COMMISSION OF THE EUROPEAN COMMUNITIES

COM(79) 568 final

Brussels, 18th October 1979

ANNUAL ECONOMIC REVIEW 1979/80

COMMISSION
OF THE
EUROPEAN COMMUNITIES

COM(79) 568 final

Annual Economic Review 1979-80

(Communication of the Commission submitted for information to the Council, Economic and Social Committee, and Parliament together with the proposed Annual Economic Report 1979-80)

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1. The Community Economy in 1979 and 1980

Over the last year the process of gradual economic recovery in the Community has been shaken by the turbulent situation in the world oil market. Initially developments in Iran at the beginning of the year led to disturbances in the functioning of the market such that physical shortages of oil became a serious danger, though they did not develop into a severe economic problem in the Community. Instead, these disturbances led to a series of increases in the world price of oil such that by the end of June it had risen by nearly 60% of its level at the end of 1978. Other raw material prices have also risen, though generally proportionately less than that of oil.

The terms of trade loss implied by the oil price increase has resulted in increased inflation throughout the Community in 1979 and little prospect of improvement in 1980. It has also led to a somewhat poorer growth performance in the Community in 1979 than had been anticipated, with a more serious slowing-down forecast for 1980. Outside the Community, all oil-importing countries have seen their short-term outlook damaged by the oil price rise. In particular the recession in the United States in the second half of 1979 has been deepened, such that the United States can no longer be expected to contribute much to growth in world trade over the coming twelve months.

In preparing the forecasts for 1980, the Commission has judged that growth in world imports outside the Community will slow down slightly from 3 1/2% in 1979 to 3 1/4% in 1980. As in 1979, internal demand will remain the main motor for growth in the Community as a whole. In 1979 both private consumption and fixed investment have made a substantial contribution to growth, while the net impact of the foreign balance in 1979 is likely to be negative, reflecting strong import growth in the faster-growing Community countries, and in the United Kingdom, as well as sluggish growth in the imports of non-member states. In 1980, however, the growth rates of all components of internal demand, but especially private consumption and stockbuilding, are forecast to fall. The turndown in Community import growth to a rate close to that of the world as a whole, implies that, broadly speaking, the foreign balance in 1980 will have little impact on GDP growth in real terms. The outcome is that Community GDP is now forecast to grow by slightly over 3% in 1979, the same figure as that recorded in 1978, but in 1980 the year-on-year growth rate is expected to fall to 2%. During the course of the year the growth rate will be even smaller - of the order of 1 1/2%.

The increase in the Community consumer deflator is predicted to rise from 7% in 1978 to about 9% in 1979 and in 1980. This increased rate of inflation reflects both the initial impact of the oil price rises on consumer goods prices and the secondary effects which derive from compensatory adjustments in other costs and prices. Developments in the components of household incomes are shown in Table 1.2. Real disposable income growth is forecast to fall from about 4% in 1978 to a little under 3% in 1979 and then to about 2% in 1980.

The fall in the rate of growth of transfer payments to households and rises in the direct tax burden, particularly in 1980, contribute to the slower growth in real disposable income. Table 1.2 makes clear that a risk associated with these forecasts is that the growth of about 2% in private consumer demand in 1980 is not realised. A fall, if modest, in the savings ratio is assumed to help sustain the level of consumption, although there is a risk that this might not occur if the inflation rate remains high and unemployment rises.

Forecasts for the evolution of trade and current account balances for the Community and the major world trading groups are given in Table 1.3. The Community is forecast to move from substantial current account surplus to a modest deficit in 1979 and to a somewhat larger deficit in 1980. The worsening of the Community current account in 1979 is in part attributable to the terms-of-trade effect of the increased price of oil and other raw materials but is, at least in equal part, due to the deterioration of the trade balances in volume terms of Germany, Italy and the United Kingdom. The current balance in 1979 also suffers from substantial increases in repatriated profits to non-Community countries. In 1980 the Community trade balance in volume terms is expected to improve substantially, because of markedly lower import growth in all countries, but this improvement is more than offset by the terms of trade deterioration.

Outside the Community, the worsening of the combined current account deficit of other OECD member states in 1979 and 1980 is due to their worsening terms of trade and in 1980 lower growth in the volume of imports by the non-oil developing countries. It conceals a marked reduction in the United States deficit, which is forecast to be in near-equilibrium in 1980 and an equally marked reduction in the Japanese balance which is predicted to be in modest deficit both in 1979 and 1980. The OPEC surplus rises sharply

in both years despite the expected large increase in OPEC imports in 1980. The deficit of the non-oil developing countries will impose a constraint in their import growth in 1980. Nevertheless, it is forecast to widen significantly.

Finally, as regards the Community as a whole, it is useful to try to summarise the impact of the oil price rise in 1979. The dollar oil import price for the Community is assumed to rise by 56% throughout the course of 1979, which in effect implies stability in the second half of the year. The Community excluding the UK (since the increased production from the North Sea would complicate the calculations) imported some 436 million tons of oil in 1978 at a cost of nearly $40 billion. The price increase would thus imply a direct balance of payments cost of $25 billion in a full year. From this should be subtracted a small figure to represent reduced imports achieved by oil economies and substitutes, and a more substantial figure for increased Community exports to OPEC, net of some fall in exports to other less developed countries. These offsets add up to some $9 billion in a full year. The full year cost to the balance of payments of the 1979 oil price increase, ignoring second-round effects from variations in the rate of economic growth and export prices, can then be estimated at about $16 billion The greater part of this will show up in 1979, since the average price increase this year on 1978 is almost 40%, but part of the impact will not appear till 1980.

The primary effect of the oil price increase on consumer prices in the Community in a full year is of the order of 1 1/2%, which rises 2 to 2 1/2% when price increases in other energy products are taken into account. These figures do not include the effects of any adjustments in wage rates compensating for the extra inflation. As regards real output, the Commission has estimated the full-year effect of the oil price increase, after taking account of both domestic multipliers and their international transmission through trading links, to be of the order of 1% for the Community as a whole, compared to an initial direct impact of 0,7% (assuming that the direct trade balance loss of $16 billion is translated into an equivalent reduction in domestic demand).

Economic Forecasts for the Member States, 1979 and 1980

The latest Commission forecasts of the major economic aggregates for the Member States for 1979 and 1980 are presented in Tables 1.4 to 1.8. It is not intended here to provide a detailed commentary on these forecasts, but rather to draw attention to certain broad developments regarding convergence or divergence in economic policy and performance among the Member States.

Table 1.4 gives GDP growth forecasts, in volume and value and forecasts for the GDP and private consumption deflator. The volume growth figures show that while the overall Community growth figure for 1979 is forecast to equal that for 1978, there are significant swings in the contributions of the different countries. In 1980 all countries participate in the slow-down in the growth rate, but the deceleration is most striking in Germany and Italy which expanded relatively rapidly in 1979 and in the United Kingdom economy which hardly grew in 1979 and is now forecast to record a fall in GDP in 1980. According to these forecasts there will be a general levelling down of growth rates in 1980, with, excluding Denmark and the United Kingdom, a clustering in the range 2 to 3%.

The inflation performance in 1979 reflects in some Member States an improvement relative to 1978 and in others a deterioration. In 1980, using the consumer expenditure deflator as criterion, inflation will only diminish significantly in France and Italy, both relatively high inflation countries, while it will get worse in the Benelux countries. Overall the standard deviations of inflation rates are likely to move from 3,2% in 1978 to 4,1% in 1979 and down to 3,2% in 1980.

The public finance aggregates presented in Table 1.5 represent the Commissions estimates for 1979 and, in most countries, the Commission's forecasts of the outcome of the announced central government budgets for 1980. Where necessary they have been converted, so as to respect the Community standardised definitions for the general and the central government accounts. The figures are broadly in accordance with the budgetary guidelines proposed by the Commission and agreed by the Council in July of this year. Where no central government budgets have been announced as in Ireland, Italy and the United Kingdom the figures in Table 1.5 reflect the Commission's view as to the broad results of maintaining the current stance of budgetary policy throughout 1980.

In some countries, Germany, Ireland, the Netherlands and the United Kingdom, the Commission foresees a tightening up of fiscal policy as measured by the general government net borrowing requirement, while only in Denmark is there a larger deficit.

The monetary aggregates for 1979 and 1980 presented in Table 1.6 can be characterised as forecasts which are subject to relatively high margins of errors and they do not imply policy recommendation. They are based on the hypothesis that the current stance of monetary policy in each of the Member States will be maintained until the end of 1980 and they are consistent with the forecasts for GDP growth and inflation taking account of changes in the velocity of circulation.

The four larger Member States set quantitative targets for monetary aggregates. For Germany the 7% forecast for monetary growth is consistent with the growth of central bank money of 7% which is well within this year's target range. For 1980 the growth of both M3 and of central bank money is expected to fall somewhat to 6 1/2% which would be in line with a slower growth of nominal GDP. In France the figures to date suggest that a 12 1/2% growth of M2 in 1979 is probable. For 1980 a reduced rate of growth of money supply to the target rate of 11% is plausible given the forecast drop in the value growth of GDP. Italy is likely to effect a further significant drop in the rate of monetary expansion in 1980, assuming that, as in 1979, the increased budget deficit can, to a greater extent, be financed by non-monetary means. A reduction in the forecast current balance surplus will also operate in the same direction. Following the strict monetary policy currently being pursued by the United Kingdom authorities an even more rapid reduction in the ratio of monetary to GDP value growth is foreseen in 1980 than that likely to be achieved this year, with the public sector borrowing requirement financed by entirely non-monetary means in 1980.

None of the smaller Member States set formal targets for the growth of money supply since the fixed exchange rate is viewed as the primary objective of monetary policy. However in several of these countries credit is subject to explicit policy constraints. The figure for monetary growth in Denmark implies a deceleration from 9% in 1979 to 8 1/2% in 1980 in view of the forecast reduction in nominal GDP growth. In Ireland monetary growth in 1978 and 1979 has been influenced by special factors, including entry into the European Monetary System. For 1980 it is forecast that monetary growth will closely follow nominal growth in GDP. In the Netherlands a constant celocity of circulation is inherent in the forecast. This is anticipated to be achieved largely through reduced monetary financing of the government deficit. In Belgium however the liquidity ratio

b

is expected to rise in 1980 following its present trend. But to restrain monetary growth to the figure cited in Table 1.6 will require an increase in the proportion of the government deficit financed by non-monetary means. (It should be noted, as regards intra-country comparisons, there are wider discrepancies in the credit data presented in Table 1.6 than for the money supply.)

Employment, as shown in Table 1.7, after showing significant increases in 1979, is predicted to show very little change in 1980 except in Ireland and Belgium where it will rise appreciably and the United Kingdom where it will fall. With almost stable employment, almost all countries are forecast to show a rise in their unemployment rates in 1980. Since the unemployment series are in principal comparable between countries, the forecasts indicate that the disparity between unemployment rates is likely to grow in 1980.

The balance of payments forecasts are given in Table 1.8. The principal factors contributing to the turn-around in the Community current balance have been referred to above. The net result is that only Italy among the Member States, in large part due to tourism, shows a substantial surplus on current account in 1980. The United Kingdom and the Netherlands due to modest import volume growth and some gain in Dutch market shares are predicted to be in near-equilibrium in 1980. All other Member States are expected to run deficits in 1980. The size of the deficit is particularly preoccupying in the cases of Ireland and Denmark. Germany however presents the most dramatic example of turn-around from a very large surplus in 1978 to a substantial deficit in 1980.

Table 1.1

Demand, Output and External Balance, 1960-1980 (percentage change)

	1960-70 average	1971-75 average	1976	1977	1978	1979	1980	1978 II	1979 I	1979 II	1980 I	1980 II
Private Consumption	4,6	3,3	3,7	2,2	3,7	3,4	2	3,3	4,0	2,0	2 1/4	2
Public Consumption	3,6	3,5	3,0	1,4	3,2	2,8	2	2,6	3,7	1,3	2 1/4	2 1/2
Fixed Investment	5,6	0,6	3,1	1,3	2,9	3,4	3	4,7	1,5	6,2	1 3/4	2
Stockbuilding (a)	1,3	0,9	1,1	1,0	,9	1,2	1/2	1,0	1,4	1,1	3/4	1/2
Domestic Demand	4,7	2,2	5,3	2,2	3,3	3,7	1 3/4	4,4	4,2	2,1	1 1/2	1 1/2
Exports	7,9	6,2	10,9	4,1	5,1	5,5	4	5,9	4,0	8,6	2 1/4	3
Imports	8,3	4,5	13,2	1,5	6,0	8,0	3 1/4	8,2	9,7	5,4	2 3/4	2 3/4
GDP volume at market prices	4,6	2,7	5,0	2,3	3,1	3,1	2	3,8	2,6	3,1	1 1/2	1 1/2
GDP price deflator	4,1	9,6	10,5	10,4	7,8	8,3	9	8,3	7,6	9,4	9	9
Consumer price deflator	3,8	9,5	11,1	10,5	6,8	8,9	9	7,2	8,7	11,0	8 1/4	8 3/4

(a) as a percentage of GDP

Table 1.2

Trends in disposable household incomes and savings, EC total, 1975-80 (percentage change)

	1960-70 average	1971-75 average	1976	1977	1978	1979	1980 Forecast
Compensation of employees	9,8	14,7	12,7	10,9	10,1	12,0	11
(Compensation per employee)	8,8	14,3	12,9	9,9	9,8	11,0	11
Other household incomes	-	-	13,3	15,0	11,4	12,5	13
Current transfers received	-	-	14,4	6,0	13,8	11,7	11 1/2
Direct taxes	-	-	18,0	9,1	10,6	11,0	14 1/4
Current transfers paid	-	-	16,6	11,0	7,6	12,9	11 1/4
Disposable household income	9,0	11,8	12,1	9,9	11,3	11,8	11 1/2
Real disposable household income	5,1	2,1	2,4	0,6	3,9	2,7	2
Real private consumption	4,6	3,3	3,6	2,1	3,7	3,4	2
Savings ratio	-	-	18,0	16,8	16,9	16,6	16 1/2

Table 1.3

World Trade and Current Account Balances (a), 1975-1980
$ '000 billion

		1973	1974	1975	1976	1977	1978	1979	1980
EC	trade balance	7,0	-3,5	9,1	-1,9	7,6	18,5	1,4	0
	current balance	1,3	-11,3	2,0	-5,5	2,5	17,9	-4,5	-7 1/4
Other OECD									
	trade balance	1,2	-22,0	-4,5	-16,4	-32,2	-18,1	-39,8	-40
	current balance	8,2	-15,0	-0,1	-12,0	-27,7	-9,0	-26,5	-28
OPEC	trade balance	21,5	77,0	49,5	65,0	61,5	43,0	84,3	106 1/4
	current balance	7,75	59,5	27,25	36,5	29,0	7,0	44,3	62 1/4
Other developing countries									
	trade balance	-7,5	-23	-38,5	-25	-23,5	-36,5	-45,5	-55 3/4
	current balance	-6,0	-23,5	-37,5	-25,5	-23,0	-35,0	-44,0	-54
Other countries (b)									
	trade balance	1	-4	-10,5	-7,5	-5,5	-4,0	-5,8	-7 1/4
	current balance	-1,5	-6,5	-14,0	-10,0	-7,0	-5,0	-7,3	-9 1/4

(a) calculated at current exchange rates; totals do not add to zero due to recording errors

(b) includes state trading countries and other non-classified countries.

Sources: 1973-1977, EC figures Eurostat, others OECD,
1978-1980, Commission departments.

Table 1.4 Gross domestic product and prices, 1978 - 1980 percentage change,

	GDP at constant prices			GDP value		
	1978	1979	1980	1978	1979	1980
DK	0,9	1,8	3/4	10,7	9,9	9 3/4
D	3,2	4,3	3	7,2	8,2	7 1/4
F	3,3	2,9	2 1/4	13,5	12,7	11 1/4
IRL	6,1	2,8	3	18,1	15,2	16 1/2
I	2,6	4,3	2 1/4	16,2	19,2	17 1/4
NL	2,4	2,6	2 1/4	7,8	7,0	9 1/2
B	2,5	3,0	2 1/2	7,2	7,3	9 1/2
L	3,2	2,5	2	6,5	8,0	8 1/2
UK	3,7	0,3	-1	14,1	14,1	14 1/2
EC	3,1	3,1	2	11,1	11,6	11 1/4

	GDP deflator			Consumption deflator		
	1978	1979	1980	1978	1979	1980
DK	9,7	8,0	9	9,4	9,7	9 3/4
D	3,9	3,9	4 1/4	2,6	4,3	4 1/2
F	9,9	9,6	8 3/4	8,8	10,2	9 1/2
IRL	11,3	12,1	13	7,9	13,2	13
I	13,3	14,3	14 3/4	12,7	15,2	14 1/2
NL	5,3	4,3	7	4,4	4,8	6 3/4
B	4,6	4,2	6 3/4	4,5	4,5	7
L	3,2	5,4	6 1/2	3,1	4,5	6 1/2
UK	10,2	13,8	15 1/2	8,5	12,8	12 3/4
EC	7,8	8,3	9	6,8	8,9	9
(Standard deviation	3,5	3,9	3,7	3,2	4,1	3,2)

TABLE 1.5 Public finance aggregates, 1978-1980

General government, percentage changes

	Expenditure			Receipts		
	1978	1979	1980	1978	1979	1980
DK	9,1	14,5	10,5	14,5	13,2	8,2
D	7,4	7,6	6,4	6,7	6,8	7,1
F	16,7	14,7	13,4	11,8	16,5	13,4
IRL (3)	19,7	22,6	13,4	14,3	9,2	40,4
I	27,9	18,1	16,6	22,4	15,0	17,0
NL	9,7	11,3	9,8	9,1	10,3	11,0
B	11,1	9,5	11,0	10,6	7,6	10,4
L	7,4	8,3	9,1	10,8	6,4	7,8
UK	13,0	14,4	16,2	11,0	16,6	18,6
EC	13,0	12,3	11,6	10,9	12,0	12,2

	General Government percentage GDP			Central Government percentage GDP		
	Net Borrowing (1)			Net Borrowing Requirement (2)		
	1978	1979	1980	1978	1979	1980
DK	-0,5	-1,0	-2,0	-2,8	-3,5	-4,3
D	-2,7	-3,1	-2,8	-3,0	-3,4	-3,2
F	-2,3	-1,7	-1,7	-1,6	-1,7	-1,7
IRL (3)	-10,8	-15,8	-7,3	-12,7	-15,0	-8,0
I	-10,6	-11,5	-11,4	-13,1	-13,6	-14,4
NL	-2,0	-2,3	-2,0	-3,1	- 3,8	-3,7
B	-6,3	-7,2	-7,4	-6,4	-7,2	-7,1
L	+2,8	+1,8	+1,0	+2,8	+1,8	+1,1
UK	-3,9	-3,1	-2,4	-4,9	-4,5	-4,1
EC	-4,0	-4,0	-3,9	-4,5	-4,6	-4,8

(1) National accounts, transactions basis excluding loans and participations

(2) Budgetary accounts, cash basis, including loans and participations

(3) 1979 and 1980 figures reflect distortions in government financial transactions due to the 1979 postal strike.

