	−2,8	−1,9	−1,7	−1,5	−1,2	−1,1
14. Gross debt of general government[7]	:	23,9	29,5	31,8	33,2	34,2	34,9	35,9	36,0	36,1	36,1
15. Interest payments by general government[7]	:	1,4	2,6	2,7	2,9	2,9	2,8	2,8	2,9	3,0	3,1
16. Money supply (end of year)[8]	13,7	13,2	11,5	9,5	6,8	6,3	7,3	7,3	7,9	:	:
17. Long-term interest rate[9]	6,9	12,1	13,6	12,5	10,9	8,4	9,4	9,0	8,8	10,0	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M2R.
9 Levels.

Table 68

Main economic indicators, 1961-90[1]

Ireland

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	11,8	19,5	10,4	11,2	7,5	5,8	7,0	6,7	11,3	6,8	5,7
— At constant prices	4,4	4,3	−0,2	4,4	2,3	−0,3	4,9	3,7	5,9	4,5	2,3
— Price deflator	7,2	14,6	10,7	6,5	5,1	6,1	2,0	2,9	5,1	2,1	3,3
2. Gross fixed capital formation[2]											
— Total	9,9	3,6	−9,3	−1,3	−8,2	−3,0	−0,7	0,3	12,1	10,2	6,5
— Construction	:	3,6	−14,4	−4,9	−9,5	−3,1	−6,7	−0,7	9,8	10,6	6,7
— Equipment	:	3,4	−3,3	4,2	−6,0	−0,3	1,8	5,6	14,1	9,8	6,3
3. Share of gross fixed capital formation in GDP[3]											
— Total	21,2	26,7	23,1	21,6	19,3	18,2	17,1	17,0	18,2	19,1	20,1
— General government	:	5,3	4,7	4,0	4,0	3,7	2,9	2,1	1,9	2,0	2,1
— Other sectors	:	21,4	18,5	17,6	15,3	14,5	14,2	15,0	16,3	17,2	18,1
4. Final national uses incl. stocks											
— At constant prices	5,1	3,0	−2,2	1,1	0,4	1,3	−0,4	0,2	6,1	6,4	0,8
— Relative against 19 competitors	1,1	1,7	−3,9	−2,7	−2,5	−2,4	−4,1	−4,3	2,6	3,9	−0,9
— Relative against other member countries	1,3	1,9	−4,2	−0,9	−1,8	−2,4	−4,1	−4,4	2,6	3,7	−1,2
5. Inflation (Price deflator private consumption)	6,3	15,9	9,2	7,6	4,7	4,0	2,6	2,5	3,9	2,8	3,5
6. Compensation per employee											
— Nominal	11,3	18,7	12,8	11,2	7,9	4,6	6,1	4,1	2,3	4,3	5,4
— Real, deflator private consumption	4,7	2,4	3,2	3,3	3,1	0,5	3,4	1,6	−1,5	1,5	1,9
— Real, deflator GDP	3,9	3,6	1,9	4,4	2,7	−1,5	4,0	1,2	−2,6	2,1	2,0
7. Productivity[4]	4,3	3,4	1,9	6,4	4,9	−0,7	4,2	3,3	4,8	2,9	1,6
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	101,0	98,0	96,2	94,2	93,4	93,2	91,3	84,9	84,3	84,6
— Annual percentage change	−0,4	0,2	0,0	−1,9	−2,1	−0,8	−0,2	−2,0	−7,0	−0,8	0,4
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	94,8	101,3	98,1	98,5	103,8	100,3	96,8	89,7	90,6	89,2
— Annual percentage change	0,4	−0,3	2,0	−3,1	0,4	5,4	−3,3	−3,5	−7,3	−1,0	−1,5
• Against other member countries											
— Index: 1961-73 = 100	100,0	92,4	103,2	102,6	103,1	105,3	99,3	96,0	89,9	87,8	85,9
— Annual percentage change	0,1	−0,1	4,1	−0,6	0,5	2,1	−5,6	−3,3	−6,4	−2,4	−2,2
10. Employment	0,1	0,8	−2,1	−1,9	−2,4	0,4	0,6	0,4	1,1	1,6	0,7
11. Unemployment rate[6]	:	9,0	15,2	16,8	18,2	18,2	18,1	17,6	17,0	16,5	16,5
12. Current balance[7]	−2,5	−8,8	−6,9	−5,8	−4,0	−2,9	1,3	1,8	1,6	1,2	0,4
13. Net lending (+) or net borrowing (−) of general government[7]	:	−10,9	−11,8	−9,8	−11,3	−11,2	−9,1	−5,3	−3,5	−3,4	−3,5
14. Gross debt of general government[7]	:	72,7	97,4	102,4	104,7	115,7	118,5	115,4	104,7	101,4	99,4
15. Interest payments by general government[7]	:	6,0	9,3	9,4	10,3	9,8	9,7	9,4	9,1	8,5	8,1
16. Money supply (end of year)[8]	12,1	18,5	5,6	10,1	5,3	−1,0	10,9	6,3	5,0	:	:
17. Long-term interest rate[9]	:	14,8	13,9	14,6	12,7	11,1	11,3	9,4	9,0	10,1	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M3.
9 Levels.