TABLE 1.6 Monetary aggregates, end 1978 - end 1980,

Money supply, percentage change

		1978	1979	1980
DK	(M2)	6,7	9,0	8 1/2
D	(M3)	11,0	7,0	6 1/2
F	(M2)	12,3	12,5	11
IRL	(M3)	28,7	21,0	16
I	(M2)	22,8	17,8	16 1/2
NL	(M2)	4,2	8,1	8 3/4
B L	(M2H)	9,5	9,1	10 3/4
UK (sterling M3)		13,7	12,5	11 1/2
EC (1)		12,7	10,9	10 1/2

Credit to enterprises and private households from monetary institutions (2), percentage changes

	1978	1979	1980
DK (3)	5,9	3,7	3
D	10,5	11 1/2	9
F	11,0	11,9	11
IRL	32,0	24,0	20
I	18,0	13,0	10
NL	22,6	18,7	16 3/4
B L	11,9	11,0	10 3/4
UK (4)	17,1	17,1	14 1/2
EC (1) (5)	(13,5)	(13,0)	(11)

(1) weighted with 1978 GDP at current prices and exchange rates
(2) owing to different coverage of credit between financial institutions and other differences, these figures are not comparable between countries
(3) contribution to the growth of the money supply, expressed in percentage of the money stock at the start of the period
(4) sterling lending to private and overseas sectors in the course of financial years
(5) excluding Denmark

Table 1.7 Labour markets 1978-1980

	Total employment percentage change			Unemployment rate (percentage of civilian working population)		
	1978	1979	1980	1978	1979	1980
DK	1,0	0,8	0,2	6,6	5,8	6,1
D	0,3	1,1	0,0	3,9	3,4	3,4
F	1,0	0,5	0,1	5,0	5,9	6,8
IRL	1,1	2,1	0,6	8,7	7,9	7,8
I	0,6	0,5	-0,2	7,1	7,7	8,4
NL	0,2	0,2	0,2	4,2	4,3	4,3
B	-0,4	0,2	0,6	8,3	8,7	8,8
L	-0,7	0,6	-0,1	0,8	0,8	0,9
UK	0,2	0,8	-0,5	5,7	5,6	6,6
EC	0,3	0,7	0	5,5	5,6	6,2

Table 1.8 Balance of payments, 1978-1980

	Current accounts, EUA '000 mill			percentage of GDP		
	1978	1979	1980	1978	1979	1980
DK	-1,2	-1,8	-2,0	-2,6	-3,7	-3,9
D	7,4	-0,9	-3,1	+1,5	-0,2	-0,5
F	2,9	0,3	-0,8	+0,8	+0,1	-0,2
IRL	-0,2	-0,9	-1,0	-2,6	-8,3	-8,2
I	4,9	3,5	3,5	+2,4	+1,5	+1,3
NL	-0,7	-0,3	0	-0,7	-0,3	0
B	-1,2	-1,4	-1,9	-1,5	-1,8	-2,2
L	0,5	0,5	0,6	-	-	-
UK	1,6	-2,3	-0,4	+0,6	-0,8	-0,1
EC	14,0	-3,3	-5,2	0,9	-0,2	-0,3

Commission Forecasting, Principles and Methods

The Commission staff prepare short-term economic forecasts three times each year, in January, May and September. For any given year the first set of forecasts is worked out in the May of the preceding year. These are further defined in the light of additional information in each successive forecasting round until the October round of the year in question. The triennial periodicity derives from three major statutory tasks which the Council has given the Commission. These are firstly the preparation of the Annual Economic Report in the fourth quarter of each year, which, inter alia, establishes economic policy guidelines to be followed by each Member State, secondly the adjustment of these guidelines during the first quarter of the following year in the light of new developments in the economic situation and thirdly the establishment in the second quarter of quantitative guidelines for the draft public budgets for the year to come (1). These sets of guidelines are framed by the Commission in the light of a set of detailed forecasts for each Member State, which include forecasts of

(1) GDP growth and its components, both in volume and value;
(2) output and employment disaggregated by principal sectors;
(3) the household income and expenditure account disaggregated by the main source of income;
(4) the current and capital revenue and expenditures accounts of general government, i.e. the consolidated accounts of central, regional and local governments and social security funds;
(5) a capital account showing intersectoral savings, capital formation and borrowing requirements;
(6) the balance of payments on current account, subdivided into the goods, services and transfer accounts;
(7) finally a number of important aggregates and indicators, included industrial production, employment and wage rates.

Each forecasting round starts with an initial set of hypotheses regarding the economic environment outside the Community, in particular GDP and import growth in the other OECD countries, the OPEC member states, the non-oil developing countries and the state trading nations. These assumptions are continually adjusted during the forecasting round in view of the impact of the emerging Community import forecasts, given the trading links between these groups of countries and the Community. At the same time hypotheses are established regarding trends in the prices of Community imports of various raw materials, including oil, and of manufactured goods. Given these assumptions, together with the first estimates of export price and import volume changes prepared for each Member State, forecasts of market share growth and import cost changes are prepared for each Member State using an (18 x 18) bilateral trade matrix prepared from the latest available data. While the domestic forecasts are in the course of taking shape, this process of recalculating market share growth and import cost changes is iterated. By the time the trade forecasts are finalised two convergence criteria, i.e. that intra-Community imports and exports are equal in current and constant prices, have to be satisfied, and the forecast changes in export shares or divergences between calculated import costs and the forecast import prices have to be justified in the light of factors such as relative competitivity gains.

Forecasts for the domestic economy proceed along three closely interrelated paths. These are the establishment of forecasts for the private sector, the public sector and for monetary aggregates. These three sets of forecasts are the responsibility of specialists in the respective areas, but inevitably working in extremely close cooperation. The private sector forecasts are to some extent based on simultaneous econometric relationships, but the use of model results is always subject to justification based on country expertise.

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(1) Articles 2, 3 and 4 of Decision 74/120/EEC of 18 February 1974

The public sector forecasts, particular those for government tax revenues and social transfers, depend on developments in the private sector, as well as a given policy stance ('no policy change' or otherwise). Where a central government budget has recently been announced or fiscal measures adopted, such a concept is easier to interpret. Where policy changes are likely or under debate the interpretation is obviously subject to judgement. The monetary forecasts which are particularly closely related to those of the governments sector are based on an interpretation of an unchanged monetary policy.

Before and throughout the forecasting exercises the Commission staff keep in close touch and discuss their forecasts with the official forecasters in the Member States. The forecasts are discussed in a general meeting of forecasting experts from the Member States and relevant Commission staff. However the Commission establishes its forecasts independently, and retains sole responsibility in publishing their main aggregates in this Review (as in other editions of European Economy).

2. Economic Cycles in the Nineteen-Seventies

This chapter is concerned with cyclical developments in the real economy from the beginning of this decade up till the present time. Its purpose is to review concisely how the European economy has behaved in several major cyclical episodes, notably that provoked by the oil price rise of 1973-74 and under the several subsequent phases of policy, leading up to the present task of managing in 1979 and 1980 a second oil shock on top of severe unresolved problems of macroeconomic performance.

The Reference Cycle in the Community, 1970-1979

The annual GDP growth rates for the Community countries, the United States, Japan and the OECD area are presented in Table 2.1. A more refined image of economic trends are shown in Graph 2.1, where GDP is plotted in terms of quarterly deviations from trend for the Community and the four largest Member States. This graph permits the identification of several clearly-defined cyclical phases since 1970. While the precise cyclical chronology differs from country to country, the Member States of the Community have tended throughout the 1970s more than ever before to show a highly synchronised cyclical developme partly owing to their increased trade interdependence and partly in response to common shocks from outside.

The present decade began with a slight slow-down (from mid-1970 to the end of 1972) throughout the Community and indeed throughout the OECD area. Then, from the end of 1972 to mid-74 the Community experienced a substantial boom, in which all Member States participated, though rather briefly in the case of the United Kingdom. The subsequent recession, the deepest since the 1930s, lasted until the last months of 1975. 1976 saw a vigorous but short-lived recovery throughout the Community. It was followed in 1977 by a year of slow growth in the Community, in contrast to a relatively strong continuation of the recovery in Japan and the United States. The near-stagnation of 1977 eventually gave way to stronger growth rates from the latter half of 1978 in most Community countries. This may be interpreted as a renewal of the recovery process, which however was temporarily hit by the damaging effects of the very severe 1978/79 winter, and now is adversely affected by the new oil shock.

The Oil Price Shock of 1973-74

It is now generally accepted that the seeds of a downturn in economic growth were already being sown in the 1972-73 boom, before the main oil price rise in December 1973. In all Community countries and most OECD countries there was a substantial increase in the rate of growth of the money supply in 1971 and 1972, to some extent as a policy reaction to the weakening of economic trends in the period 1970 to 1972. In 1973 the rate of inflation rose throughout the Community, partly in response to the sharp acceleration of commodity prices - the Economist overall dollar index rose from an average of 107 in 1972 to 166 in 1973 - which were themselves reacting to increased demand from the industrialised countries. This inflationary upsurge was largely responsible for measures to to reduce the rate of growth in the money supply which were taken in several Member States, notably in France, Germany, Belgium, Denmark, and the United Kingdom, as well as in Japan and the United States, during the course of 1973. Throughout the Community and indeed throughout most industrialised countries interest rates moved up sharply during 1973. It is against this background that oil prices were quadrupled in the four months prior to January 1974.

By the second half of 1974 it was apparent that a serious recession was under way. Graph 2.2 plots quarterly deviations from trend for a number of cyclical indicators for the Community as a whole against those of GDP. As can be seen, production expectations, as given by the Community's business survey, had been falling since the middle of 1973, that is in advance of the first major oil price announcement, and continued to fall rapidly. Order books turned down and stocks of finished products became excessive from the end of 1973 onwards.

For the oil price hike to have triggered the recession, however, required that the deterioration in the terms of trade caused by the oil price rise be translated into an effective reduction in the supply of and demand for goods and services. In other words one or more of the major sectors, households, enterprises or the public sector had to accept a reduction in its real expenditure on goods and services. What seems to have happened in general is that the real disposable

income of the household sector, and certainly that major component of it which is employment income, was maintained and in fact increased in both 1974 and 1975. On the other hand the surplus of the enterprise sector fell substantially in 1974, such that the borrowing requirement of this sector appears to have risen rapidly. However because of a sharp rise in the savings ratio of the household sector, the financial surplus of the private sector as a whole only fell slightly in 1974. In 1975 as more of the increased costs were passed on in the form of higher output prices, and capital expenditure was cut and stocks sharply reduced, the financial position of the enterprise sector improved and the surplus of the private sector as a whole leapt from 0.4% of GDP in 1974 to 5.3% in 1975, (see Graph 2.4). Graph 2.3 illustrates the quarterly deviations from trend for private consumption, gross fixed investment and exports for the Community as a whole. The growth rate of consumption weakened throughout 1974, remaining below trend from mid-1974 till the beginning of 1976. The growth rate of fixed investment deteriorated after the 1973 boom but remained above trend until it fell sharply at the end of 1974. Exports suffered from the severe downturn of world trade with their real growth rate rapidly diminishing beyond mid-1974.

The financial surpluses and deficits of the private and the public sectors and the whole Community vis-à-vis the rest of the world from 1960 to the present are plotted in Graph 2.4. It is clear that 1975 represents a total break with the preceding 15 years in which the sectoral deficits and surpluses fluctuated within 2% of GDP. But, given that the recession eliminated the Community's current account deficit in 1975, the enormous bound in the private sector surplus was mainly mirrored in the jump in the public sector deficit. The policy response to the oil crisis, together with the automatic impact of the recession on public budgets, must now be considered.

The Policy Response to the 1973-74 Oil Crisis

In 1974 fiscal policy was slightly stimulatory. Net government borrowing as a percentage of GDP nearly doubled in the Community but the overall deficit remained relatively small at 1.7% in that year. The reason for the increase was essentially the operation of built-in stabilisers, mainly in the form of lower tax receipts and higher social transfer payments. Nevertheless a tight money policy continued to be observed in most countries, particularly in Italy and the United Kingdom. Indeed both in 1974 and in 1975 the rise in the Community's nominal money supply was no greater than the rise in the consumer price deflator.

Throughout the course of 1974 and 1975, however, wages, helped by widespread indexation arrangements in most Community countries, were increased to accomodate the direct inflationary effects of the oil price increase. Indeed average real wages rose in all Member States over those two years. This development had several important implications. Firstly the real disposable income of the household sector was sustained. Secondly the financial position of the enterprise sector was further squeezed, which contributed to the sharp fall in investment spending. Thirdly inflationary expectations were given a further upward impulse, serving to worsen further the inflation rate associated with any given level of output. The increase in inflation itself had an important depressive effect on aggregate demand, through the reaction of households to a fall in the real value of their financial assets.[1)]

In 1975 heavy inventory decumulation deepened the recession, contributing a 2 1/2% fall in the level of GDP (see Table 2.2). In the latter months of 1974 and the early months of 1975 the authorities in Member States became convinced of the need to change policy. However their reactions differed from country to country. In the United Kingdom the increase in the public deficit interacted with a wages explosion and sharply increased inflationary expectations, and thus limited the fall in real output and employment but at the cost of a sharply increased rate of inflation. In contrast in some other countries strict monetary and fiscal policies were aimed above all at reducing the inflation rate. This was the stance adopted to some extent in Germany and, outside the Community, even more so in Switzerland. In the United Kingdom the inflation rate rose from 16 1/2% in 1974 to 23 1/2% in 1975. In Germany it fell slightly from 7% in 1974 to 6% in 1975 while in Switzerland it fell from 9% to 4%. In 1975 employment fell by less than 1/2% in the United Kingdom, by 3 1/2% in Germany and by 9% in Switzerland.

Denmark, Italy and Belgium may also be rather arbitrarily classified as pursuing on "accomodating" policy, in that in these countries monetary policy was relatively liberal and the public budgets were expansionist. Thus the policy stance tended towards acceptance of the direct and indirect inflationary effects of the oil price rise, while seeking primarily to contain its recessionary impact on output and employment. In most Community countries however,

.../...

1) A study of the effect of inflation rates on consumer expenditure in the four largest Community countries, which will be reported in a future edition of European Economy, indicates that patterns of consumer behaviour did change after the 1973-74 oil shock towards higher savings ratios, and this change was brought about because of consumers' defensive reactions to higher inflation. Secondly there are at least in the cases of Germany, France and the United Kingdom discontinuities in the reaction of the savings ratio to inflation rates, such that beyond a certain critical inflation rate, the sensitivity of savings to inflation increases. Thus where inflation rates have fallen below the appropriate critical level as in Germany and France, the earlier pattern has been restored.

the tendency was to a mixed policy, with tightness as regards the money supply but compensated by increased public deficits. The net result was that consumer prices in the Community as a whole grew at about the same rate (13%) in both 1974 and 1975, while GDP continued to fall but at a slower rate after mid 1975.

The enormous rise in the financial deficit of the public sector in 1975 was the result of both an automatic rise in the deficit due to the built-in stabilisers, taxes and transfer payments, and a discretionary increase reflecting a more expansionary fiscal policy. In the first half of 1975 fiscal measures were limited more or less to some modest increases in unemployment benefits and improved aids to private investment. But in August and September significant, coordinated expansionary programs with serious budgetary implications were decided upon in Germany, France, Italy, Denmark and the Netherlands. In Germany a six billion mark investment support program was announced in August and a fifteen billion mark supplementary deficit was planned. In September the French Government announced a 30 billion franc expansionary program. In August in Italy a package of credits worth 4000 billion lire was made available, together with further stimulatory measures.

The contributions to 1975 GDP growth of public expenditure are given in Table 2.2. Changes in tax and other current receipts also made a contribution to GDP growth in Denmark, Germany, Ireland and Italy. Taking the combined contribution of the government sector as a whole, with the exceptions of France, Belgium, Luxembourg and the United Kingdom, the public deficit made an important contribution to supporting economic activity. In all countries social transfers were a buoyant component of government expenditure. Public sector investment was also substantial in France and Italy. Taking the Community as a whole the government sector made a direct contribution to GDP growth of some 0.7%, of which 0.6% derived from public expenditure and 0.1% from reduced tax receipts.

The 1976 Recovery

Output in all Community countries recovered sharply in 1976,though not in general as rapidly as in the United States, Japan or in several European countries outside the Community. As Table 2.2 shows, this recovery was in the main due to renewed growth of private consumption and stock-building, in some countries in part reflecting the tax relief measures of the previous year. Only in Denmark did fixed investment in the private sector contribute significantly to the increased rate of economic activity. Only in Denmark and Ireland did public expenditure make a notable contribution.

As the oil and other commodity price rises worked themselves out and inflationary expectations subsided in most Community countries (the real price of oil remaining constant in EUA from the end of 1974 to the end of 1978), the inflation-output trade-off improved generally so that all Member States found that both more output and less inflation were possible. The Community benefitted from the rapid growth throughout the OECD area and a turn-around in imports by the non-oil developing countries which had fallen in volume terms in 1975.

After the coordinated policy stimuli of the latter half of 1975 it may appear strange that the public sector made a relatively minor contribution to growth in 1976, either as measured in Table 2.2 or seen in terms of the fall in the borrowing requirement in Graph 2.4. However during the course of 1976 increasing worries about the implications of such high levels of public deficits - either because of concern that private investment would be "crowded out" or because they would lead to undesirable and inflationary increases in the money supply - led to measures designed to cut growth in government expenditure. In Germany the implementation of public expenditure programs was often delayed by administrative problems. In the cases of Ireland and Italy, where the government deficits both represented well over 10% of GDP in 1975 and the current account deficits were rapidly increasing,restrictive measures were taken within the framework of Community loans. In the United Kingdom, where the public sector borrowing requirement had reached an alarming 11% of GDP in 1975 and was expected to exceed that figure in 1976 and where the average effective exchange rate fell some 15% from 1975 to 1976, the authorities adopted severe measures to restrict the growth of public expenditure. But on the whole it was the much more rapid growth of receipts than expenditures, in the main because of

the real and nominal growth in incomes, but in Italy also because of increases in tax rates, that brought down the overall government budget deficits to figures in absolute terms below those of 1975 in Denmark, Germany, France Ireland, Italy and the Netherlands. Thus fiscal drag had worked extremely powerfully, with the share of direct taxes in Community GDP rising from 12.9% to 13.5%.

In the course of the year monetary policy became increasingly restrictive. According to the broad definition (M2 or M3), money supply growth did not exceed the nominal GDP growth rate in any member country except the Netherlands. Throughout the Community interest rates, particularly at the short end, increased in the course of the year.

The 1976 recovery was already showing signs of weakness by the end of the summer. The quarterly growth rates in industrial production for the Community as a whole fell from 3.4% in the first quarter of 1976, to 2.2% in the second quarter, zero in the third and a modest 0.8% in the final quarter. In the next section we consider the factors behind the premature termination of the recovery when industrial production was generally below its 1974 peak and unemployment had only been falling in most cases for less than six months.

A Period of Slow Growth, End-1976 to Mid-1978

The superficial reasons for the petering out of the 1976 boom can be seen by looking at the contributions to growth of the major components of demand in 1977 (see Table 2.2). Clearly the general pattern was one of weak household demand, even weaker private sector investment, a negligible contribution from public expenditure, modest destocking and varying contributions from the trade account.

With cuts in expenditure and tax buoyancy implying a contractionary budgetary policy in most countries, net borrowing by general government decreased in all Member States with the exception of Belgium and Luxembourg. For the Community it fell from 5.2% of GDP in 1975 to 3.7% in 1976. In 1977 it fell further, to 3.3% of GDP, with only France and, marginally, Belgium showing a rise in the borrowing requirement. The borrowing requirement of the public sector as a whole fell even more than that of general government, since the investment programs of the nationalised industries were pruned in many countries in the interests of monetary discipline.

It has already been pointed out that monetary policy was in practice generally strict in 1976 though in effect monetary growth often exceeded the initial targets. In 1977 it was eased somewhat in Germany, France and the

United Kingdom, but, partly due to exchange rate worries, remained tight elsewhere. Indeed the growth rate of the money supply fell in 1977 compared with 1976 in Denmark, the Netherlands and Belgium. Generally interest rates fell gradually through the course of 1977.

Clearly the economic policy stance adopted during 1976 contributed to the premature slowing-up of the recovery process and the weakness of growth in the following year. The stance of budgetary and fiscal policy was established before it became clear that private investment and private consumption would run out of steam. After the recovery process had weakened in the latter half of 1976 policy makers continued to be constrained by high budget deficits, inflationary pressures and, in some countries weak currencies, to maintain at best an overall neutral posture.

While inflation continued to fall in Germany and the Benelux countries, it began to rise again in late 1976 in Denmark, France, Italy and the United Kingdom. Italy, Ireland and the United Kingdom continued to experience inflation rates greatly in excess of the Community average. These same countries, together with Belgium, were most concerned about the monetary implications of financing their large public deficits. The United Kingdom, Italy and France were particularly subject to concern over exchange rate developments. The pound sterling, after falling sharply in the first half of 1976, regained some ground in the summer months, but suddenly fell again towards the end of the year so that it recorded an effective depreciation of over 20 % during the twelve months together. The lira behaved in a similar fashion and recorded an effective depreciation of the same magnitude. The French franc also depreciated, though less dramatically, in the latter half of the year with an effective depreciation of some 10 % over the 12 month period.

As regards private consumption the falling rate of inflation throughout 1976 in some member countries might have been expected to encourage consumer expenditure and indeed the savings rate did tend to fall in several countries (Denmark, Germany, France and Ireland) in 1976, but generally stabilised in 1977. In fact during 1976 and 1977 real disposable income grew more slowly, in some cases partly due to incomes policies, in favour of a strengthening of corporate profits. Furthermore the replacement buying of durable goods, particularly cars, which had been postponed during the recession and had stimulated consumption in the first half of 1976 became weaker thereafter. Nevertheless in 1977 and early 1978 such growth that did take place was on the whole due to the contribution of private consumption expenditure.

In the case of private investment the performance was disappointing throughout the period in view of the considerable stimulatory measures taken in all member countries and the improved financial position of the corporate sector. But in many sectors capacity was still largely underutilised and the initial reaction was to improve balance sheets by reducing outstanding short-term debt rather than to embark on new investment programs. The Community business survey showed a falling business climate indicator throughout the course of the year.

In view of the sluggish economic performance, the European Council in April 1978 agreed that the Community should work out a strategy to "reverse the unsatisfactory trend in the Community's economic and social situation". A concerted action program was jointly prepared by the Commission and the national authorities and adopted by the European Council held at Bremen on 6 and 7 July. This program constituted the basis of the Community's contribution to a broader co-ordinated reflationary package at the Western Economic Summit in Bonn a week later.

The Community's concerted action program was further detailed at the Finance Council meeting of 24 July. The implications of the decision made at that meeting were discussed in the Annual Economic Review 1978-79. In the event the German authorities implemented the agreed stimulatory measures evaluated at about 1% of GDP at the beginning of this year. The French Government adopted a more expansive budgetary policy in 1978 and have maintained that stance this year. Certain other countries, notably Belgium, Ireland and Italy, have followed budget policy programs agreed in Bremen in constraining the public deficit while reallocating resources to growth-oriented expenditure. The major expansionary measures implemented by the Japanese Government at the end of 1978 represent an important contribution to the wider co-ordinated program agreed at Bonn.

The 1979 Oil Price Rise

By the time that the concerted action programs agreed at Bonn and at Bremen were generally under way at the beginning of this year, there had already been signs of an upturn (see Graph 2.1), partly in response to a relaxation of budgetary and monetary policy during the course of 1978 (Graph 2.4). The increased deficits were in some cases mainly due to indexation arrangements, for example in Italy. In the United Kingdom the stimulus equivalent to more than 1% of GDP was partly composed of tax reductions due to indexation arrangements and partly of increased public expenditure and discretionary tax cuts. In other countries it was largely the result of public expenditure plans made in earlier years, notably in Germany.

The unusually severe winter of 1978-79 and, in some Member States, Labour disputes led to a weakening of activity in January and February of 1979. From March to the middle of 1979 the rate of growth of GDP picked up again, so that for the first half of 1979 the growth rate was probably of the order of 3 %, as against more than 4 % in the second half of 1978.

It is against this background that oil prices were escalating upwards throughout the first half of 1979. The OPEC meeting at the end of June brought the total dollar price rise of over twelve months to some 60 %. The direct shock to the balance of payments of the Community, assuming unchanged imports of oil and oil products, and that the dollar price of oil products rises by the same as crude, and ignoring increased OPEC imports was nearly $ 25 billion, equivalent, at the present exchange rates, to 10.6 % of Community imports from the rest of the world in 1978 or 1.1% of 1978 Community GDP. By comparison, between October 1973 and January 1974 the crude price rose on average 288 %. Under the same assumptions this represented a direct balance of payments shock of $ 35 billion, or 40 % of Community imports from the rest of the world (in the period 1972 IV to 1973 III) and 3.4 % of 1973 Community GDP. Thus the direct economic impact of the 1979 oil price increase are considerably less than those of 1973/74.

A further major difference is to be seen in the behaviour of non-oil commodity prices. Taking in each case the 12 month period of fastest increase, the Economist all primary commodities sterling index rose 64% between January 1973 and January 1974 while the dollar index rose 55% over the same period. For the period June 1978 to June 1979, the indexes rose by 8.7% and 24.6% respectively. The overall effect of the oil and commodity price increase was a fall of 4.7% in the Community's commodity terms of trade in 1973 followed by a fall of 11.1% in 1974. The drop from the second half of 1978 to the second half of 1979 is likely to be of the order of 2 %.

As in 1973, in most Member States efforts are under way to contain if not reduce the rate of growth of money supply, and the period of sharply rising oil prices has also been one of rising interest rates. On the other hand the climate of business confidence as shown in the Community survey has recently remained firm. Short-term production expectations and order books continue to rise. This is in contrast to the 1973-74 experience when, apart from a short-lived upturn at the beginning of 1974, order books and production expectations fell steadily and steeply from July 1973 to the end of 1974.

Policy reactions to the oil price rise at the national level have been mainly aimed towards conservation. At the Community level the European Council expressed its determination to maintain Community oil imports between 1980 and 1985 at an annual level not higher than that of 1978, and at the Western summit in Tokyo in July Germany, France, Italy and the United Kingdom agreed that each Member Country's contribution to meeting this overall target would be specified. So far demand management policies have not been significantly altered in response to the terms of trade deterioration, although in France a package of public expenditure increases and aids to low-income families was announced in August. Thus while Graph 2.4 shows that the general government net borrowing of the Community has edged up from 3% in 1976 to an estimated 4% in 1979, this mainly reflects the modestly more expansionary stance of fiscal policy adopted in 1978 and pushed somewhat further by the concerted action program.

Table 2.1

Increase in the volume of GDP

(percentages)

	1960-1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
DK	4,9	2,4	5,4	5,2	0,6	-1,2	6,3	1,8	0,9	1,8
D	4,7	3,2	3,7	4,9	0,5	-1,8	5,2	2,7	3,2	4,3
F	5,6	5,4	5,9	5,4	3,2	0,2	5,0	2,8	3,3	2,9
IRL	4,2	4,1	5,7	4,6	2,1	1,2	2,9	5,5	6,1	2,8
I	5,6	1,6	3,1	6,9	4,2	-3,5	5,9	2,0	2,6	4,3
NL	5,4	4,4	3,9	5,9	4,2	-1,0	5,3	2,8	2,4	2,6
B	4,9	4,1	5,7	6,4	4,7	-2,2	5,6	1,2	2,5	3,0
L	3,6	4,4	5,4	10,5	4,2	- 9,5	2,2	1,4	3,2	2,5
UK	2,8	2,6	2,3	7,9	-1,8	-1,7	3,6	1,2	3,7	0,3
EC	4,6	3,4	4,0	6,0	1,6	-1,6	5,0	2,3	3,1	3,1
US	3,8	2,9	5,8	5,4	-1,3	-1,0	3,5	4,9	4,0	1,5
JAPAN	10,7	7,3	8,9	9,8	-1,0	2,4	6,0	5,4	5,6	5,7
OECD	4,8	4,0	5,5	6,3	0,5	-1,0	5,1	3,9	3,8	2,9

Note: EC totals based on 1970 exchange rates, OECD totals for 1960-1970 based on 1963 exchange rates and 1970 exchange rates thereafter. The price base is 1970, except for 1978, which is based on the prices of the preceding year. Official UK figures based on 1975 prices show rates of growth in 1976 and 1977 about 0,75% higher owing to the higher valuation of the output of North Sea Oil.

Source: Eurostat and estimates of the Commission services for 1978 and 1979.

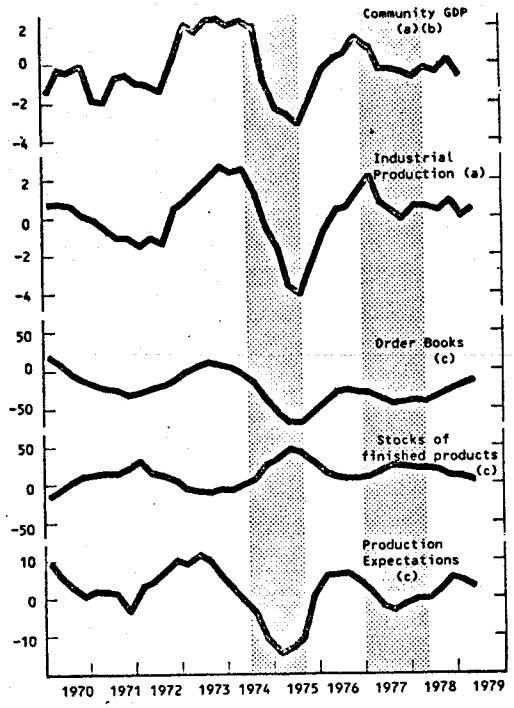
Table 2.2

Contribution to changes in real GDP as a percent of GDP in the previous year at 1970 prices

		1960-70	1971	1972	1973	1974	1975	1976	1977	1978	1979
DK	private consumption	2,5	0,3	1,1	3,6	-0,4	1,8	3,0	0,4	-0,5	0,1
	private investment	0,6	-0,1	2,1	2,6	-2,4	-2,6	3,3	-0,5	-0,1	0,0
	public expenditure	1,9	1,4	1,3	-0,1	0,6	1,2	1,3	0,7	1,1	1,2
	stockbuilding	-1,6	-0,5	-0,4	1,4	-0,3	-2,7	2,3	-0,4	-0,2	-0,2
	foreign balance	1,5	1,4	1,2	-2,2	3,0	1,1	-3,6	1,6	0,5	0,8
D	private consumption	2,7	3,0	2,5	1,4	0,7	2,1	2,0	1,6	1,9	2,0
	private investment	1,2	1,6	1,1	0,1	-2,8	-0,8	1,2	1,0	1,0	1,3
	public expenditure	0,8	0,6	0,1	0,4	0,6	0,0	-0,2	0,0	1,0	0,8
	stockbuilding	0,1	-1,7	-0,2	0,5	-0,2	-0,8	1,2	-0,1	-0,2	0,8
	foreign balance	0,0	-0,4	0,1	2,4	2,2	-2,6	0,5	0,3	-0,6	-0,7
F	private consumption	3,4	3,8	3,7	3,4	2,0	2,0	3,5	1,7	2,5	1,8
	private investment	1,6	1,7	1,7	1,4	-0,2	-1,1	0,6	-0,2	-0,1	0,3
	public expenditure	0,7	0,5	0,5	0,5	0,5	0,9	1,1	0,2	0,7	0,5
	stockbuilding	0,0	-1,0	0,5	0,5	0,1	-2,7	1,6	0,0	-0,2	0,4
	foreign balance	0,0	0,5	-0,4	-0,4	0,8	-1,1	-1,8	1,1	0,3	-0,1
IRL	private consumption	2,7	2,2	3,1	3,5	1,4	-2,3	1,8	3,9	5,6	1,7
	private investment	0,9	1,5	0,6	3,5	-3,9	-1,4	1,3	1,9	3,4	2,5
	public expenditure	0,9	2,0	1,9	1,9	1,6	0,8	1,0	0,1	0,9	1,3
	stockbuilding	0,1	-1,3	0,7	0,4	1,7	-4,8	2,2	1,2	-1,0	1,3
	foreign balance	-0,4	-0,2	-0,5	-4,7	1,3	8,9	-3,4	-1,6	-2,8	-3,9
I	private consumption	3,9	1,9	2,3	3,9	1,7	-0,9	2,3	1,4	1,9	2,5
	private investment	1,0	-0,6	0,1	1,7	0,5	-2,9	0,0	0,2	-0,8	0,8
	public expenditure	0,6	0,6	0,8	0,1	0,6	0,7	0,7	0,2	1,3	0,6
	stockbuilding	0,1	-1,2	0,0	2,5	0,0	-3,0	2,8	-1,2	-0,6	0,9
	foreign balance	0,0	0,8	0,0	-1,3	1,4	2,6	0,0	1,4	0,9	-0,4
NL	private consumption	3,7	2,1	2,2	2,3	1,5	1,9	3,3	2,8	2,2	1,5
	private investment	1,7	0,6	-0,5	1,5	-0,8	-1,5	-0,5	2,2	0,9	-0,2
	public expenditure	1,0	0,8	0,0	-0,2	0,3	1,1	0,6	0,6	0,2	0,6
	stockbuilding	-0,4	-1,1	-0,6	1,2	1,1	-3,0	1,6	-0,4	0,6	-0,6
	foreign balance	-0,5	2,0	2,9	1,1	2,1	0,4	0,3	-2,4	-1,5	1,3
B	private consumption	2,4	2,9	3,7	4,8	2,1	0,1	3,7	1,3	1,5	1,9
	private investment	1,1	-1,0	0,6	1,9	1,8	-0,6	0,3	-0,2	0,5	0,0
	public expenditure	0,9	1,3	1,0	0,2	0,2	1,0	0,9	0,4	1,0	0,7
	stockbuilding	0,2	-0,1	-0,7	1,0	0,9	-3,0	1,0	-0,0	-0,3	0,1
	foreign balance	0,4	0,9	1,2	-1,5	-0,3	0,3	-0,3	-0,3	-0,2	0,4
L	private consumption	2,2	3,1	2,5	2,6	2,9	2,1	1,8	0,9	1,1	1,2
	private investment	0,8	3,3	-0,2	1,4	-1,0	-2,6	0,7	-1,0	1,2	1,0
	public expenditure	0,3	1,2	1,1	1,4	1,6	0,8	0,2	0,5	0,4	0,6
	stockbuilding	0,3	1,6	-1,8	-1,1	0,1	-0,6	-4,4	2,0	0,1	-0,2
	foreign balance	-0,3	-4,7	3,9	6,2	0,6	-9,2	3,8	-1,1	0,5	0,0
UK	private consumption	1,5	1,8	3,6	2,9	-1,2	-0,8	0,5	-0,3	3,3	2,4
	private investment	0,6	0,5	0,0	0,6	-0,5	0,1	0,2	0,0	1,0	0,1
	public expenditure	0,7	0,4	0,8	1,6	0,3	0,6	0,0	-0,7	-0,2	0,0
	stockbuilding	-0,1	-0,8	-0,2	2,9	-1,3	-3,2	2,0	0,8	0,1	0,0
	foreign balance	0,2	0,7	-1,9	0,0	0,9	1,5	1,0	1,5	-0,5	-2,2
EC	private consumption	2,7	2,7	3,0	2,8	0,9	1,0	2,3	1,2	2,2	2,0
	private investment	1,2	0,9	0,8	1,1	-1,0	-1,1	0,6	0,4	0,5	0,6
	public expenditure	0,7	0,6	0,5	0,5	0,5	0,6	0,5	0,0	0,7	0,6
	stockbuilding	0,0	-1,2	0,0	1,3	-0,2	-2,4	1,8	-0,1	-0,2	0,4
	foreign balance	0,0	0,4	-0,2	0,3	1,4	0,2	-0,2	0,7	-0,2	-0,5

Graph 2.2

Community GDP, and Cyclical Indicators,
1970 Qu 1 - 1979 Qu 1



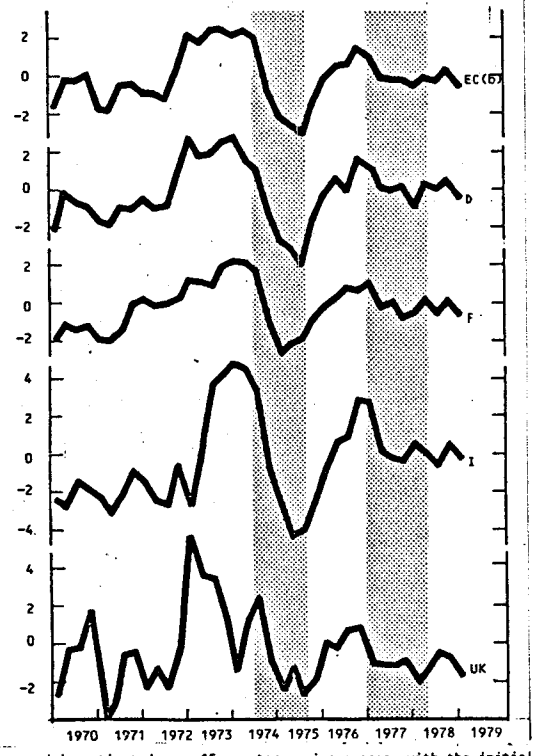
(a) See note (a) to Graph 2.1

(b) See note (b) to Graph 2.1

(c) Net balances, i.e. the differences between percentage of EC respondents giving positive and negative replies to survey question. See European Economy, Supplement B, for details of questions.

Graph 2.1

GDP, Percentage Deviations from Trend, 1970 Qu 1 - 1979 Qu 1 (a)

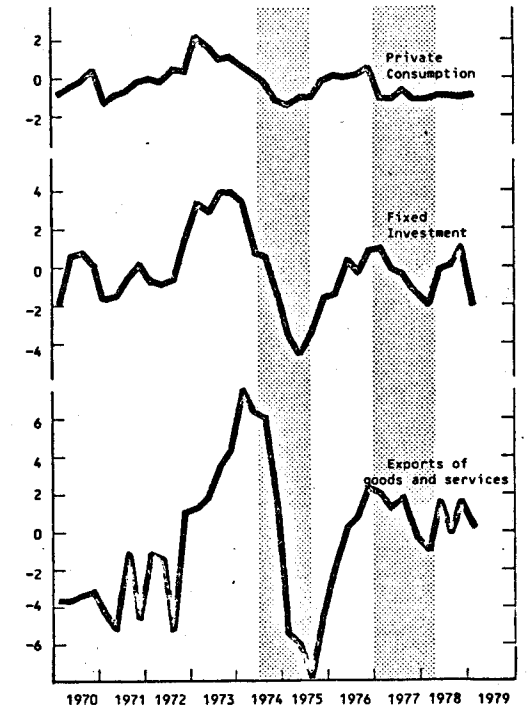


(a) The trend is estimated as a 15 quarter moving average with the initial and final periods of 10 quarters estimated by regression against time (second-order polynomial). The recessionary phases indicated by shading are those of falling Community GDP relative to trend for at least four consecutive quarters.