Table 69

Main economic indicators, 1961-90[1]

Italy

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	11,0	21,2	16,2	14,8	11,8	10,3	9,3	10,1	9,7	9,9	9,1
— At constant prices	5,3	3,1	1,1	3,0	2,6	2,5	3,0	3,9	3,2	2,6	2,3
— Price deflator	5,5	17,6	14,9	11,4	8,9	7,5	6,1	6,0	6,3	7,1	6,7
2. Gross fixed capital formation[2]											
— Total	4,7	0,3	−0,9	4,5	1,4	1,6	6,8	4,9	5,1	3,0	3,3
— Construction	:	−1,9	1,5	−1,0	−0,5	1,1	−0,4	3,7	3,6	2,5	2,5
— Equipment	:	3,6	−3,2	12,0	4,0	1,6	14,6	6,4	6,3	3,4	4,0
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,4	23,8	21,2	21,1	20,7	19,7	20,0	19,9	20,1	19,9	19,9
— General government	:	3,1	3,7	3,6	3,7	3,6	3,5	3,5	3,6	3,5	3,4
— Other sectors	:	20,7	17,5	17,5	17,0	16,2	16,4	16,4	16,5	16,4	16,4
4. Final national uses incl. stocks											
— At constant prices	5,3	2,5	0,2	4,0	2,9	3,1	4,7	4,6	3,3	2,9	2,7
— Relative against 19 competitors	0,4	0,9	−1,4	0,4	0,0	−0,5	1,1	0,3	−0,1	0,1	0,7
— Relative against other member countries	0,6	1,1	−1,2	2,4	0,9	−0,6	1,3	0,3	−0,1	−0,1	0,4
5. Inflation (Price deflator private consumption)	4,9	17,4	15,1	11,9	9,0	5,7	5,0	4,8	6,0	6,1	6,3
6. Compensation per employee											
— Nominal	11,5	20,2	16,0	11,8	10,1	7,4	9,3	8,8	9,2	8,9	9,0
— Real, deflator private consumption	6,3	2,4	0,8	−0,1	1,0	1,6	4,1	3,8	3,0	2,6	2,5
— Real, deflator GDP	5,7	2,2	1,0	0,3	1,1	−0,2	3,0	2,7	2,7	1,6	2,2
7. Productivity[4]	5,5	2,0	0,5	2,6	1,7	1,8	2,4	2,5	3,0	1,6	1,9
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	104,0	104,5	102,1	101,5	99,6	100,2	100,3	100,1	100,0	100,3
— Annual percentage change	0,1	0,2	0,5	−2,3	−0,6	−1,9	0,6	0,2	0,3	0,0	0,2
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	87,4	96,2	95,9	95,4	101,0	106,2	106,4	110,0	116,6	119,1
— Annual percentage change	−0,3	−0,5	7,1	−0,3	−0,5	5,9	5,1	0,3	3,3	6,1	2,1
• Against other member countries											
— Index: 1961-73 = 100	100,0	84,5	100,2	103,5	103,1	105,0	107,2	108,1	113,3	115,3	117,1
— Annual percentage change	−0,8	0,0	10,2	3,3	−0,4	1,9	2,1	0,8	4,9	1,8	1,5
10. Employment	−0,2	1,0	0,6	0,4	0,9	0,8	0,6	1,4	0,2	0,9	0,4
11. Unemployment rate[6]	:	6,6	8,8	9,5	9,4	10,4	10,2	10,8	10,8	10,2	10,3
12. Current balance[7]	1,4	−0,7	0,3	−0,6	−0,9	0,5	−0,2	−0,6	−1,3	−1,3	−1,7
13. Net lending (+) or net borrowing (−) of general government[7]	:	−8,9	−10,6	−11,6	−12,5	−11,7	−11,1	−10,9	−10,2	−10,1	−9,4
14. Gross debt of general government[7]	:	60,7	72,0	77,2	84,0	88,5	92,9	96,1	98,9	100,9	102,9
15. Interest payments by general government[7]	:	4,9	7,5	8,0	8,0	8,5	8,0	8,2	9,0	9,7	10,0
16. Money supply (end of year)[8]	15,4	18,5	12,3	12,1	11,1	9,4	8,4	8,5	10,8	:	:
17. Long-term interest rate[9]	7,0	14,9	18,0	15,0	14,3	11,7	11,3	12,1	12,9	13,3	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M2N.
9 Levels.

Table 70

Main economic indicators, 1961-90[1]