(b) The quarterly EC GDP is estimated as the sum of the series for Germany, France, Italy and the United Kingdom, using 1975 exchange rates.

Graph 2.3

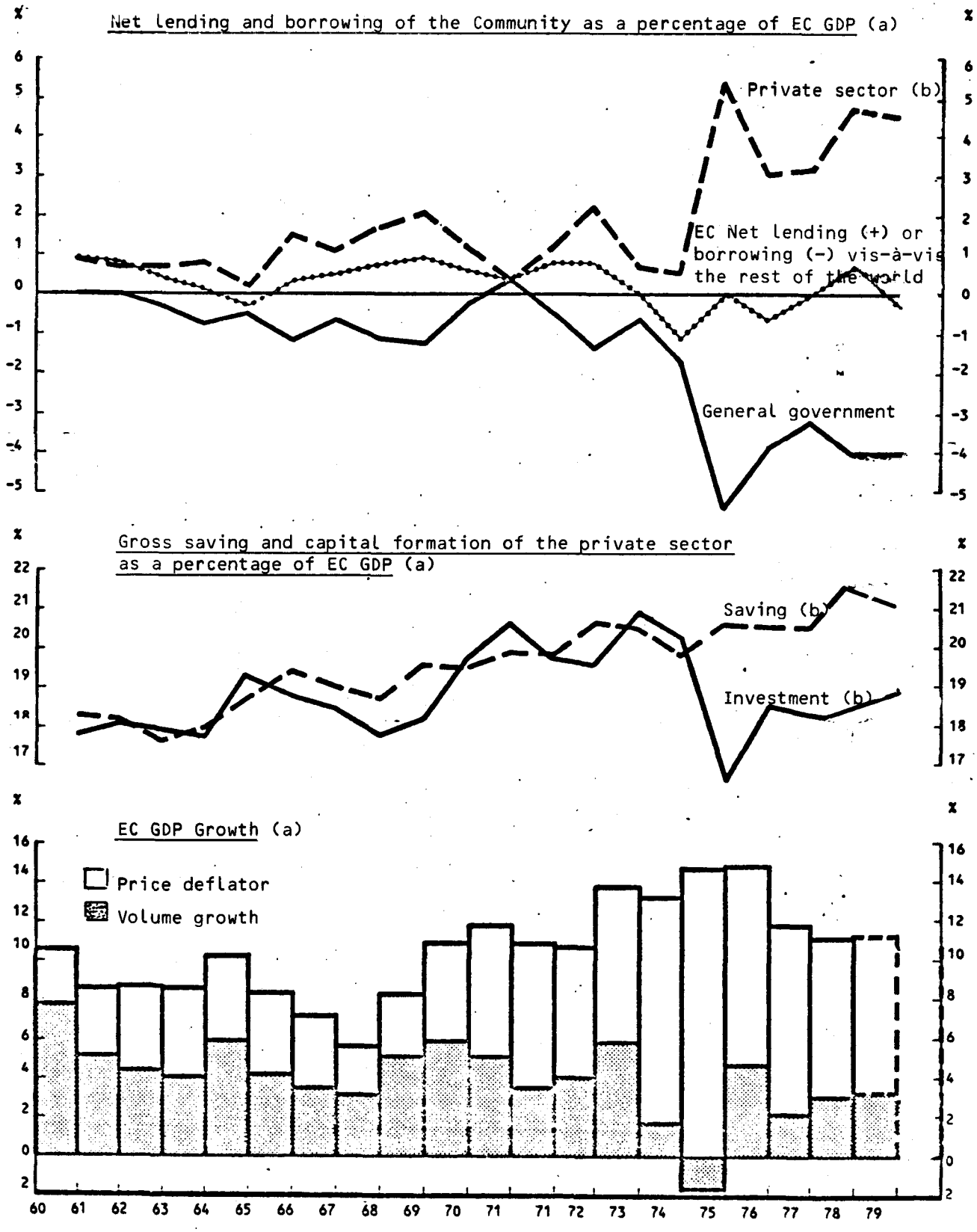
Components of Community GDP, Deviations from Trend, 1970 Qu 1 - 1979 Qu 1 (a)(b)



(a) See note (a) to Graph 2.1

(b) See note (b) to Graph 2.1

Graph 2.4



(a) Sources: Eurostat and Commission forecasts
(b) private sector, including nationalised industries

3. Labour markets

Labour supply and demand developments since 1973

Employment in the Community changed little in 1974, fell in 1975 and 1976 and recovered very modestly in 1977 and 1978. In the latter year it was still 0.5 % lower than in 1973, while over the five year period the labour force had grown by 2.5 % (Table 3.1 and Graph 3.1). As a result, unemployment more than doubled between 1973 and 1978.

Working-age population has been growing at an average of 0.4 % a year since 1973 (Table 3.1 and Graph 3.1), and a rise in activity rates from 1976 onwards has also contributed to labour force growth. The activity rate fell from 41.3 % in 1973 to 41.1 % in 1975, but by 1978 stood at 41.7 %. This increase over the period took place despite the facts that there was an increase of around 800 000 between 1973 and 1977 in the number of persons classified as inactive but nonetheless seeking work (results of Community Labour Force Sample Surveys, see Table 3.5), and that around 1 million foreign workers left the Community labour force between 1973 and 1978, thus depressing recorded activity rates. The increase in the activity rate since 1975 can be attributed entirely to increased activity within age/sex categories.

The development of overall activity rates has been made up of a slight fall in the male rate (as the coverage of higher education continued to increase and early retirement became more common) more than offset by a rising female rate.

The continued increase in female activity rates since 1973 is probably explained in part by factors additional to those underlying the earlier increase during 1960-1973. Real disposable household incomes grew much more slowly during the later period than during the earlier; this may have encouraged more "secondary workers" to enter, or attempt to enter, the labour market. In addition, equal pay legislation may have increased the female labour supply. It appears from the Community Labour Force Sample Surveys that between 1973 and

and 1977 there was an increase of around 4 3/4 million in the numbers of women either in work or seeking work, but the number in work increased by only about 2 1/4 million.

The development of the sectoral structure of employment since 1973 has been qualitatively similar in many respects to that observed between 1960 and 1973: employment in agriculture has continued to decline (although less rapidly than in the earlier period), as has employment in the energy industries, while growth of employment in services, both marketed and non-marketed, has been maintained. However, manufacturing employment fell sharply in 1975 and has shown more moderate falls thereafter.

In the Community countries for which figures are available, only in France had total hours worked been increasing in the 1960-1973 period, but in all four countries average hours (for the whole economy) declined sufficiently, given total hours, for employment to increase. Average hours worked continued to decline in the 1973-1978 period (Table 3.2). However, despite the generally depressed state of demand and capacity utilisation in the economy the rate of reduction of average hours does not seem to have been significantly faster, for the Community as a whole, than in 1960-1973.

Growth in productivity per hour was markedly reduced over the 1973-1978 period as compared with 1960-1973 in all the Community countries for which data are available (Table 3.3). Of the four major countries the slowdown was most marked over the 1973-1978 period as a whole for Italy (where the extent of the short-fall in output at the end of the period was probably greatest) and least for Germany (where the shortfall was probably smallest). On account of the decrease in average working hours, productivity growth per occupied person was slower than that per hour in both periods and all the countries considered. As did hourly productivity, output per occupied person grew everywhere less strongly

in 1973-1978 than in 1960-1973. For the Community as a whole, productivity growth per occupied person slowed down from 4.3 % annually in the 1960-1973 period to 2.4 % in the 1973-1978 period. The increase in 1979 might remain below 2 1/2 % (Table 3.3).

The above data relate, of course, to recorded developments in hours and employment. Some consideration must also be given to unrecorded changes in these variables. Unrecorded work may result from marketed or non-marketed transactions. The former category largely represents an attempt to evade not only taxation and social security contributions but also the restrictions imposed by various measures of employment legislation. The second category will largely take the form of "do-it-yourself" - car and household maintenance and improvement work and so on. Information on the scale of unrecorded transactions is, naturally, hard to come by directly. Estimates have recently been made by ISTAT that in Italy unrecorded marketed transactions may amount to 10 % in GNP, while in the United Kingdom the Inland Revenue have guessed that the proportion may be around 7 1/2 %.

Structural trends in the labour market

The sum total of the developments in labour supply and demand has been a very sharp rise since 1973 in the numbers of registered unemployed in the Community (see Annex Table 3). The rise began in 1974 (+18%), accelerated sharply in 1975 (+50%) and continued thereafter (+14% in 1976, +10% in 1977, +4% in 1978) until it flattened out in 1979.

The rise in registered unemployment in the Community since 1973 has been accompanied by major changes in its structure. The proportions of young people and women in total unemployment have risen substantially and the gaps between unemployment rates for these categories of the labour force and overall unemployment rates have also increased considerably. Table 3.4 shows unemployment rates, based on the results of Labour Force Sample Surveys for the Community rather than on registered unemployment, by age and sex for 1973, 1975 and 1977.

Even in a cyclical peak year such as 1973 - when aggregate unemployment was relatively low - unemployment rates for young people have tended to be considerably higher than those for older workers. Frictional unemployment always tends to be higher among young workers and the duration of unemployment shorter. Although comparisons between the 1968 Labour Sample Survey and the Surveys for later years must be made with considerable caution, the gap between unemployment rates for young people and overall unemployment rates appear to have been much the same in 1968 and 1973 (the overall rates in the two years were also similar). By 1977, the unemployment rate for the 14-19 age-group was 12.5 % and that for the 20-24 age-group 8.8 % as against an overall unemployment rate (on the Sample Survey definitions) of 4.2 %. Since 1977 the gap between unemployment rates for young people and overall unemployment rates seems, on the basis of national surveys and other statistics to have declined somewhat in the UK and Germany and to have increased further in France.

Young people have been confronted with a number of particular problems in avoiding unemployment since the 1975 recession. First, it has clearly been difficult for them to obtain employment at all. Table 3.5, again drawing on the results of the Labour Force Sample Surveys of 1973, 1975 and 1977, shows that the number of people declaring themselves to be unemployed and to be seeking a first job increased more than half a million. Secondly, there is evidence in at least one major country, that temporary employment has become more common as employers, in the face of various measures of employment legislation, have become more reluctant to hire new permanent employess. Thus for those new entrants to the labour market who do succeed in gaining employment, many of them may be employed on a temporary basis with a resulting high level of frictional unemployment. Third, even if young people do find non-temporary jobs, their chances of being made redundant are higher than those of older, longer-established and possibly more productive workers.

While unemployment among females has also been rising more rapidly than total unemployment, the trend has not been as dramatic as in the case of young people. Nevertheless, the excess of the female unemployment rate over the male unemployment rate increased

in every age-group except the over 60's between 1973 and 1977 (Table 3.4). Moreover, the number of women declaring themselves to be inoccupied but seeking employment increased substantially between 1973 and 1977 (Table 3.5).

The rapid rise in youth and female unemployment may reflect changes in the structure of the labour market adverse to young people and women or may be a predictable result of cyclically-rising overall unemployment or both factors may have been operating.

In the case of youth unemployment, an increased rigidity of the labour market arising from employment legislation and trade union attitudes has very probably been disadvantageous to young people. Such a rigidification appears to have had an especially marketed impact on new entrants to the labour market since 1975. Table 3.5 shows that between the 1975 and 1977 Labour Force Sample Surveys the number of males unemployed as a result of dismissal actually declined, while the number of unemployed seeking a first job or returning to the labour market after a voluntary interruption increased by nearly 600,000. The legislative measures and attitudes which helped to produce this situation are themselves products of conditions of cyclically high unemployment, and their effects might to some extent be unwound during a period of sustained growth in labour demand, but some long-term residual impact on youth employment might remain.

Women returning to the labour force after a spell away from work have faced similar problems to those of young people entering the labour market for the first time. In addition, increased overhead costs of labour may have tended to make part-time work less attractive to employers than otherwise. The effect of such a tendency would be felt most heavily by female workers - the 1977 Labour Force Sample Survey showed that 23.7 % of occupied females in the Community worked part-time, while only 1.6 % of occupied males did so. National sources make it clear that the proportion of women seeking part-time work has increased substantially, while the numbers finding such work has risen less rapidly. The result has been a sharp rise in the number of unemployed women seeking such work.

In all the Community countries regional disparities in unemployment (as measured by the differences between the highest and lowest regional unemployment rates) worsened with the onset of the 1974-1975 recession (Table 3.6). Such a phenomenon is not unusual in a period of generally high unemployment, and worsening regional disparities in recession years cannot, without extensive further investigation, be taken as evidence of an increasing degree of structural maladjustment, or of increasing disparities in regional competitiveness. The disparities might well be expected to be reduced again as the overall pressure of demand in the economy increases. Indeed, in Germany and the United Kingdom, where overall unemployment rates have been falling over the past year or so, the gap between the highest and lowest regional rates has also been falling. However, since the early 1970's a number of regionally-concentrated industries, some of them in areas of already above-average unemployment, have begun to experience more acutely than hitherto problems of loss of international competitiveness. In the absence of greater geographical mobility or of an improvement in inter-regional competitiveness within industries in those regions threatened with declining employment, regional disparities in unemployment in the Community may prove to be greater at the next cyclical peak than they were in 1973, although the net effect cannot be predicted with any certainty. On the evidence of the Community Labour Force Sample Surveys - emerging from a comparison of the number of persons who have changed their region of residence - geographical mobility of occupied persons has declined since 1973 in all countries except Belgium. Such a decline is an expected cyclical phenomenon. Evidence on the mobility of those who had become unemployed is harder to come by. National Surveys of the unemployed suggest that over the past two or three years the proportion of unemployed willing to change locations has increased.

An important dimension of the unemployment problem is the "mismatch" in the supply versus demand of labour (1). Evidence of a growing mismatch would in principle show up in a change in the vacancy/unemployment ratio. Graph 3.2 plots the level of registered unemployment in the Community against the level of unfilled registered vacancies for each year. What seems to emerge most clearly is that the level of vacancies associated with a given level of unemployment (and vice versa) shifted

(1) See document SEC(79)634 final.

sharply upwards at the end of the 1960's. This might be taken as an indication of increasing mismatches in the Community economy, perhaps caused by changes in the industrial structure of employment or in the age, sex and skill structure of the labour force. It might also, however, be an indication that periods of "job search" by unemployed workers had increased as a result of the improvements in unemployment benefits introduced in some countries in the mid- or late-sixties. Available evidence points to some effect from this source, though estimates of the quantitative impact vary widely.

Graph 3.2 also suggests that a further shift in the unemployment/vacancies relationship has taken place over the last three or four years and that mismatches are becoming more important. There are a number of reasons for thinking that such may be the case (always bearing in mind that the relationship between registered vacancies and total vacancies in the economy may itself not be constant). First, there are the problems associated with a changing age and sex structure of the labour force and the regional structure of employment which have already been touched upon. Second, the outflow of non-Community workers since the beginning of the recession has probably made it harder to fill the monotonous, unpleasant and low-paid jobs. Third, the period since the recession has been one in which pay differentials have been compressed in some countries. Skill shortages may have emerged, partly as a result of this process. A recent Government study in the United Kingdom suggests that the shortages of labour in certain key skilled occupations are rather higher than would have been expected at the current levels of activity. Among the five ocuntries which have taken part in the harmonized Community Business Surveys since before the recession, the percentages of manufacturing firms quoting labour shortages as a reason for operating below normal levels of activity, although obviously lower than in times of stronger activity, appear to be unusually high, given unemployment levels, in Germany and the Netherlands.

In addition to an increase in mismatch, increased overhead costs of employees and statutory rights of those permanently engaged have probably led employers to engage in longer periods of "labour search", the equivalent of increased "job search" on the supply side of the market.

Developments and prospects in 1979

Complete figures on the development of employment in the Community in the first half of 1979 are not yet available in most cases. What figures are available suggest that total employment in Community might be slightly higher in the first half of 1979 than a year earlier. Estimates by Commission staff for 1979 as a whole suggest that total employment in the Community might rise by 0.7 % against 1978.

The following data, while not comprehensive and not on a consistent basis, give some indication of the most recent developments.

In France, the number of employees (all marketed branches) in establishments employing ten or more workers was very slightly higher in the first half of 1979 than in the first half of 1978 and the trend appears to be flat. In Germany, total employment in the first quarter of 1979 was 1.3 % higher than a year earlier, with construction employment showing the biggest gain. In Italy, employment in industry was little changed in the second quarter of 1979 from its level a year earlier. In the United Kingdom the employed labour force (whole economy), fell by 0.2 % on a seasonally-adjusted basis between the fourth quarter of 1978 and the first quarter of 1979 after rising in each quarter of 1978: it remained 0.6 % higher in the first quarter of 1979 than a year earlier.

In all the countries for which data are available short-time working has been falling away rapidly in the course of 1979 (although unusually severe weather and the effects of industrial disputes had caused a temporary increase in the first quarter in some countries). In nearly all cases (Belgium being the exception) a rundown of short-time working had already begun in 1978. Generally, the reduction in short-time working seems not to have been associated with an increased number of redundancies and may therefore be taken as an indicator of improved conditions in the sector affected.

Few data on average hours are available. In France, average hours worked in the whole economy seem to have declined by about 0.6 % between the first halves of 1978 and 1979 and average manufacturing hours by about 0.4 %. In Germany in the first quarter average hours

in manufacturing may have risen very marginally as compared with a year earlier, after taking account of the distortion caused by strikes, while in the United Kingdom average hours in manufacturing seem to have been falling rather steadily between the first quarter of 1978 and 1979 at a rate of around 1/2 % a year.

Registered unemployment, seasonally adjusted, in the Community has been very flat, at just over 6 million, since the middle of 1978. The unemployment rate for 1978 as a whole was 5.5 %; the same figure is to be expected for the 1979 average. There have been significant differences between Member States, however. Unemployment in Germany, Denmark, Ireland and the United Kingdom has been falling (since mid-1978 in the first two cases and since early 1978 in the last two). In Italy and Belgium the level of unemployment was higher in the first half of 1979 than in the second half of 1978 but seems to have now stabilized. In the Netherlands, and more clearly in France, unemployment continues to increase. In all the Community countries unemployment moved up in the summer months, on an unadjusted basis, as school leavers entered the labour market. In the Community as a whole unfilled vacancies moved up quite sharply in the first half of 1979 (seasonally-adjusted), mainly as a result of developments in Germany and the United Kingdom. In the former case the rise in number of unfilled vacancies appears to result from an increase in the duration of vacancies rather than from an increased inflow onto the vacancies register, possibly indicating (as also suggested by business survey results) greater difficulty than hitherto in matching workers and jobs. In the United Kingdom, the inflow of vacancies moved quite sharply up in the second half of 1978 and has remained high, but the stock of unfilled vacancies has recently begun to decline again.

Projections of population to 1995

Table 3.7 and Graph 3.1 show projections of total population and working-age population to 1995. The figures are based on those produced for the document "The economic implications of demographical change in the European Community: 1975-1995", the report of a group of independent experts set up by the Commission. For the Community as a whole total population is

seen as growing relatively slowly and very steadily (by 0.2 % a year) over the period 1979-1995, but the population of working age grows at a rate of 0.4 % a year over the period. Until the mid-1980's working-age population is growing even faster - at rates varying between 0.7 % and 1.0 % a year between 1980 and 1985 - but its growth falls sharply to 0,2 % in the second half of the 1980's and there is a slow decline in the first half of the 1990's.