Luxembourg

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	8,7	8,4	10,0	10,9	6,0	6,2	3,8	6,7	10,1	6,4	6,8
— At constant prices	4,1	1,0	3,0	6,2	2,9	4,4	2,8	4,3	6,1	3,2	2,9
— Price deflator	4,4	7,3	6,8	4,4	3,0	1,7	0,9	2,2	3,8	3,1	3,8
2. Gross fixed capital formation[2]											
— Total	4,9	−1,2	−11,5	0,5	−6,1	28,7	6,5	3,2	11,5	10,0	5,6
— Construction	:	−1,8	−12,9	−3,1	3,4	8,9	−0,5	9,9	8,8	8,2	5,1
— Equipment	:	−0,5	−6,9	2,7	−20,4	74,6	13,9	−5,4	14,9	12,0	6,3
3. Share of gross fixed capital formation in GDP[3]											
— Total	26,4	25,4	21,3	20,2	18,5	23,2	24,6	24,2	25,6	27,5	28,3
— General government	:	6,4	5,9	4,9	5,3	5,4	5,9	6,1	5,9	6,3	6,5
— Other sectors	:	19,0	15,4	15,3	13,2	17,9	18,8	18,1	19,8	21,2	21,8
4. Final national uses incl. stocks											
— At constant prices	4,0	1,8	−0,8	2,3	0,3	4,5	5,2	2,7	5,3	5,2	4,5
— Relative against 19 competitors	:	:	:	:	:	:	:	:	:	:	:
— Relative against other member countries	:	:	:	:	:	:	:	:	:	:	:
5. Inflation (Price deflator private consumption)	3,2	7,7	8,5	6,9	4,5	1,2	1,5	2,6	4,0	3,5	4,0
6. Compensation per employee											
— Nominal	7,4	10,3	6,9	7,1	3,5	5,2	3,9	3,1	3,9	6,2	5,3
— Real, deflator private consumption	4,1	2,3	−1,4	0,2	−0,9	4,0	2,3	0,5	−0,2	2,6	1,2
— Real, deflator GDP	2,9	2,7	0,1	2,6	0,5	3,5	2,9	0,8	0,0	3,0	1,4
7. Productivity[4]	3,0	0,5	3,3	5,6	1,5	1,8	0,1	1,2	2,3	0,8	1,1
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	117,2	112,1	108,9	107,8	109,6	112,7	112,3	109,8	112,2	112,5
— Annual percentage change	−0,2	2,2	−3,1	−2,8	−1,0	1,7	2,8	−0,3	−2,2	2,2	0,3
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	:	:	:	:	:	:	:	:	:	:	:
— Annual percentage change	:	:	:	:	:	:	:	:	:	:	:
• Against other member countries											
— Index: 1961-73 = 100	:	:	:	:	:	:	:	:	:	:	:
— Annual percentage change	:	:	:	:	:	:	:	:	:	:	:
10. Employment	1,1	0,5	−0,3	0,6	1,4	2,6	2,7	3,1	3,7	2,4	1,8
11. Unemployment rate[6]	:	1,2	3,5	3,1	2,9	2,6	2,6	2,1	1,8	1,7	1,6
12. Current balance[7]	6,8	22,2	39,3	38,9	43,5	39,4	31,6	34,3	31,5	27,3	24,1
13. Net lending (+) or net borrowing (−) of general government[7]	:	1,4	2,0	3,3	5,3	3,3	1,3	2,1	3,2	3,3	1,1
14. Gross debt of general government[7]	:	15,6	14,8	15,0	14,0	13,8	12,0	10,2	8,8	7,8	6,8
15. Interest payments by general government[7]	:	0,9	1,1	1,1	1,1	1,1	1,2	1,0	0,8	0,7	0,6
16. Money supply (end of year)	:	:	:	:	:	:	:	:	:	:	:
17. Long-term interest rate[8]	:	7,6	9,8	10,3	9,5	8,7	8,0	7,1	7,7	8,6	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 Levels.

Table 71

Main economic indicators, 1961-90[1]

Netherlands

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	11,2	8,6	3,3	5,0	4,5	2,5	0,6	4,6	5,6	6,5	4,9
— At constant prices	4,8	1,6	1,4	3,1	2,6	2,0	1,1	2,7	4,0	3,4	2,0
— Price deflator	6,0	6,8	1,9	1,9	1,8	0,5	−0,4	1,9	1,5	2,9	2,8
2. Gross fixed capital formation[2]											
— Total	5,3	−1,8	1,9	5,2	6,7	7,9	0,7	9,8	3,9	2,9	0,8
— Construction	:	−2,4	−3,9	3,8	−0,1	5,0	0,7	11,8	2,6	0,8	−1,6
— Equipment	:	−0,4	9,8	8,8	15,5	10,1	1,3	6,8	5,5	5,5	3,5
3. Share of gross fixed capital formation in GDP[3]											
— Total	25,1	20,5	18,2	18,6	19,2	20,1	20,1	21,4	21,7	21,5	21,4
— General government	:	3,4	2,7	2,8	2,6	2,5	2,4	2,3	2,3	2,3	2,3
— Other sectors	:	17,1	15,6	15,8	16,6	17,6	17,7	19,1	19,4	19,2	19,1
4. Final national uses incl. stocks											
— At constant prices	4,9	1,2	1,6	1,7	3,2	2,1	2,1	2,0	4,3	3,9	1,7
— Relative against 19 competitors	0,2	−0,3	0,5	−1,6	0,8	−1,6	−1,4	−2,2	0,9	1,0	−0,6
— Relative against other member countries	0,3	−0,2	0,4	−0,3	1,4	−1,6	−1,4	−2,3	0,9	0,9	−0,8
5. Inflation (Price deflator private consumption)	5,0	6,8	2,9	2,2	2,2	0,2	−0,4	0,7	2,1	2,4	2,8
6. Compensation per employee											
— Nominal	11,4	8,4	3,2	0,2	1,4	1,6	1,4	1,4	0,5	4,7	4,4
— Real, deflator private consumption	6,0	1,5	0,2	−1,9	−0,8	1,4	1,8	0,7	−1,5	2,2	1,5
— Real, deflator GDP	5,0	1,5	1,3	−1,6	−0,4	1,2	1,9	−0,4	−1,0	1,7	1,5
7. Productivity[4]	3,9	1,8	3,3	3,2	1,0	0,0	−0,3	1,5	2,3	1,7	1,3
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	105,0	99,1	94,5	93,2	94,2	96,3	94,5	91,4	91,4	91,6
— Annual percentage change	1,0	−0,3	−2,0	−4,6	−1,4	1,1	2,2	−1,9	−3,2	0,0	0,2
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	121,2	110,2	101,8	98,8	104,4	108,4	105,4	99,2	100,6	98,6
— Annual percentage change	2,9	−0,3	−2,5	−7,7	−2,9	5,6	3,8	−2,7	−5,9	1,4	−2,0
• Against other member countries											
— Index: 1961-73 = 100	100,0	119,4	112,7	106,1	103,1	106,4	108,5	106,0	100,5	99,3	96,9
— Annual percentage change	2,7	−0,1	−1,2	−5,8	−2,8	3,2	1,9	−2,3	−5,1	−1,2	−2,4
10. Employment	0,9	−0,2	−1,9	−0,1	1,5	2,0	1,4	1,3	1,6	1,7	0,8
11. Unemployment rate[6]	:	6,5	12,4	12,3	10,5	10,2	10,0	9,3	8,7	7,4	7,2
12. Current balance[7]	0,5	1,2	3,1	4,2	4,1	2,7	1,4	2,4	3,6	3,3	3,4
13. Net lending (+) or net borrowing (−) of general government[7]	:	−3,4	−6,4	−6,3	−4,8	−6,0	−6,6	−5,2	−5,2	−5,4	−4,7
14. Gross debt of general government[7]	:	44,2	62,0	66,1	69,7	71,7	75,3	77,4	77,6	77,8	78,5
15. Interest payments by general government[7]	:	3,5	5,7	6,0	6,3	6,2	6,1	6,0	5,9	5,9	6,0
16. Money supply (end of year)[8]	10,3	8,9	10,4	7,6	11,1	5,1	4,4	13,1	14,5	:	:
17. Long-term interest rate[9]	5,9	9,8	8,8	8,6	7,3	6,4	6,4	6,3	7,2	9,0	:

[1] 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
[2] At constant prices.
[3] At current prices.
[4] GDP at constant market prices per person employed.
[5] Deflator GDP.
[6] Percent of civilian labour force.
[7] Percent of GDP.
[8] M2N.
[9] Levels.

Table 72

Main economic indicators, 1961-90[1]

Portugal

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	11,1	23,2	24,4	22,3	25,2	25,4	17,1	16,0	18,5	18,7	16,2
— At constant prices	6,9	2,8	−0,2	−1,9	2,8	4,1	5,3	3,9	5,4	4,2	3,2
— Price deflator	3,9	19,8	24,6	24,7	21,7	20,5	11,2	11,6	12,5	13,9	12,6
2. Gross fixed capital formation[2]											
— Total	7,9	1,7	−7,1	−17,4	−3,5	10,9	15,1	15,0	8,3	9,1	6,3
— Construction	:	:	−3,3	−9,2	−6,0	8,7	9,4	10,1	7,5	7,0	4,5
— Equipment	:	:	−11,1	−29,6	−4,5	14,2	26,8	23,2	9,0	11,0	8,0
3. Share of gross fixed capital formation in GDP[3]											
— Total	24,1	27,6	29,2	23,6	21,8	22,1	24,2	26,8	27,0	27,5	27,8
— General government	:	:	3,1	2,6	2,5	2,6	2,7	2,9	2,8	2,8	2,8
— Other sectors	:	:	26,1	21,0	19,3	19,5	21,5	23,9	24,2	24,7	25,0
4. Final national uses incl. stocks											
— At constant prices	7,3	2,9	−5,7	−6,7	0,9	8,3	10,4	7,4	4,1	5,0	3,4
— Relative against 19 competitors	2,6	1,4	−6,7	−10,1	−1,9	4,3	6,4	3,0	0,6	2,2	1,4
— Relative against other member countries	2,7	1,5	−7,1	−8,5	−1,2	4,3	6,5	3,0	0,6	2,0	1,1
5. Inflation (Price deflator private consumption)	3,9	21,5	25,8	28,5	19,4	13,8	10,0	10,0	12,8	13,2	12,6
6. Compensation per employee											
— Nominal	10,8	25,1	21,8	21,2	22,5	21,6	17,9	13,4	13,0	16,9	15,6
— Real, deflator private consumption	6,7	3,0	−3,2	−5,6	2,6	6,8	7,2	3,1	0,2	3,3	2,7
— Real, deflator GDP	6,7	4,4	−2,3	−2,8	0,6	0,9	6,0	1,5	0,5	2,7	2,7
7. Productivity[4]	6,7	3,2	1,0	−0,4	2,8	7,0	4,7	3,9	3,5	3,5	3,0
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	121,6	109,3	106,7	104,4	98,4	99,7	97,4	94,6	93,8	93,6
— Annual percentage change	0,0	1,2	−3,2	−2,4	−2,2	−5,7	1,3	−2,2	−3,0	−0,8	−0,2
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	105,0	81,5	79,3	80,8	81,6	82,7	83,5	85,2	90,0	93,9
— Annual percentage change	−0,7	−1,2	−9,1	−2,7	1,8	1,0	1,4	0,9	2,1	5,6	4,3
• Against other member countries											
— Index: 1961-73 = 100	100,0	101,9	82,1	82,0	83,7	82,2	81,6	82,7	85,3	87,8	91,2
— Annual percentage change	−1,2	−1,0	−7,7	−0,2	2,1	−1,8	−0,7	1,3	3,2	2,9	3,9
10. Employment	0,2	−0,4	−1,1	−1,5	0,0	−2,7	0,5	0,1	1,8	0,7	0,2
11. Unemployment rate[6]	:	6,4	8,0	8,7	8,8	8,2	6,8	5,6	5,0	4,4	4,9
12. Current balance[7]	0,4	−7,6	−8,3	−3,4	0,4	2,4	−0,4	−4,4	−1,2	−1,2	−1,7
13. Net lending (+) or net borrowing (−) of general government[7]	:	:	−9,0	−12,0	−10,1	−7,2	−6,8	−5,4	−3,8	−6,0	−5,6
14. Gross debt of general government[7]	:	35,4	56,0	61,4	69,5	68,4	71,6	74,0	71,5	67,8	64,7
15. Interest payments by general government[7]	:	:	6,4	7,1	7,9	9,2	7,8	7,8	7,3	8,6	8,6
16. Money supply (end of year)[8]	:	21,9	16,3	24,5	29,8	25,8	16,8	14,8	8,8	:	:
17. Long-term interest rate[9]	:	:	:	:	25,4	17,9	15,4	14,2	14,9	15,4	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 L^{-}.
9 Levels.