The rapid increase in the working-age population in the first half of the 1980's can in part be explained as an "echo" of the very high birth rates in the first few years after the Second World War; the slowing-down of this growth in the second half of the 1980's partly reflects the second-generation effects of a return to less high birth rates in the early 1950's; and the fall in the population of working age in the early 1990's is largely a first-generation result of the very low birth rates experienced during the past few years of high unemployment and relatively depressed incomes of heads of households.

TABLE 3.1

Population, employment and unemployment in the Community 1961-1979, percentage changes

	1960/ 1970	1971	1972	1973	1974	1975	1976	1977	1978	(1979)
1. Unemployed	- 1,8	21,8	10,7	- 9,4	18,2	50,3	13,6	9,5	4,1	1,4
2. Employers and self-employed	- 2,5	0,5	-3,7	- 1,1	-1,7	-2,3	-1,2	0,6	-0,2	:
3. Employees	1,0	0,4	0,4	1,8	0,5	-1,1	0,1	0,8	0,5	:
4. Civilian employment	0,3	-0,1	-0,3	1,2	0,2	-1,2	-0,2	0,4	0,3	0,7
5. Civilian labour force	0,3	0,2	0,1	1,0	0,4	0,1	0,6	0,8	0,4	0,7
6. Working age population	0,6	0,7	0,4	0,6	0,6	0,5	0,3	0,4	(0,5)	0,6
7. Total population	0,8	0,8	0,6	0,6	0,4	0,2	0,1	0,2	0,2	0,2

Note : For the levels (which are depicted in Graph 3.1), lines 2 and 3 add up to line 4. The sum of the level values of lines 4 and 1 does not exactly match line 5 because the unemployment figures are annual averages while the other figures are mid-year estimates.

Source: Eurostat, estimates of Commission staff.

TABLE 3.2

Salaried employment and hours, whole economy[1], percentage changes

		1960-73	1973-78	1974	1975	1976	1977	1978
D	Total hours	- 0.4	-1,7	-2,9	-5,8	1,3	-1,3	-0,2
	Average hours	- 1,0	-1,1	-1,8	-2,3	1,8	-1,6	-1,4
	Employment	0,7	-0,7	-1,1	-3,6	-0,5	0,3	1,2
F	Total hours	1,4	-0,6	0,2	-2,6	0,0	-0,7	-0,2
	Average hours	- 0,4	-1,1	-1,3	-1,7	-0,7	-0,9	-0,7
	Employment	1,8	0,4	1,5	-0,9	0,6	0,2	0,4
I	Total hours	- 0,6	1,2[2]	1,4	-0,2	1,7	1,9	:
	Average hours	- 1,4	-0,4[2]	-0,6	-1,7	0,6	0,1	:
	Employment	0,8	1,6[2]	2,0	1,5	1,1	1,8	-0,1
UK	Total hours	- 0,1	-0,5	-0,7	-3,3	0,5	0,3	0,6
	Average hours	- 0,5	-0,5	-1,2	-2,6	0,9	0,2	0,0
	Employment	0,4	-0,0	0,5	-0,7	-0,3	0,1	0,6

[1] France: marketed non-agricultural sector.

[2] 1973-1977.

Source: D: IAB; F: INSEE; I: ISTAT; UK: London Business School; Eurostat.

TABLE 3.3

Productivity per occupied person and per hour, whole economy, 1960-1979

% changes

	1960-1973		1973-1978		1974	1975	1976	1977	1978	(1979)
	occupied person	hourly	occupied person	hourly	occupied person					
DK	3,8(1)	4,6	1,3	2,2(2)	0,1	-0,1	5,0	1,7	-0,4	1,0
D	4,3	5,5	3,0	4,1	2,4	1,5	6,0	2,9	2,4	3,2
F	4,9	5,3	2,8	3,9	2,5	1,4	4,4	2,2	3,6	2,4
IRL	4,6(3)	:	3,7	:	1,1	2,9	4,5	5,2	4,9	0,7
I	5,5	7,0	2,5	2,9(2)	2,7	4,6	5,0	1,3	1,9	4,1
NL	4,9(4)	6,0	2,6	3,7	4,2	0,4	4,9	2,0	2,4	2,4
B	4,4	5,4	2,4	3,7	3,2	-0,9	6,3	1,4	2,3	2,8
L	3,5	:	0,1	:	1,5	-9,7	3,7	2,2	3,6	1,9
UK	2,9	3,4	0,9	1,4	-2,1	-1,2	4,3	0,7	3,1	-0,5
EC	4,3	5,2	2,4	3,2	1,5	1,0	5,1	1,9	2,7	2,4

(1) 1966-1973.
(2) 1973-1977
(3) 1970-1973
(4) 1963-1977

Source: Eurostat for output per occupied person. Hours: D: Institut für Arbeitsmarkt und Berufsforschung; F: INSEE (marketed non-agricultural sector); I: estimates of Commission services; NL: Centraalplanbureau; B: Bureau du Plan; UK: London Business School; DK: national estimates.

TABLE 3.4

Unemployment rates by age and sex, EC

	1973			1975			1977		
	T	M	F	T	M	F	T	M	F
14 - 19	6,0	6,0	6,0	10,1	9,4	11,0	12,5	10,9	14,4
20 - 24	4,1	4,0	4,0	7,0	7,3	6,7	8,8	8,0	9,8
25 - 29	2,3	2,0	2,9	4,2	3,7	5,1	5,0	4,3	6,1
30 - 39	1,2	1,0	1,4	2,8	2,3	3,7	2,8	2,3	3,7
40 - 49	1,2	1,1	1,2	2,3	2,0	2,8	2,4	2,1	2,8
50 - 59	1,7	1,1	1,4	2,3	2,0	2,7	2,6	2,4	3,0
60 - 64	1,9	2,0	1,3	3,1	3,5	2,0	3,5	3,9	2,6
65 - 69	0,9	1,1	-	2,2	2,7	1,1	1,4	1,5	1,1

Source : EC Labour Force Sample Surveys 1973, 1975, 1977. Social Indicators for the European Community, 1975.

TABLE 3.5

Main categories of persons seeking paid employment, EC[1], 1973,1975,1977.

(thousands)

	1973			1975			1977		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Unemployed persons, total	1880	1140	740	3753	2176	1577	4353	2371	1983
of which:									
dismissal	575	..	..	1676	1136	542	1741	1055	665
resignation	262	138	123	507	268	241	583	285	296
retirement	9	9	-	34	28	6	13	12	1
self-employed	..	..	..	60	48	12	62	45	17
occacional occupied	..	..	..	236	142	93	235	117	117
voluntary spell	171	34	137	433	148	286	550	251	299
seeking first job	603	318	285	711	369	342	1167	576	587
Non-active persons seeking paid employment, total	1685 [2]	476 [2]	1209 [2]	1533	519	1014	2474	831	1644
of which:									
after a voluntary	361[2]	28[2]	333[2]	299	25	274	586	57	529
seeking first job	612[2]	149[2]	463[2]	248	104	144	1012	380	632
others	712[2]	299[2]	413[2]	986	390	596	876	394	483

[1] 1973 figures exclude Denmark and Ireland.

[2] Excludes Federal Republic of Germany.

Source: Labour Force Sample Surveys for the European Community, 1973, 1975, 1977

TABLE 3.6

Regional unemployment rates

		National unemployment rate[1]			Highest regional rate			Lowest regional rate		
		M	F	T	M	F	T	M	F	T
D	1973	0,4	0,8	0,5	0,8	1,1	0,8	0,2	0,5	0,3
	1975	2,8	3,2	2,9	4,4	4,3	4,3	1,9	2,1	1,6
	1977	2,4	3,8	2,9	4,5	6,2	4,1	1,4	2,2	1,8
F	1973	1,5	2,6	1,9	2,7	5,6	3,7	0,6	1,3	0,9
	1975	2,6	4,3	3,3	3,9	8,6	5,5	1,7	3,1	2,2
	1977	3,3	6,1	4,4	4,5	8,8	6,0	2,0	3,9	2,7
I	1973	3,3	6,1	4,0	6,6	11,0	7,6	1,5	3,1	2,0
	1975	2,7	4,9	3,3	5,3	10,1	6,0	1,0	2,0	1,3
	1977	3,3	7,0	4,4	6,1	16,9	8,6	1,3	3,1	2,0
NL	1973	1,9	1,7	1,9	2,6	1,7	2,5	1,7	1,6	1,7
	1975	3,4	2,9	3,2	4,9	3,9	4,7	2,3	2,4	4,7
	1977	3,3	3,3	3,3	4,5	4,9	4,6	2,5	2,6	2,5
B	1973	1,2	2,6	1,6	1,4	3,8	2,2	1,1	1,6	1,4
	1975	2,2	5,5	3,2	2,7	7,3	4,1	1,9	4,6	4,1
	1977	3,1	10,9	5,7	4,2	12,3	6,5	2,6	7,1	5,3
UK	1973	2,4	1,7	2,1	4,9	3,9	4,6	1,0	1,1	1,1
	1975	4,2	5,2	4,6	6,4	8,8	7,1	3,2	4,4	3,7
	1977	4,8	4,4	4,7	8,8	7,9	8,5	3,8	3,6	3,8

[1] Figures refer to specific sampling dates; they are not directly comparable to annual averages elsewhere used.

Source : Labour Force Sample Surveys for the European Community, 1973, 1975, 1977.

TABLE 3.7

Total and working-age population, EC, 1979-1995

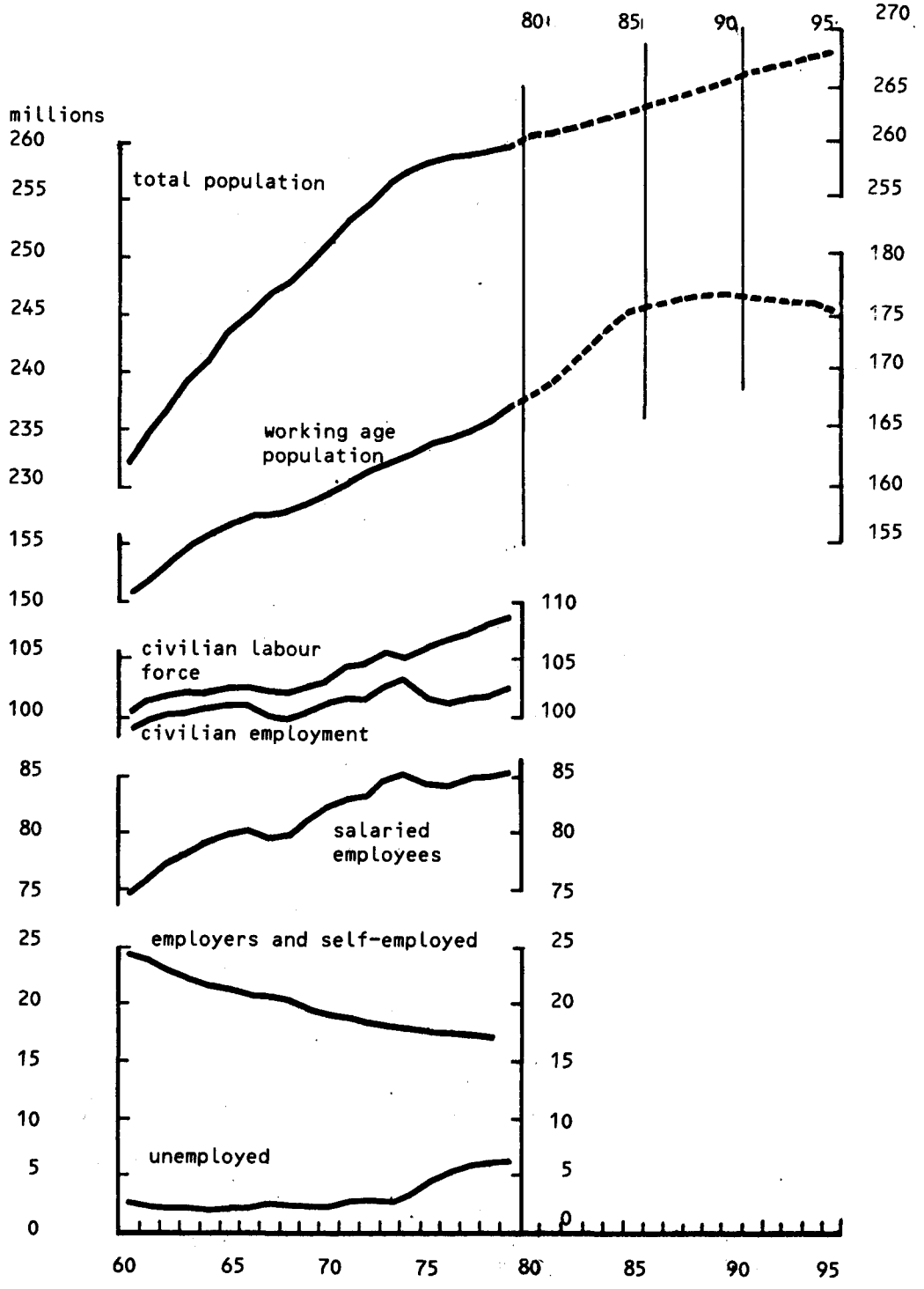
% changes

	Total	15-64 years
1979	0,2	0,6
1980	0,4	0,7
1981	0,0	0,8
1982	0,2	1,0
1983	0,2	1,0
1984	0,2	1,0
1985	0,2	0,7
1986	0,2	0,2
1987	0,2	0,2
1988	0,2	0,2
1989	0,2	0,1
1990	0,2	0,0
1991	0,2	- 0,1
1992	0,2	- 0,1
1993	0,2	- 0,1
1994	0,2	0,0
1995	0,2	- 0,6

Source: "The economic implications of demographic change in the European Community: 1975-1995", report of group of independent experts set up by the Commission.

GRAPH 3.1

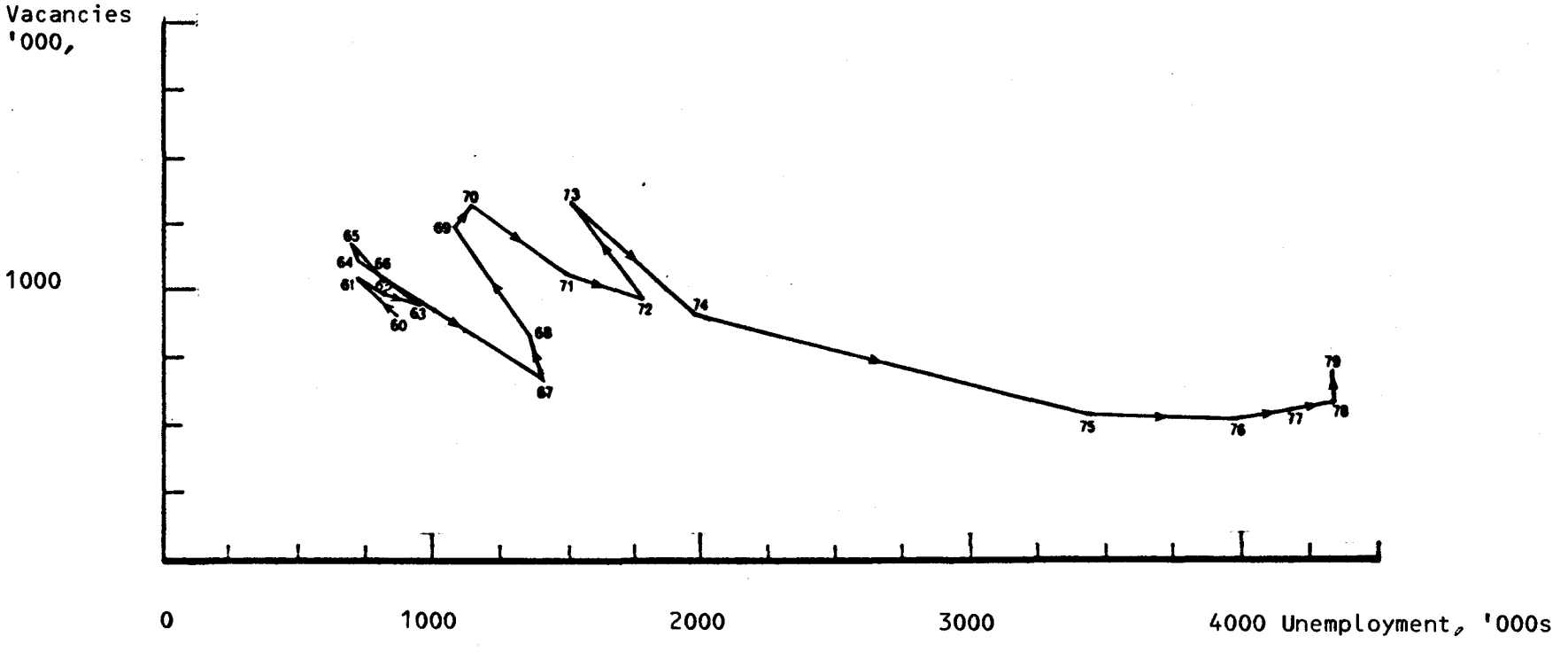
Population, employment and unemployment, EC, 1960-1979 (with population projections to 1995)



Source : Eurostat and estimates of Commission services.

GRAPH 3.2

Registered unemployment and unfilled vacancies, EC (1)



(1) Excludes Italy and Ireland; **excludes Danmark before 1970.** 1979 figures are for first six months.

Source: Eurostat, Commission services.

4. Prices and costs

Price trends and policies

The slowdown in inflation observed during the period 1975 to 1978 has been interrupted in 1979. Consumer prices as measured by the implicit price deflator for consumers' expenditure will probably rise by 8.9 % in 1979 compared with 6.8 % in 1978 and the price deflator for gross domestic product by 8.3 % compared with 7.8 % Price trends have gradually been reversed since the second half of 1978, particularly as a result of a faster rise in food prices and rents (Graph 1). Over the twelve months to June 1979, there was a slight upturn in the rate of increase of non-food prices, a clear upsurge in the prices of fuel and light and in rents and a slight acceleration in the prices of services. The severe winter has had a marked influence on food prices. Manufacturers' wholesale output prices, which have increased markedly since the beginning of the year as a result of higher input prices for raw materials and petroleum products, have affected the non-food prices included in the consumer price index. Fuel and light costs have risen considerably owing mainly to the oil price rise during the first half of 1979, but also to an increase in indirect taxes on this category of products. Rents have increased steadily since the second half of 1978, particularly in France and Italy; liberalizatio of the rules and regulations governing rents has certainly been an appreciable factor in this increase. In the United Kingdom, housing costs are climbing very rapidly, mainly as a result of the rise in rates and mortgage costs.

In 1979, price controls have been reviewed in several Member States because of a realization that they may eventually carry economic costs that outweigh the short-term gains in terms of the price index. By curbing competition, they are seen to make market structures more rigid, to hold back the rate of investment and therefore economic activity and, when all is said and done, to contribute to inflation.

In France, the removal of controls on industrial product prices in 1978 has not led to the sharp acceleration in prices feared in some quarters. The inflation rate in fact slackened during the last two quarters of 1978 : to 2.7 % and 2.1 % respectively. However, inflation has worsened since the second quarter of 1979 (2.8 % compared with 2.2 % in the first quarter). This increase in the rate of price increases has been caused by all components of the index : manufactured goods, petroleum products, services and rents. Under these circumstances, the authorities have postponed the abolition of the other price and profits freezes.