Table 73

Main economic indicators, 1961-90[1]

United Kingdom

(Annual percentage change, unless otherwise stated)

	1961-73	1974-82	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. Gross domestic product											
— At current prices	8,4	15,8	9,0	6,9	9,5	7,1	9,8	11,0	9,3	9,3	7,5
— At constant prices	3,2	0,8	3,6	2,1	3,7	3,5	4,7	4,1	2,2	1,5	0,7
— Price deflator	5,1	14,9	5,3	4,6	5,6	3,5	4,8	6,6	7,0	7,7	6,8
2. Gross fixed capital formation[2]											
— Total	4,6	−1,0	5,0	8,6	3,9	1,9	8,8	13,1	4,8	−1,2	−1,6
— Construction	:	−2,0	5,0	6,1	−2,4	6,0	10,4	6,1	−0,4	−2,2	−0,8
— Equipment	:	0,1	4,8	11,4	10,6	−1,9	7,6	17,7	10,0	−0,3	−2,3
3. Share of gross fixed capital formation in GDP[3]											
— Total	18,5	18,5	16,1	17,0	17,0	17,0	17,7	19,2	19,6	18,7	17,7
— General government	:	3,2	2,0	2,1	2,0	1,8	1,6	1,3	1,8	2,2	2,3
— Other sectors	:	15,3	14,1	14,9	15,1	15,2	16,1	17,9	17,8	16,5	15,4
4. Final national uses incl. stocks											
— At constant prices	3,2	0,5	4,7	2,6	2,8	4,2	5,2	7,3	3,1	0,9	0,4
— Relative against 19 competitors	−1,9	−1,2	3,5	−1,5	−0,3	0,7	1,7	3,2	−0,4	−1,9	−1,6
— Relative against other member countries	−1,8	−1,2	4,2	0,8	0,8	0,7	1,9	3,6	−0,4	−2,5	−2,2
5. Inflation (Price deflator private consumption)	4,9	14,4	5,0	5,1	5,2	4,4	3,9	5,0	6,1	7,0	6,3
6. Compensation per employee											
— Nominal	8,3	16,1	8,6	5,4	6,9	7,3	6,2	7,2	8,8	10,4	8,7
— Real, deflator private consumption	3,3	1,5	3,5	0,3	1,6	2,8	2,2	2,1	2,5	3,2	2,2
— Real, deflator GDP	3,1	1,0	3,2	0,7	1,2	3,7	1,3	0,6	1,7	2,5	1,8
7. Productivity[4]	2,9	1,3	4,8	0,2	2,1	3,1	2,5	0,9	−0,6	−0,4	1,1
8. Real unit labour costs[5]											
— Index: 1961-73 = 100	100,0	102,8	96,9	97,4	96,5	97,0	95,9	95,6	97,8	100,7	101,5
— Annual percentage change	0,2	−0,3	−1,6	0,5	−0,9	0,6	−1,1	−0,4	2,3	3,0	0,7
9. Relative unit labour costs in common currency											
• Against 19 competitors											
— Index: 1961-73 = 100	100,0	91,8	96,0	93,5	94,7	88,2	87,9	96,6	99,5	104,7	111,1
— Annual percentage change	−1,9	2,5	−7,6	−2,6	1,2	−6,8	−0,4	9,9	3,0	5,2	6,1
• Against other member countries											
— Index: 1961-73 = 100	100,0	85,9	98,2	99,6	101,1	88,2	84,1	94,0	99,1	98,8	104,5
— Annual percentage change	−3,0	3,3	−5,7	1,4	1,5	−12,8	−4,6	11,7	5,4	−0,3	5,7
10. Employment	0,3	−0,5	−1,2	1,9	1,6	0,4	2,2	3,2	2,8	2,0	−0,4
11. Unemployment rate[6]	:	5,5	11,1	11,3	11,4	11,4	10,4	8,5	7,0	6,4	7,3
12. Current balance[7]	−0,1	−0,3	0,9	−0,2	0,6	−0,8	−1,9	−4,1	−3,7	−2,8	−2,0
13. Net lending (+) or net borrowing (−) of general government[7]	:	−3,6	−3,3	−3,9	−2,8	−2,4	−1,3	1,1	0,9	−0,3	−0,7
14. Gross debt of general government[7]	:	58,4	59,1	60,4	59,0	58,1	56,1	51,0	45,7	43,0	41,8
15. Interest payments by general government[7]	:	4,4	4,7	4,9	4,9	4,5	4,3	3,9	3,7	3,4	3,1
16. Money supply (end of year)[8]	:	14,2	13,3	13,6	13,0	15,9	16,3	17,6	18,4	:	:
17. Long-term interest rate[9]	7,6	13,7	10,8	10,7	10,6	9,8	9,5	9,3	9,6	11,2	:

1 1961-89: Eurostat and Commission services.
1990-91: Economic forecasts, October-November 1990.
2 At constant prices.
3 At current prices.
4 GDP at constant market prices per person employed.
5 Deflator GDP.
6 Percent of civilian labour force.
7 Percent of GDP.
8 M4.
9 Levels.

Notes on the tables

Tables 1, 2, 4 to 10, 12 to 36, 39, 40 and 43

Source: Eurostat, OECD and national publications.

Table 3

Definitions: EC: Eurostat, from 1964 onwards: new definition. USA and Japan: OECD.

Table 11

Coverage: Construction excluded.

Source: Eurostat.

Tables 31 to 34

Definitions:

Adjusted wage share: compensation of employees adjusted for the share of self-employed in total employment.

Unit labour costs: adjusted compensation of employees per unit of GDP at constant market prices.

Real unit labour costs: unit labour costs deflated by the GDP price deflator.

Tables 34 and 53

For a detailed commentary on the method used, see *European Economy* No 8, March 1981.

EUR 12: against nine non-member countries (Australia, Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland, USA).

Tables 37, 38, 41, 42, 44 and 45

Definition: Trade statistics.

Source: Eurostat.

Table 46

Definitions: B: M2N. DK: M2. D, GR: M3. E: ALP. F: M3R. IRL: M3. I: M2N. NL: M2N, breaks in series 1976, 1977, 1978 and 1982. P: L^-. UK: M4. EUR: chain weighted arithmetic mean; weights: GDP at current market prices and PPS. USA: M3. J: M2 plus CD's (certificates of deposit).

Table 47

Definitions: B: 1961-84 4-month certificates of Fonds des Rentes; 1985-90 3-month Treasury certificates. DK: 1961-76 discount rate; 1977-90 call money. D: 3-month interbank loans. GR: 1960-April 1980 credit for working capital to industry; May 1980-90 interbank sight deposits. E: 3-month interbank deposits. F: 1960-68 call money; 1969-81 1-month sale and repurchase agreements on private sector paper; 1982-89 3-month sale and repurchase agreements on private sector paper. IRL: 1961-70 3-month interbank deposits in London; 1971-90 3-month interbank deposits in Dublin. I: 1960-70 12-month Treasury bills; 1971-90 interbank sight deposits. NL: 1960-September 1972 3-month Treasury bills; October 1972-90 3-month interbank deposits. P: 1966-July 1985 6-month deposits; August 1985-90 3-month Treasury bills. UK: 1961-September 1964 3-month Treasury bills; October 1964-90 3-month interbank deposits. EUR 12: weighted geometric mean, weights: private consumption at current prices and PPS. USA: 3-month Treasury bills. J: bonds traded with 3-month repurchase agreements.

Table 48

Definitions: B: State bonds over 5 years, secondary market. DK: State bonds and mortgage loans. D: public sector bonds outstanding. GR: State bonds. E: public sector bonds over 2 years. F: 1960-79 public sector bonds; 1980-90 State bonds over 7 years. IRL: 1960-70 State bonds 20 years in London; 1971-90 State bonds 15 years in Dublin. I: 1960-84 Crediop bonds; 1985-90 rate of specialized industrial credit institutions. NL: 1960-73 3,25 % State bond 1948; 1974-84 private loans to public enterprises; 1985-90 5 State bonds with the longest maturity. P: bonds over 5 years. UK: State bonds 20 years. EUR 12: as for Table 47. USA: federal bonds over 10 years. J: 1961-78 State bonds; 1979-90 over-the-counter sales of State bonds.

Table 49

Source: IMF: International financial statistics and Commission departments. Gold is valued at market-related prices.

Table 50

Source: Eurostat and Commission departments.

Tables 51 and 52

Source: Commission departments.

The drachma and, since 21 September 1989, the escudo, are represented in the ecu, but do not participate in the EMS exchange-rate mechanism.

Tables 54 to 56

Definition: EUR 9: Community excluding Greece, Spain and Portugal.

Source: 1960-70: OECD, 1970-91: Member countries' national accounts and Commission departments.

Table 57

Source: 1958-89: Management accounts. (a) UA until 1977, EUA/ECU 1978 onwards. (b) Incorporated in the EC budget from 1971. (c) This column includes, for the years to 1970, substantial amounts carried forward to following years.