In Italy the nex rent law has become effective this year. Rents are now calculated by reference to the rental value of the building and changes in the cost of living. The rent component of the price index showed an appreciable increase in the first half of 1979, and the rise in the prices of foodstuffs and services accelerated slightly.

In the United Kingdom the increase in the prices of oil and other commodities was only partly reflected in retail prices in the first six months of 1979, when the prices of food and manufactured goods were increasing sharply. In May the new Government announced its intention to abolish the Price Commission, which had been able to recommend to the Government a lower increase than that requested or even a freeze on prices. Experience had shown that the old system discouraged price competition between firms. For this reason the Government has introduced legislation to help stimulate competition. The 1979-80 Budget involved a major switch from direct to indirect taxation, and the increase in VAT to a single rate of 15 % is estimated to have added some 3 1/2 % to the Retail Prices Index. Since the Retail Prices Index does not reflect the countervailing effect of the direct tax reductions, the Government decided to publish a new Tax and Price Index which reflects changes in both retail prices and taxes and gives a better guide to the overall changes in the purchasing power of gross incomes. For the twelve months to July 1979 the rise in the Tax and Price Index was 13.2 %, compared with 15.6 % for the Retail Prices Index.

In the Federal Republic of Germany, where there are virtually no price controls at all, the increased cost of petroleum products and raw material imports and its subsequent effect on manufactured products have been the main cause of the sharper rise in prices. It should also be noted that the standard rate of VAT was increased by 1 % as from 1 July.

In the Netherlands, industry was authorized, under the 1979 price regulation for goods and services, to pass on in prices up to 1 % of the increase in wages and salaries. Increases in other costs may be passed on in full. The prices of services were allowed to be raised only twice during the year (by 2% on 1 January and 2 % on 1 July). Profit margins have remained frozen and the rise in public service charges has been limited to 3.5 % for the year. Besides these general rules, there are many specific arrangements. All in all, inflation did not increase during the first half of 1979, as the increase in energy prices had not yet been felt.

In Belgium, the Government reacted to the slowdown in inflation in 1978 by easing supervision (price monitoring by the Prices Department, control by the Economic Affairs Inspectorate, consultations with the Price Regulation Commission). Acting under existing legislation, it fixed maximum prices for a number of products (bread, bricks, milk, pork and beef) or maximum price rises (rents, public transport charges). The rate of inflation remained unchanged during the first half of the year, but the rise in petroleum product prices is likely to accelerate in the second half of 1979.

In Ireland, there has been a marked upsurge in prices in 1979, in part as a result of the increase in the price of oil, but also partly as a result of the increased cost of foodstuffs (accentuated by a reduction in subsidies at the beginning of the year) and the impact of the increase in indirect taxes in the Budget in February. In October 1978, a number of changes were made in the system of price control, the most important being that major firms were obliged to give a longer period of advance notice to the National Prices Committee.

In Denmark, the temporary price freeze which became effective on 28 August 1978 was replaced by controls over prices, profits and dividends on 1 April 1979. The price freeze brought about a deceleration in the rate of inflation : the retail price index, net of the effects of indirect taxation, increased at an annual rate of 4.9 % from September 1978 to March 1979, compared with 6.3 % over the six months from February 1978 to August 1978. The rise in prices began to accelerate in April 1979 (to an annual rate of 12.2 % for the period from March to July). The increase in the prices of foodstuffs and services remained moderate during the first half of 1979; this served to compensate a little for the sharp rise in energy prices, which was amplified by the increase in excise duties on energy products at the end of June.

Incomes trends and policies

Taking the Community as a whole, nominal per capita compensation of employees could well increase slightly more in 1979 than in 1978: by 11 % compared with 9.8 % (Table 4.3). The slowdown in the rate of increase of nominal wages, which began in 1976, will thus have ended. Unit labour costs are also likely to increase (by 8.6 % in 1979 compared with 6.8 % in 1978), although a little more rapidly owing to a less favourable labour productivity trend in 1979. Real compensation per employee is expected to increase by 1.9 % (a rate slightly lower than the 2.8 % recorded in 1978) under the influence of an acceleration in consumer prices. Real unit labour costs should rise by 0.3 % (having fallen by 0.9 % in 1978) thus interrupting the favourable trend observed since 1976 which reflected the slow recovery in business profits after the very severe deterioration during the 1974/75 recession which followed the 1973 oil crisis.

In the Community generally, with the notable exception of the United Kingdom, there have been no major changes in the overall arrangements for the determination of incomes.

At the present time, overall wage agreements are in operation in only two Member States : in Denmark and in Ireland, where a national agreement was signed in July. In the other countries, wages are determined mainly through bargaining at branch and sector level, either because the Government has failed to conclude successfully, or has not yet initiated, negotiations on an overall agreement, or because it is not normally directly involved in negotiations (Federal Republic of Germany) or because it restricts itself to general recommendations in respect of wages (France).

In the United Kingdom, the incomes policy adopted in August 1978 by the former Government was based on a 5 % guideline for pay increases, and the maintenance of a 12 month interval between settlements. This guideline was not generally respected: by May 1979, average earnings

were rising at an annual rate of around 14 %. The new government has abandoned the pay guideline policy, and is basing its counter inflation policy on monetary and fiscal limits, and the promotion of competition. In the public sector pay settlements will need to reflect the Government's cash limits on expenditure. Since there are no pay norms, negotiators may bargain freely, but are expected to do so paying full regard to the financial constraints imposed by the Government's policies. Overall real par capita wage, which had increased appreciably in 1978 (following, it is true, a substantial loss of purchasing power in 1977), should increase at a more moderate rate in 1979. Social security benefits are adjusted in line with the rise in retail prices. Non-wage incomes will benefit from the abolition of dividend controls and the cuts in direct taxation.

In Denmark, the wage law adopted by Parliament on 28 March, which is to apply for two years, lays down the arrangements to follow the six-month freeze on prices and incomes. It maintains the indexation system, operating with a three-point threshold as its base, under which wages are automatically adjusted twice a year (March and September). However, full compensation is not given : a 1 % rise in consumer prices triggers a 1/2 % increase in wages. Social transfer payments, on the other hand, are fully indexed to consumer prices. All in all, the agreement could well lead to an annual increase in hourly earnings of at least 8.5 % in the private sector and of between 7 and 7.5 % in the public sector. Including the increase in social security costs, total wage costs could go up by around 10 %, i.e. at the same rate as in previous years. Profits and dividends are frozen and will not be allowed to exceed their 1979 level. In real terms, per capita wages should not increase in 1979.

In Ireland, the national pay agreement reached in March 1978 provided for an increase in basic wages of 8 % for the first twelve months and of 2 % for the following three months. Including the carry-over from 1977 and wage drift, average incomes increased by (15 1/2 %) in 1978, giving a real increase of about 7 %. A new agreement was concluded in July 1979 after a first version had been rejected

by the conference of trade union delegates in May and after the Government decision, subsequentlyrescinded in the light of developments, to impose a 7 % limit for six months. Under this agreement, wages can be increased by 9 % during the first nine months; during the second period of six months, a 2 % increase will be granted with additional increases based on movements in the price index (full indexation for any index increase of between 7 and 12 % and 60 pence for each additional percentage point between 12 % and 16 %).

In the Federal Republic of Germany, incomes are determined without Government involvement. There is no wage indexation system. Following a dispute of over forty days at the end of 1978, employers and unions in Hesse and North-Rhine Westphalia steel industry reached agreement in January 1979 on a 4 % wage increase in this industry for fifteen months and on an increase (to 6 weeks) in annual holidays. In March, employers and unions in the public sector agreed on a 4 % pay increase. In July, union leaders in the steel industry stated that they would not challenge the wage agreements on the grounds of the increase in petroleum prices. This moderation in wage claims has spread to all sectors of the economy. Real wages should increase slightly in 1979.

In the Netherlands, wages are adjusted twice a year in line with a special consumer price index which excludes the effect of indirect taxation and uses a reduced weighting for the cost of medical care. In real terms, the rise in per capita compensation of employees was 1,4% in 1978 and could well be higher in 1979.

In Belgium, where index-linked wage increases are triggered when a threshold of normally 2% is crossed, the rate of increase of per capita wages has slackened steadily since 1976, while real wages have increased at a rate of slightly less than 3% since 1977. The Government increased a number of transfer incomes in October 1978 and altered the direct tax scales, reducing the tax burden on low and medium incomes and increasing that on incomes above Bfrs. 500 000. In Luxembourg, where wage indexation is based on a 2,5% threshold, collective agreements are renewed without the Government intervening. In 1978, there was a slight fall in real per capita compensation of employees.

In France, the statutory minimum wage is indexed to the consumer price index with an adaptation threshold of 2%. Occasionally, the Government decides on an increase higher than that of prices; thus, between July 1978 and July 1979, the purchasing power of the minimum wage went up by 2%. Other wage and salary earners have the right to free bargaining. In practice, however, the rise in the hourly wage rate is always close to or slightly higher than that in the statutory minimum wage. In 1979 the authorities have sought to curb the increase in the wage and salary bill: in July, the Prime Minister called for a halt to any increase in the purchasing power of total wages and salaries. Real per capita compensation of employees increased by 2,8% in 1978, but unit labour costs fell during the same year. For 1979, a slowing down in real compensation per employee can be observed; the slowdown is even more pronounced for net compensation. Family allowances and the minimum old-age pension, increases in which are decided on by the Government, have gone up in real terms. Investment and entreprenensial incomes, which are not subject to regulation or recommendation (except for rents), have improved.

Italy practises wage indexation. In 1979, three year collective agreements involving more than half of Italian wage and salary earners are due for renewal. Many collective agreements had already been signed by mid-1979, in particular in the metal-processing industry which frequently sets the pace for other agreements. The increase in 1979 in the wage and salary bill for the eight million employees affected by the renewal of agreements is likely to be slightly more than 4%, provided that the agreements still to be signed turn out to be similar to those already concluded. On this assumption, the total wage and salary bill will probably increase by 3.5 % in 1979. The sliding wage scale should account for 12.5 % of the increase in the wage and salary bill, which, taking into account such additional factors as working hours, employment and wage drift, should increase overall by 18 % on a per capita basis in 1979; price inflation is estimated to be 15 % over the same period.

Effects of the higher oil prices

According to Commission staff estimates relying on inter-sectoral relationship statistics (input-output tables), the increase in oil prices of close on 60 % that has already been applied and a similar change in the prices of petroleum products will push up consumer prices in the Community by an extra 1.5 % in the period from mid-1979 to mid-1980. If the prices of all energy products were to rise by 60 %, the effect would be 2.7 %. An average impact of the order of 2 % is the most likely outcome (Table 4.4).

The impact will probably be more marked in some member countries than in others, taking account of the widely differing systems of income formation and distribution.

The countries in which the short-term movement in wage costs is influenced by indexation arrangements might thus experience a proportionately sharper acceleration than the other countries unless the indexation effect is offset by a simultaneous slowdown in the increase in real wages and salaries not linked to the index so that the overall increase in wage incomes is compatible with available macroeconomic resources.

Admittedly, making allowance in wage agreements for the level of resources actually available to the nation poses a number of methodological problems. In most countries, wage negotiations are customarily geared to the increase in the cost of living and the growth in productivity (i.e. the volume of output per person employed). However, when the terms of trade deteriorate - the situation in 1973/74 and 1979/80 - because of an increase in import prices relative to export prices, the growth in productivity is no longer an appropriate measure of the volume of resources available (per capita) for domestic spending: a greater proportion of output has to

be exported to compensate for the reduced purchasing power (on foreign markets) of export earnings.

As Table 4.5 shows, the impact of a shift in the terms of trade on the growth in available resources (national income in real terms) was generally very weak in the period 1961-72, hardly exceeding 0.2 % of GDP either way. Throughout this period, the additional output of goods and services was, as a rule, available for domestic spending. Since 1972, developments have been more turbulent : because of the increase in the prices of oil and other raw materials, the negative impact on the availability of resources rose to 1.2 % of GDP in 1973 and to 2.7 % in 1974. While some of this loss has been made good thanks to an improvement in the terms of trade in 1978, the 1979 increase in oil prices again reduces the size of the "cake" available for domestic distribution by an amount equal to 0.8 % of GDP (around 0.5 % in 1979 and 0.3 % in 1980).

Competitiveness

Since 1978, the Community's average competitive position against its main competitors has deteriorated a little while no similar change has been experienced by the United States and even less so by Japan. Table 4.6 provides the statistics on which these comparisons are based, giving first the effective exchange rates (trade-weighted), then the relative performance of manufacturers' wholesale prices (likewise trade-weighted) and, lastly, the composite index of competitiveness obtained by multiplying the first two series.

A comparison of the relative performance of Community prices between 1973, a particularly appropriate base year, and 1978 reveals little overall change, although large fluctuations did occur during the period. Between 1978 and the second quarter of 1979, the average relative performance of Community prices was hardly changed while there was a deterioration for the United States and an improvement for Japan. However, over the same period, the Community's average effective exchange rate rose significantly (from 97 to 101, an increase of 4 points) because of the depreciation of the dollar and the more marked depreciation of the yen. Between 1978 and the second quarter of 1979, average competitiveness, the composite measure reflecting both prices and exchange rates, declined by 4 points for the Community and by 1 point for the United States, compared with a rise of 12 points for Japan.

Taking the individual Member States, the period between 1978 and the second quarter of 1979 saw an improvement of competitiveness in Denmark, Belgium and the Netherlands and a decline in France, Italy and the United Kingdom, while the situation in the Federal Republic of Germany remaining virtually unchanged. (In the United Kingdom, however, the pronounced deterioration recorded up to the second quarter of 1979 because of the strengthening of sterling gave way to an improvement in the third quarter).

TABLE 4.1

Increase in consumer prices, wholesale prices and the GDP price deflator

(as a percentage)

	1960-1972	1973	1974	1975	1976	1977	1978	1979
				Consumer prices				(1)
DK	5,2	10,1	12,4	9,7	10,1	10,1	9,4	9,7
D	3,0	7,6	7,1	6,1	4,5	3,8	2,6	4,3
F	4,3	6,8	13,2	11,4	9,5	8,7	8,8	10,2
IRL	5,0	12,0	15,7	21,7	18,6	13,8	7,9	13,2
I	4,0	12,2	21,1	17,7	18,1	18,2	12,7	15,2
NL	4,7	8,9	9,6	9,8	8,8	6,1	4,4	4,8
B	3,1	5,8	12,2	12,2	7,7	6,5	4,5	4,5
L	3,1	5,5	9,0	11,2	8,4	6,7	3,1	4,5
UK	4,3	8,6	17,4	23,4	16,0	14,7	8,5	12,8
EC	3,9	8,4	13,4	12,8	11,1	10,5	6,8	8,9
				Wholesale prices				(2)
DK	3,3	14,6	22,3	5,6	7,6	8,1	4,9	4,7
D	1,7	6,9	13,4	3,2	3,6	2,7	1,0	3,9
F	3,0	5,1	16,0	11,6	7,5	7,3	9,1	10,6
IRL	4,9	12,7	18,9	25,1	14,7	15,4	12,1	9,7
I	2,5	14,9	45,5	8,4	22,4	17,6	8,1	12,6
NL	3,0	6,8	9,5	6,8	6,9	5,4	2,0	1,3
B L	2,1	3,4	17,2	7,0	3,8	3,1	0,9	3,7
UK	3,6	7,9	24,4	24,2	16,5	17,9	10,1	10,5
EC	2,6	7,8	20,5	10,2	9,7	8,9	5,5	8,0
				GDP price deflator				(1)
DK	6,2	9,5	10,4	12,5	8,6	9,0	9,7	8,0
D	4,0	6,0	6,9	6,6	3,1	3,9	3,9	3,8
F	4,6	7,8	11,1	13,4	9,7	9,1	9,9	9,6
IRL	6,0	15,5	7,1	23,6	19,2	13,5	11,3	12,1
I	4,8	11,7	18,3	17,7	18,0	18,9	13,3	14,3
NL	5,5	8,2	8,6	11,3	7,8	6,7	5,3	4,3
B	3,5	6,7	12,1	12,5	7,5	6,9	4,6	4,2
L	3,7	11,7	15,5	2,1	12,5	1,7	3,2	5,4
UK	4,7	6,8	15,3	27,4	15,0	13,3	10,2	13,8
EC	4,6	7,7	11,7	15,0	10,5	10,4	7,8	8,3

(1) Estimates of Commission Staff

(2) First half of 1979 as compared with the first half of 1978

Note : Consumer prices = implicit price index of consumers' expenditure.
GDP price deflator = implicit price index of GDP.

Sources : Eurostat for consumer prices and GDP price index; Commission staff for wholesale prices.

TABLE 4.2

Components of consumer price developments

(percentage increase)

	Food	Non-food goods	Fuel and light	Rent (1)	Services (2)	Total
EC Total						
1973	10,3	6,4	7,6	7,8	8,0	8,1
1974	11,9	14,1	25,6	7,9	10,0	12,4
1975	13,4	11,7	14,3	11,2	13,7	12,5
1976	12,5	8,3	12,8	10,5	10,5	10,3
1977	13,6	8,6	11,7	8,2	8,2	10,3
			1978			
DK	10,5	9,2	10,2	8,7	10,2	9,9
D	1,0	3,6	2,9	3,0	3,2	2,6
F	8,5	9,2	8,7	8,8	11,0	9,1
IRL	8,0		3,5			7,6
I	13,0	11,3	11,3	6,8	13,3	12,1
NL	0,3	6,4	9,9	5,2	5,0	4,1
B	1,4	3,3		7,3	8,3	4,4
L	1,5		1,5			3,1
UK	7,8	8,3	7,6	7,2	11,6	8,3
EC	6,5	6,9	6,9	6,1	8,3	6,6
			Percentage increase June 1979/June 1978 (3)			
DK	7,4	10,1	27,3	7,2	7,7	8,6
D	0,7	6,6	25,6	2,8	4,8	3,9
F	9,1	10,6	15,5	11,8	11,1	10,2
IRL	16,4		6,0			12,4
I	14,0	11,3	12,4	26,7	15,4	13,7
NL	2,0	3,9	4,2	7,3	4,7	4,2
B	0,5	5,8		6,1	5,9	4,5
L	2,8		13,5			4,2
UK	11,3	9,3	5,4	22,7	8,8	11,4
EC	7,5	8,5	15,1	12,6	8,6	8,9

(1) Including repairs, maintenance and other expenses relative to property ownership.
(2) Excluding rent.
(3) May 1979/May 1978 for Ireland and Italy.
Note : Consumer prices = consumer price indices.

Sources : OECD and Commission staff.

TABLE 4.4

Effect on the implicit price index of consumers' expenditure of a 60 % increase in the prices of energy products (calculated on the basis of input-output tables) (1)

	60 % increase in the prices of	
	oil and petroleum products	all energy products
DK	1,8	2,2
D	1,3	2,5
F	1,6	2,5
IRL	1,7	2,6
I	2,1	3,1
NL	0,8	1,5
B	1,3	2,5
L	.	..
UK	1,4	3,3
EC (1)	1,5	2,7

Weighting in the consumer price indices (%)
(Market prices, including indirect taxes)

	Oil and petroleum products	All energy products
DK	5,9	
D	2,9	6,6
F	5,7	8,6
IRL	5,7	10,5
I	1,8	3,4
NL	2,3	6,2
B	6,2	9,7
L	3,2	8,1
UK	3,7	9,2

(1) These estimates cover the direct and indirect effect on consumer prices of a 60 % increase in the prices of (a) oil and petroleum products and (b) all energy products. They were prepared using a model of intersectoral relationships based on a 1970 input-output table updated to take account of the increase in the weighting of energy products since 1970. The secondary price effects stemming from price-income links (e.g. wage indexation) have been disregarded.

Sources : Estimates by Commission staff.

TABLE 4.5

Effect of changes in the terms of trade on the Community's real domestic income

	Growth rate of real GDP	Growth rate of real domestic income	Contribution of changes in the terms of trade to the growth in real domestic income (1)(2)	Percentage change in terms of trade (goods and services)
1961	5,1	5,2	0,1	+ 0,5
1962	4,4	4,5	0,1	+ 0,7
1963	4,1	4,0	-0,1	- 0,5
1964	5,9	6,0	0,1	+ 0,9
1965	4,2	4,2	0,0	0
1966	3,5	3,5	0,0	+ 0,3
1967	3,1	3,4	0,2	+ 1,2
1968	5,1	5,0	-0,2	- 0,8
1969	5,9	5,9	0,0	+ 0,2
1970	5,0	5,2	0,2	+ 1,0
1971	3,4	3,5	0,1	+ 0,4
1972	4,0	4,3	0,3	+ 1,3
1973	6,0	4,8	-1,2	- 4,4
1974	1,6	-1,1	-2,7	-10,2
1975	-1,6	-0,8	0,8	+ 4,4
1976	5,0	4,3	-0,7	+ 1,6
1977	2,3	2,4	0,1	+ 0,3
1978	3,1	3,9	0,8	+ 2,6
1979	3,1	2,6	-0,5	- 1,6

(1) This contribution is the difference between exports deflated by the import price index and the same exports deflated by the export price index. The first variable gives the purchasing power of export earnings in terms of the volume of goods and services imported while the second represents the volume of goods and services exported. The difference between the two is the effect of the change in the terms of trade on the purchasing power of export earnings. Real domestic income is the sum of real gross domestic product and this effect of the change in the terms of trade.

(2) As percentage point of previous year GDP.

Note : Changes at 1970 prices for 1961 to 1977.
Changes at previous year's prices for 1978 and 1979.

Sources : Eurostat and Commission staff.

TABLE 4.6

Effective exchange rates, price performance and competitiveness

First quarter of 1972 = 100	DK	D	F	IRL	I	BL	NL	UK	EC	US	JAP
Effective exchange rates (1) (average)											
1973	106.8	111.4	104.9	90.4	90.6	102.0	103.3	85.5	101.7	91.3	106.4
1974	107.5	118.0	98.1	88.1	82.0	103.9	109.1	82.8	100.1	93.4	99.6
1975	111.2	120.3	107.8	83.3	78.6	105.5	111.9	76.1	102.1	92.6	97.0
1976	113.7	127.3	103.9	74.8	65.2	107.7	115.0	64.9	93.6	97.4	101.4
1977	113.3	138.2	98.9	72.6	59.9	114.3	121.7	61.9	94.4	96.2	112.5
1978	113.8	147.6	97.8	73.6	56.4	118.5	125.4	62.7	97.1	86.9	136.7
IV 1978	115.3	152.0	98.0	73.3	54.9	120.3	127.2	62.2	98.4	83.3	145.0
I 1979	116.2	153.7	98.6	74.1	54.3	121.1	128.1	63.3	100.4	83.9	139.1
II 1979	112.8	152.6	97.5	73.5	54.7	119.0	126.6	66.6	101.0	85.6	129.5
Price performance											
1973	106.7	97.8	96.9	105.4	106.6	95.2	98.5	100.3	98.3	96.3	106.5
1974	108.0	90.8	92.4	103.4	131.2	93.5	90.0	103.8	96.6	96.7	113.8
1975	103.7	85.0	95.2	113.8	130.8	92.0	88.4	119.0	97.6	100.0	104.7
1976	102.8	80.8	94.4	118.5	150.3	88.7	87.8	129.5	100.5	99.1	101.4
1977	102.7	76.6	94.1	123.6	166.2	85.5	86.3	143.3	103.0	99.1	95.6
1978	102.2	73.0	98.3	129.9	171.5	81.9	83.9	150.3	103.4	102.0	88.4
IV 1978	100.8	71.8	100.5	130.6	173.9	80.9	82.5	151.8	103.5	103.7	85.3
I 1979	100.2	71.3	100.2	131.5	177.6	80.4	81.2	152.8	103.5	104.1	84.5
II 1979	101.1	70.7	100.2	130.0	181.1	79.3	79.2	155.3	103.5	105.0	83.7
Competitiveness (2)											
1973	114.0	108.9	101.7	95.3	96.6	97.0	101.8	85.8	100.0	88.0	113.3
1974	116.1	107.2	90.6	91.1	107.6	97.1	98.2	85.9	96.7	90.3	113.3
1975	115.2	102.2	102.7	94.8	102.9	97.1	98.9	90.6	99.7	92.7	101.5
1976	116.6	102.8	98.1	88.7	98.0	95.6	100.9	84.1	94.1	96.5	102.9
1977	116.4	105.8	93.0	89.7	99.6	97.6	105.0	88.8	97.2	95.3	107.6
1978	116.3	107.7	96.2	95.6	96.7	97.1	105.2	94.2	100.4	88.6	120.8
IV 1978	116.2	109.2	98.4	95.8	95.5	97.4	105.0	94.4	101.9	86.3	123.7
I 1979	116.5	109.9	98.8	97.4	96.4	97.4	104.5	96.7	103.9	87.3	117.5
II 1979	114.0	107.9	97.7	95.6	99.0	94.3	100.2	103.4	104.5	89.7	108.4

(1) An effective exchange rate greater than 100 indicates an appreciation.

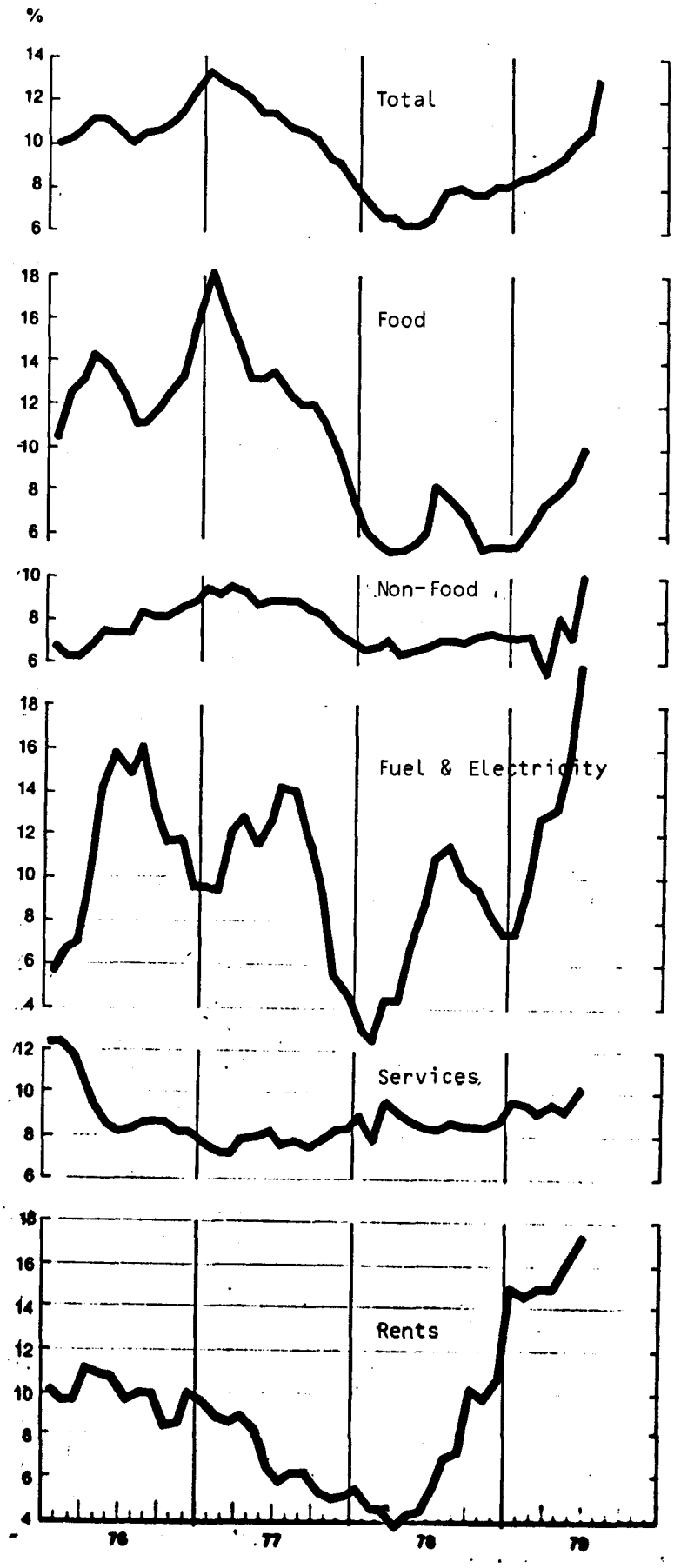
(2) An index greater than 100 indicates relatively high international prices and hence a deterioration in competitiveness.

Note : The indices of effective exchange rates and of the price performance provide comparisons of each country's exchange rate and rate of domestic inflation - based here on manufacturers' wholesale prices with the average of the corresponding indices for that country's main competitors. The indices of competitiveness, obtained by multiplying the first two series, show how prices in one country have moved as compared with the weighted average of its competitors' prices adjusted for changes in exchange rates.

Source : Commission staff.

Graph 4.1

Consumer prices and principal components, EC total (change on six months (s.a.), expressed at an annual rate



Source : Eurostat, OECD, and Commission staff.

5. Convergence and Divergence of Economic Performance

The concept of convergence is basic to the Community's objectives of economic and political integration. However, a balance has to be respected in defining the degrees and types of convergence that should be expected and pursued. Last year's Annual Report devoted its Chapter 5 to assessing convergence and divergence of two types: price inflation and levels of gross national product by Member State and region. The present chapter updates the record on these accounts, adding improvements in the statistical methods and sources.

Data is now more fully available for the comparison of national accounts aggregates between Member States in a strictly comparable common unit, as opposed to the frequently used convention of using market exchange rates for making comparisons. The Statistical Office of the European Communities published in the last year detailed national accounts converted at purchasing power parity rates (1).

Purchasing power parities show the relationship between prices in different countries. They permit comparisons in real terms between the various aggregates represented in national accounts. For each flow of goods and services there is a specific purchasing power parity rate. For the aggregates which are included in the following analysis there has, however, been used one purchasing power parity, that for 'final domestic uses'.

The main data are given in Table 5.1 for gross domestic product, public and private consumption and investment in both purchasing power parity and current market exchange rates (see also Graph 5.1), together with two measures of inequality as between Member States. The 1970 and 1977 data are directly based on the Statistical Office's calculations; those for 1979 are provisionally calculated by Commission staff on the basis of forecasts and estimates.

Using 100 to represent the average Community level per capita of the respective aggregate, the figures show the relative position of each country. Converted into a common unit at purchasing power parity rates (upper half of the table), the dispersion between countries is markedly lower for all aggregates than if they are converted at market exchange rates (lower half of the table).

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(1) Eurostat, National Accounts ESA, Aggregates 1960-1977, 1978.

For example, on a market exchange rate basis, GDP per capita in 1977 was 3,1 times higher in Denmark than in Ireland, but only 1,9 times higher if the comparison is based on the purchasing power of the Krone and the Irish Pound. Comparisons between different countries at market exchange rates tend to overestimate differences in living standards. For example, services that are not internationally traded are in general relatively expensive in the wealthier countries, but their price is insufficiently reflected in exchange rates. Besides, market exchange rates are affected by a lot of factors which are not directly related - at least in the short-run - with the purchasing power of the currencies, so that their use for international comparisons of national account aggregates tends to be misleading.

As far as convergence or divergence is concerned, both methods of comparison indicate the same tendency for practically all aggregates: between 1970 and 1977 the dispersion between Member States has slightly increased, whereas provisional figures for 1979 suggest a more convergent evolution between 1977 and 1979.

Gross domestic product per capita may be considered the most general indicator for comparing the level of economic welfare. Based on purchasing power parities, the spread between countries does not seem to have changed substantially between 1970 and 1979. The ratio between the richest and the poorest country's product per capita has slightly decreased (from 2,0 to 1,9) between 1970 and 1979. The index of inequality (Theil's index) (1), which takes account of the relative position of all countries and of their population share, indicates a slightly divergent evolution until 1977, which seems, however, to have been reversed in the last two years. As to the relative position of individual countries, the largest shifts concern France, whose index based on the Community average rose from 106 to 113 between 1970 and 1977, and the United Kingdom, whose index fell in the same period from 97 to 92.

Turning to the final domestic uses of GDP, private consumption per capita proves to be the component with the smallest spread between Member States - on a purchasing power basis as well as if compared by market exchange rates. Measured in purchasing power parities, both the ratio between the country with the highest consumption per capita to that with the lowest (1,6 in 1970, 1,8 in 1977 and 1979)

(1) The Theil index measures the inequality of the series and is defined as the logarithm of a weighted geometric mean of the per capita product in each country compared to the per capita product of all the countries together. The index varies with the degree of dispersion of per capita product (a value of zero corresponding with a zero degree of inequality).

and the index of inequality were lower for private consumption than for GDP or any other aggregate in all three years considered. The situation of the richer countries - wealth as measured by their GDP per capita - tends to be reflected to a lesser extent in the level of their private consumption than in other components of final demand. Denmark for example had a GDP per capita in 1977 which was 19 % higher than that of the Community in its total, but its private consumption per head was only 10 % higher than the overall Community level. The poorer countries, on the other hand, tend to maintain a relatively better position as regards private consumption than if the total of GDP is taken into consideration. Ireland's and Italy's GDP per head were 38 % and 28 % below the total Community level in 1977, their private consumption per head was 35 % and 23 % below the average of the nine countries. Notable exceptions for recent years are France and the UK: France in being a relatively rich country whose rank in private consumption exceeds its rank in GDP, the UK in being a comparably low-product country with an even lower position as regards private consumption.

Public consumption as compared by purchasing power parities is the internal demand component with the highest dispersion between Member States. It is the sole aggregate for which the index of inequality suggests a further - though minor - divergence beyond 1977, although the mini-max ratio is likely to decrease in 1979 compared to 1977. (However institutional differences in the organisation and financing of public services make comparisons in this field particularly difficult).

Collective consumption per head is also the aggregate with the highest variability of relative country positions over time. Denmark's collective consumption per head is by far the highest in the Community; although its gap from the average has narrowed in recent years compared in purchasing power parities, it was in 1977 2,9 times as high as that of Italy, the country with the lowest level. The rank of several countries in the level of public consumption differs considerably from their rank in GDP. Until 1977, the UK and the Netherlands held relatively high positions whereas Germany's public consumption per head was relatively low compared to the level of its GDP per head. The figures for 1979 suggest that the situation may have changed markedly since then.

As far as investment per capita is concerned, a comparison between Member States on the basis of purchasing power parities reveals that the ratio between the highest and the lowest level in the Community has decreased from 2,2 in 1970 to 2,0 in 1977, and to 1,9 in 1979, which is slightly above the respective values for GDP per capita. Taking into consideration all countries,

the inequality proves as well to be somewhat larger for investment than for GDP, as the index suggests. The majority of Member States' investment per capita related to the Community average is higher than their corresponding ratio for GDP per capita; this is at the cost of Italy and the UK. Italy's investment performance had deteriorated less between 1970 and 1977 (its level fell from 71 % to 69 % of the Community average) than its GDP performance (from 76 % to 72 %); between 1977 and 1979 however, its relative investment position seems to have remained constant, whereas its relative GDP position rose by five points to 77. In the UK, investment per head was about 20 % below the total Community level in all three years considered. Whereas in 1970 the gap between GDP and investment per head was extremely high (Britain's GDP per head was only three per cent below the Community average), the lag of the relative investment performance behind GDP performance has diminished in recent years because the GDP position has deteriorated.

The Statistical Office of the European Communities regularly draws up harmonized statistics on earnings in industry in the various Member States. These statistics are based on national surveys carried out regularly in the different countries. They offer information on the gross hourly earnings of industrial workers. The results - converted into European Units of Account - are summarized in Table 5.2. Between 1972 and 1977, the period for which data for eight out of nine countries are available, the ratio between the highest and the lowest figure has increased from 1,9 to 2,3, but the spread has been narrowing more recently. The coefficient of variation, after rising from 21 % in 1972 to 31 % in 1976, equally suggests a more convergent evolution in 1977 (29%) and probably in 1978. Thus hourly earnings in industry show a similar evolution in respect to their convergence or divergence among Member States as does per capita gross domestic product if expressed at current market exchange rates in European Units of Account, whose coefficient of variation rose from 25 % in 1972 to 38 % in 1976 and declined to 35 % in 1977. Again, the dispersion is distinctly lower if national data are compared on the basis of purchasing power parities. In this case the coefficient of variation for gross hourly earnings in industry is 16 % for 1972 as well as for 1977.

Entry into operation of the European Monetary System on 13 March 1979 has highlighted the importance of monitoring price and cost trends in relation to the requirements of greater exchange rate stability. In Table 5.3 data are given on the average variability in the Community as a whole of three price and cost measures (consumer and wholesale prices and unit labour costs) and of exchange rates against the European Unit of Account (or ECU). Graph 5.2. puts together two out of these indicators, namely the standard deviation of consumer prices and the exchange rate variability.

The dispersion of consumer prices between the countries of the Community was quite stable until the beginning of the 'seventies. Exceptional disturbances occured in 1958 and 1969 (notably in France). Starting in 1973 and accompanying the increase of inflation rates, the differences in the rises in price levels between Member States widened drastically, approaching 5 1/2 % in 1975 as measured by the standard deviation. From 1976 to 1978, the divergences were decreasing (3.25 % in 1978). However, before settling down to the usual level of the 'sixties, the likely standard deviation for 1979 (about 4 %) suggests again a widening of the gap between inflation rates of the Member States. The dispersion of wholesale prices shows more or less the same cyclical pattern, with even more pronounced divergence from 1973 onwards. Unit labour costs present a remarkable difference to the evolution of price dispersion: although the period of general divergence in the mid-seventies is reflected in the values of the standard deviation (up to 7 1/2 % in 1975), the divergence was far less marked in that period compared to the 'sixties than it was for prices. From 1960 to 1972, the standard deviation for unit labour costs used to be in all except two years higher than that for both price indices; from 1973 to 1978 however, it was lower than that for prices in each year.

Exchange rate variability as presented in the right-hand column of Table 5.3. and depicted as rectangles in Graph 5.2 is calculated as the average exchange rate change of all Community currencies against the European Unit of Account or the ECU from one year to the other. A first inspection of the diagram confirms the view that the dispersion of inflation rates between Member States and the variability of exchange rates between Community currencies tend to go hand in hand. The periods 1958-1959, 1968-1969 and especially 1973 onwards are characterized by an upsurge of both price dispersion and exchange rate instability. The correlation coefficient is 0,63 when the dispersion of inflation rates of a given year

is correlated with the exchange rate variability of the same year. The coefficient is lower (0,55) when the dispersion of inflation rates of a given year is correlated with the exchange rate variability of the following year (0,55); it is higher in the reverse case (0,74).