(d) Commission, Council, Parliament, Court of Justice and Court of Auditors. (e) Including surplus of ECU 82,4 Mio carried forward to 1981. (f) Including ECU 1 173 Mio carried forward to 1982. (g) Including ECU 1 819 Mio UK special measures. (h) Including ECU 2 211 Mio carried forward to 1983. (i) Including ECU 1 707 Mio carried forward to 1984. (j) There was a small deficit in 1984 in respect of the EC budget due largely to late payment of advances by some Member States. (k) There was a cash deficit in 1985 of ECU 25 Mio due to late payment of advances by some Member States. (l) Includes a surplus of ECU 5 080 Mio carried forward to 1990. (m) Supplementary and amending budget No 2 of 1990. (n) Draft general budget for 1991 (Council first reading).

Table 58

Source: 1958-89: Management accounts. (a) UA until 1977, EUA/ECU 1978 onwards. (b) GNP until 1978, VAT from 1979 until 1987; GNP from 1988 onwards. (c) This column includes for the years to 1970 surplus revenue from previous years carried forward to following years. (d) As a result of the calculations to establish the relative shares of the Member States in the 1976 budget, an excess of revenue over expenditure occurred amounting to 40,5 Mio UA. This was carried forward to 1977. (e) Including surplus brought forward from 1979 and balance of 1979 VAT and financial contributions. (f) Including surplus of ECU 82,4 Mio carried forward to 1981. (g) Including surplus of ECU 661 Mio. (h) Includes surplus of ECU 307 Mio. (i) Includes ECU 593 Mio of repayable advances by Member States. (j) See note (j) to Table 57. (k) Includes non-repayable advances by Member States of ECU 1 981,6 Mio. (l) Supplementary and amending budget No 2 of 1990. (n) Draft general budget for 1991 (Council first reading).

Note: From 1988 onwards agricultural levies, sugar levies and customs duties are net of 10% collection costs previously included as an expenditure item.

Tables 59 and 60

Source: European Economy: various issues on the borrowing and lending activities of the Community. (a) ECSC: 1958-74 UA, 1975-89 EUA/ECU. EIB: 1961-73 UA, 1974-89 EUA/ECU. Euratom: 1963-73 UA, 1974-89 EUA/ECU. (b) EEC balance-of-payments financing. (c) EEC New Community Instrument (for investment). (d) Drawings under credit lines opened with Eximbank (USA). (e) Including the following short-term borrowing: 1984: ECU 289 Mio, 1985: ECU 252 Mio. (f) Including the Community loan 'Jean Monnet' of ECU 500 Mio which has been divided equally under the headings ECSC and NCI. (g) Of which ECU 200 Mio of commercial paper and ECU 37,5 Mio of certificates of deposit.

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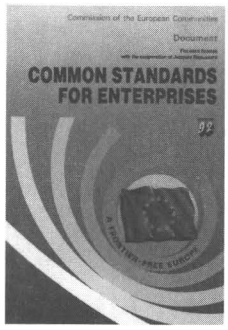

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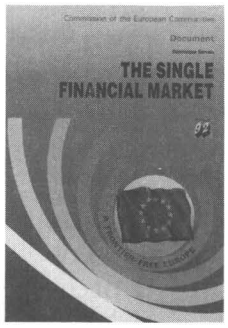

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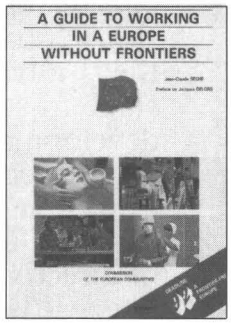

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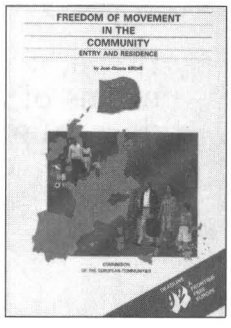

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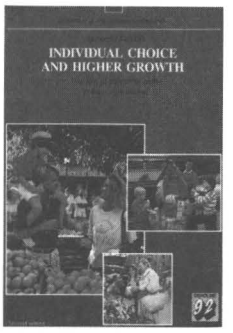

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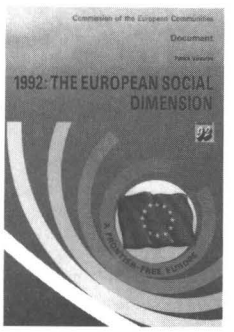

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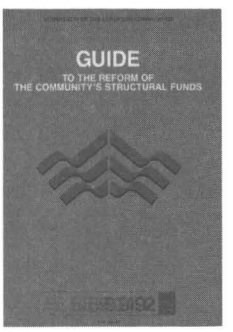

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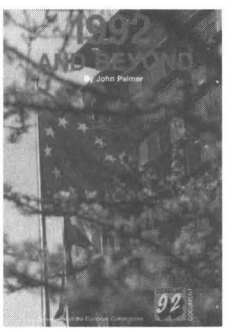

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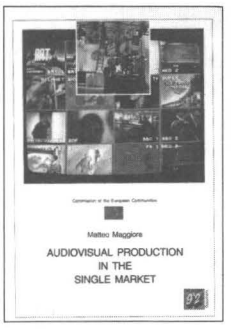

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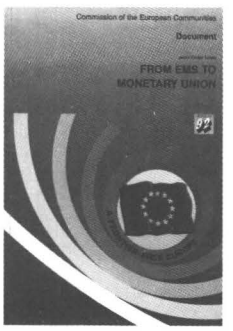

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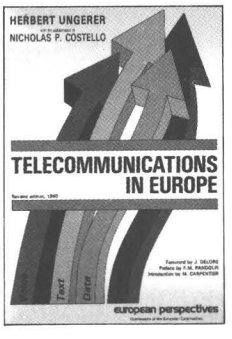

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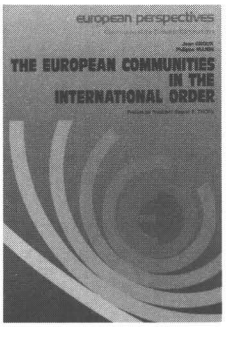

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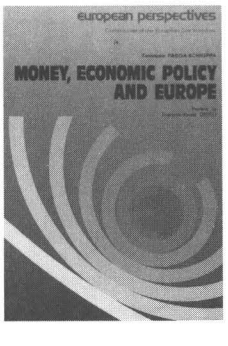

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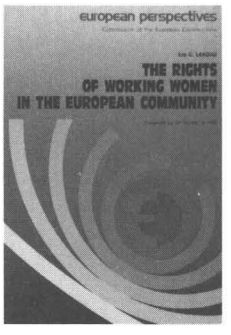

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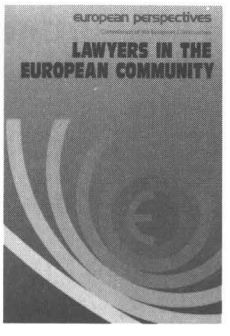

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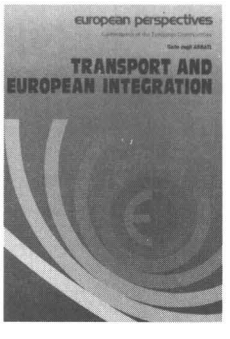

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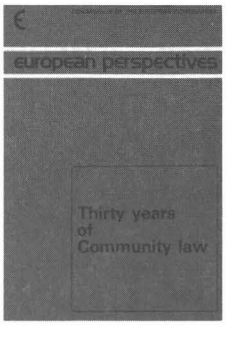

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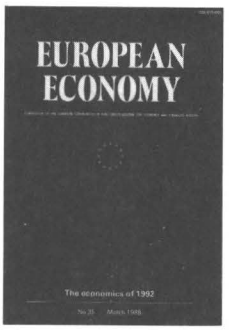

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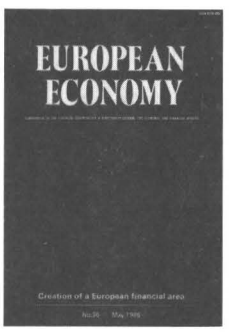

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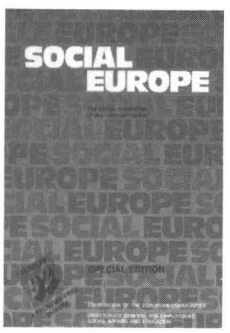

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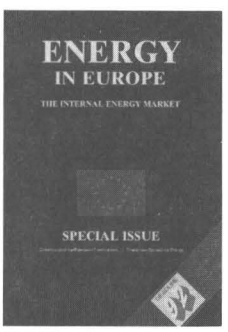

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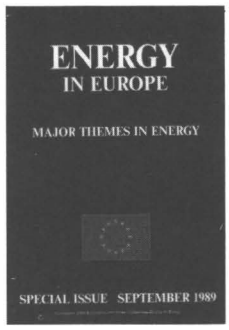

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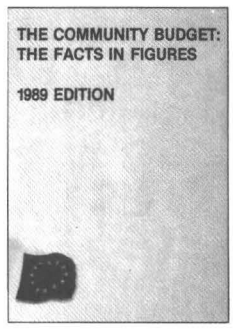

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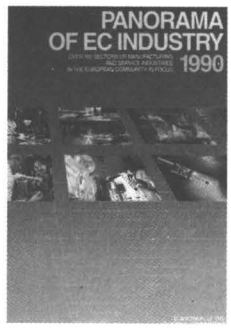

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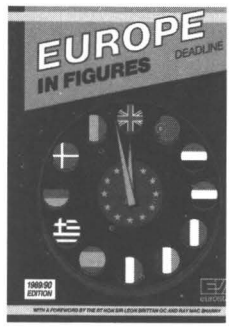

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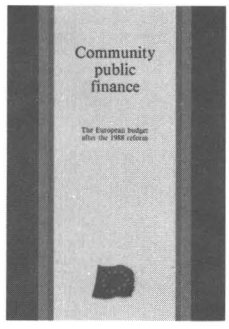

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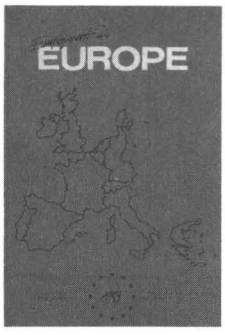

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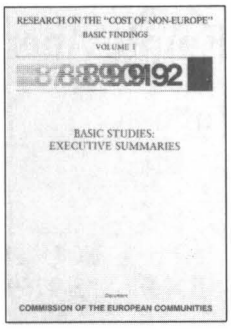

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