There have been periods of relative exchange rate stability defended in the presence of important balance of payments deficits or surpluses. On the other hand, in some periods exchange rate policy has allowed the markets quickly to find a new equilibrium rate, involving substantial exchange rate changes. For this reason year-by-year comparisons between price dispersion and exchange rate fluctuations may turn out to be too narrow. As one could expect, the correlation is closer for three years moving averages; the values of the coefficient are 0,83 for the year-by-year correlation, 0,68 if exchange rate variability is lagged by one year and 0,88 if price dispersion is lagged by one year.

The wider dispersion of the consumer prices in 1979 than in 1978 may to some extent be explained by once-for-all factors. In some countries, the liberalization of the price policy has led to sudden price adaptations. In addition major indirect tax changes have occured in 1979, whose impacts on consumer prices may as well cause an overestimation of the divergence of prices. Both effects on the consumer price level are difficult to assess. A raw estimate of the standard deviation of consumer prices in 1979 after taking account of the major indirect tax changes yields 3.90 instead of 4,07 as shown in Table 5.3. and depicted in Graph 5.2.

Of further importance in the context of convergence analysis is the fact that in the case of alternative price and cost indicators the pattern of deviations from the Community average can differ. The foregoing analysis in relation to exchange rate changes used the consumer price measure in order to give a first simple comparison. However, for the purpose of analysing the competitiveness of a country's exchange rate, it is desirable to study also trends in unit labour costs, wholesale prices and other measures shown in Table 5.4. This Table adjusts price and cost trends over the years for changes in exchange-rates against the European Unit of Account, so as to show (a) in what degree exchange rate changes have merely offset price and cost differences between Member States, and (b) how the different price and cost measures compare.

For instance, during the period 1973-1978, the Dutch consumer prices after adjustment for exchange rate changes rose at an annual rate which was 2.9 % higher than the Community average; the corresponding Belgian and Danish price increases were 2.4 % and 1.1 % above the average. Assessed on the basis of an internal cost indicator like unit labour costs, the relative position of these countries seems, however, to have deteriorated much less than indicated by consumer prices. The annual difference of unit labour costs to the Community average is 1.0 % for the Netherlands, 1.5 % for Belgium and 0.6 % for Denmark. Germany's and Ireland's relative position looks more or less unchanged for the period 1973-1978 if assessed on the basis of adjusted consumer prices; if measured with unit labour costs, these countries' position relative to their partners has improved markedly over that period.

On the other hand, Italy's and the UK's relative performance is distinctly less favourable for the period 1973-1978 when measured in unit labour costs than when measured in consumer prices. The rise of unit labour costs in the UK exceeded the Community average by 2.5 % annually in this period, whereas the British exchange-rate-adjusted consumer prices increased by 0.3 % annually less than all nine countries' average. A different pattern of behaviour may be found in the Table for prices which are particularly sensitive to foreign influences like export prices and wholesale prices.

These results suggests that in analysing the conditions for exchange rate stability restriction to one price or cost series such as consumer prices might lead to a biased assessment of the relative performance of countries.

TABLE 5.1

Dispersion between Member States of GDP, private and public consumption and investment per capita, at purchasing power parity and market exchange rates, 1970, 1977 and 1979

	gross domestic product			private consumption			public consumption			investment		
	1970	1977	1979 (est.)	1970	1977	1979 (est.)	1970	1977	1979 (est.)	1970	1977	1979 (est.)
	at purchasing power parities (1)											
DK	121	119	116	115	110	108	170	179	155	131	135	122
D	116	119	118	111	117	109	99	101	128	131	119	128
F	106	113	112	106	115	116	101	105	94	109	124	116
IRL	61	62	61	71	65	65	63	70	63	60	73	81
I	76	72	77	82	77	83	68	62	67	71	69	69
NL	107	108	105	100	100	103	124	122	106	121	110	105
B	102	109	108	100	108	111	97	114	106	102	114	109
L	127	110	111	109	110	106	90	108	97	129	135	143
UK	97	92	91	100	90	90	122	119	103	80	81	80
EC average	100	100	100	100	100	100	100	100	100	100	100	100
EC mini-max ratio (2)	2,0	1,9	1,9	1,6	1,8	1,8	2,7	2,9	2,5	2,2	2,0	1,9
EC index of inequality (Theil's index)	,0039	,0076	,0070	,0028	,0065	,0036	,0103	,0127	,0128	,0092	,0122	,0113
	at market exchange rates (3)											
DK	131	148	141	125	136	132	186	224	189	141	166	148
D	124	138	134	119	137	125	107	120	146	139	138	145
F	113	118	116	113	119	121	108	110	96	115	127	118
IRL	54	48	51	63	52	55	56	56	52	53	57	66
I	70	57	62	76	61	68	63	49	54	65	54	56
NL	99	126	119	93	118	119	115	145	121	111	127	120
B	106	129	123	105	129	128	102	137	121	105	134	124
L	128	128	123	110	127	122	91	127	106	132	156	158
UK	89	72	76	92	70	76	112	94	85	73	62	66
EC average	100	100	100	100	100	100	100	100	100	100	100	100
EC average in EUA (3)	2406	5342	6647	1451	3280	3933	338	850	1219	552	1115	1383
EC mini-max ratio (2)	2,4	3,1	2,8	2,0	2,6	2,4	3,3	4,6	3,6	2,7	3,1	2,2
EC index of inequality (Theil's index)	,0092	,0261	,0200	,0072	,0271	,0248	,0130	,0261	,0270	,0204	,0323	,0304

(1) At current prices and current purchasing power parities.
(2) Disregarding Luxembourg.
(3) At current prices and current market exchange rates.

Source : Eurostat and Commission staff estimates and calculations.

TABLE 5.2

Average gross hourly earnings in industry as a whole

(EUA)

	1964	1970	1972	1975	1976	1977	1978
DK	:	:	2,40	4,39	5,28	5,34	5,98
D	0,93	1,70	2,12	3,26	3,95	4,32	4,76
F	0,67	1,04	1,34	2,30	2,52	2,77	3,05
IRL	:	:	:	:	:	:	:
I	0,58	1,00	1,27	1,94	2,10	2,38	:
NL	0,74	1,35	1,86	3,27	3,93	4,30	4,72
B	0,79	1,34	1,81	3,19	3,95	4,48	4,89
L	1,07	1,69	2,08	3,46	4,45	4,87	5,27
UK	:	:	1,56	2,20	2,10	2,36	2,59
Arithmetic mean	0,74	1,29	1,77	2,94	3,54	3,85	-
Ratio max./min.	1,6	1,7	1,9	2,3	2,5	2,3	-
Standard deviation	0,16	0,28	0,37	0,76	1,09	1,10	-
Coefficient of variation (1)	22%	22%	21%	26%	31%	29%	-

(1) Standard deviation as percent of arithmetic mean.

Note : All data refer to October of the year in question. Excluding the employers' part of social security contributions.

Source : Eurostat and Commission services.

TABLE 5.3

Price, cost and exchange rate divergences between nine Member States, 1958-1979
(percentages)

	Standard deviation of changes in			Exchange rate variability against EUA
	consumer prices	wholesale prices	unit labour costs	
1958	3,45	:	2,54	3,7
1959	1,82	:	2,58	4,8
1960	1,15	:	0,82	0,0
1961	0,77	1,40	2,72	1,5
1962	1,82	0,70	1,57	0,3
1963	1,75	2,01	3,81	0,0
1964	1,58	1,79	3,20	0,0
1965	1,04	1,25	2,40	0,0
1966	1,17	1,37	2,53	0,0
1967	1,21	1,34	1,62	0,7
1968	1,62	1,65	2,07	5,2
1969	2,01	2,06	2,89	1,3
1970	1,66	1,62	3,02	1,8
1971	1,55	2,41	1,61	1,2
1972	1,48	1,54	1,57	2,4
1973	2,32	4,14	3,16	7,1
1974	4,16	10,29	4,22	4,2
1975	5,45	7,92	7,49	4,7
1976	4,64	6,30	4,01	7,5
1977	4,42	5,39	4,38	5,1
1978	3,25	3,90	3,88	2,7
1979	4,07	-	3,95	-

Source : Commission staff.

TABLE 5.4.

Indicators of price and cost performance, adjusted for exchange-rate changes in relation to the EUA

(average annual increase, %)

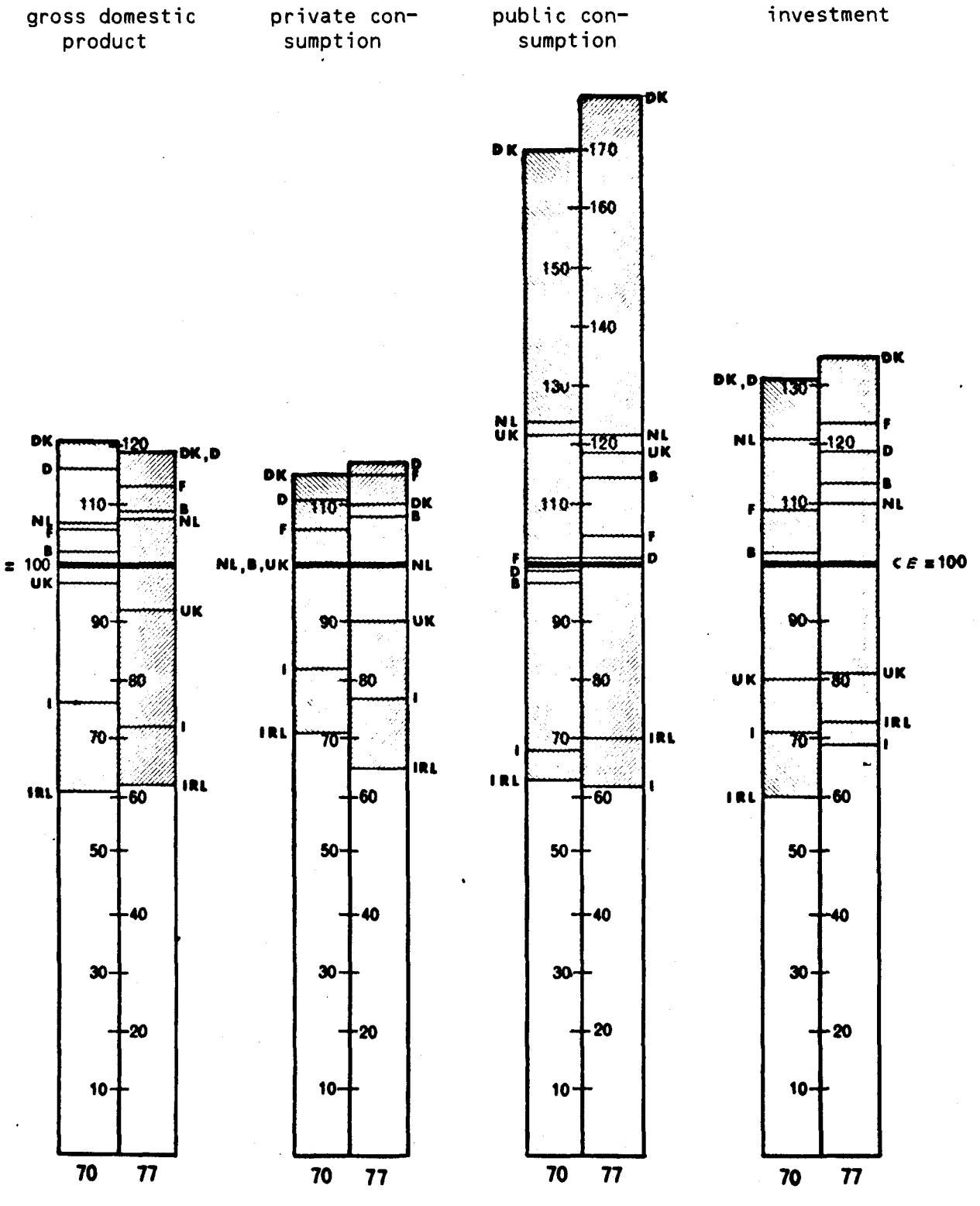
	Exchange rate against EUA	Unit labour costs	Value-added deflator for industry	GDP price deflator	Consumer prices	Export prices	Industrial[2] Wholesale prices
DK							
1960-73	-0,10	:	5,1	6,7	6,4	4,6	3,4
1973-78	+1,11	11,5	11,6	11,3	11,1	10,6	10,6
D							
1960-73	+2,35	6,2	5,8	6,5	6,0	4,1	4,9
1973-78	+5,04	10,1	10,6	10,6	10,4	10,6	10,4
F							
1960-73	-0,38	4,2	3,6	4,5	3,9	1,7	2,9
1973-78	-0,96	10,1	9,6	9,6	9,5	9,0	9,2
IRL							
1960-73	-2,20	:	3,6	4,8	3,5	3,9	3,8
1973-78	-5,42	9,4	8,8	8,6	9,5	11,1	10,8
I							
1960-73	-0,63	4,0	4,1	4,7	3,9	1,6	3,1
1973-78	-8,40	10,3	8,9	7,8	8,1	9,4	10,1
NL							
1960-73	+1,20	7,4	4,6	7,1	5,7	2,2	5,2
1973-78	+4,43	11,9	11,5	13,0	12,9	12,5	10,8
B							
1960-73	+0,80	3,6	3,6	4,8	4,4	3,0	5,6
1973-78	+3,61	12,4	12,1	12,5	12,4	11,1	10,0
UK							
1960-73	-2,20	2,6	1,4	2,9	2,4	1,8	2,6
1973-78	-5,42	13,4	11,9	10,1	9,7	12,6	12,2
EC[1]							
1960-73	-	4,7	4,1	5,0	4,4	2,7	4,0
1973-78	-	10,9	10,5	10,2	10,0	10,8	10,4

(1) Weighted for 1960-73 by 1970 GDP at current exchange rates, and for 1973-78 by 1977 GDP at current exchange rates.

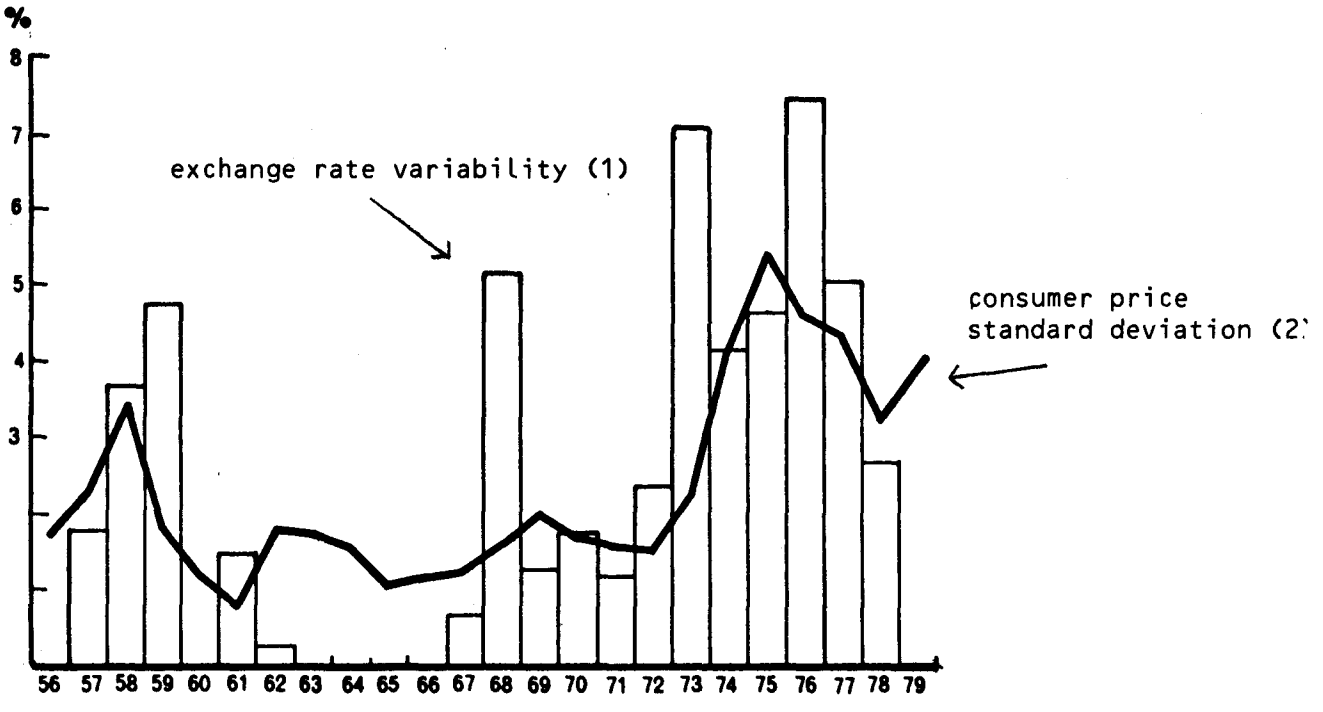
(2) except Denmark, where all sectors are covered

Source : Commission staff.

GRAPH 5.1 : Dispersion between Member States of GDP, private and public consumption and investment per capita at purchasing power parities, 1970 and 1977



GRAPH 5.2 : Exchange rate variability and divergence of consumer price inflation in the Community, 1956-1978



(1) mean exchange rate changes on previous year of all Community currencies against EUA/Ecu

(2) standard deviation of annual increases in Member States

Source : Data of Table 5.3

6. Budgetary Policies and Trends

Budgetary policies in 1978 and 1979

After the efforts made in all the Member States to reduce the public deficitsin 1976 and 1977 to levels consistent with gradually restoring conditions for balanced growth, it once again became necessary in 1978 and 1979 to increase budgetary policy support to economic activity. This change, which seemed justified in view of the good results of previous policies of consolidation, first became apparent in mid-1977 when the Council adopted unequivocally expansionist guidelines for 1978. It was consolidated by the decisions of the European Council meeting held at Bremen on 6 and 7 July 1978, which led to the adoption yet again of slightly more stimulatory guidelines for 1979.

In general, the aim could easily have been achieved at least in overall terms, or even exceeded without any specific measures, so great is the spontaneous tendency for budget deficits to increase; for the structural factors that make for rising public expenditure are powerful, and they are reinforced in a context of widespread unemployment and rapidly rising prices. Moreover, it is all the more difficult to match the increase in expenditure with an increase in revenue in such a situation, as specific taxes are usually adjusted to increased prices with some delay, and especially as the progressivity of personal income tax is attenuated by the widespread practice of index-linking tax brackets partially or totally. The automatic functioning of these mechanisms alone would have been enough in most cases to increase deficits in 1978 and 1979, but the governments did not give them full rein, since they wanted to regain the margin for manoeuvre needed to introduce support measures more specifically adapted to the requirements of the situation. The policies implemented were thus a complex mixture of measures intended to limit the effects of the automatic mechanisms and decisions with the opposite effect, that of deliberately stimulating demand.

As table 6.1 shows, the main boost to activity was provided by central government budgets. Social security funds, especially when they are independent, are generally subject to rules of financial management that require a rigorous watch on their financial equilibrium. The effects of changes in local authority debt have been varied, but always very small.

The budgetary policies of Member States in 1978 and 1979 have on the whole shown the same tendency to flexibility though, in some cases where the expansionist policies adopted in 1978 have produced stronger effects then expected, some modifications have been made in 1979. Over the two years as a whole the general government borrowing requirement has increased in all countries though by amounts which differ in a fashion not strictly in line with the constraints of internal and external equilibrium.

It is true to say that in the countries where the budgetary stimulus has been greatest the stimulus has more often been the result of certain automatic structural mechanisms than of deliberate action. This is especially true of Italy and to a lesser extent Belgium, the Netherlands and Denmark where the policy aim has been to try to limit the effect of these automatic mechanisms rather than to introduce new support measures.

In Italy the strong budgetary stimulus seen again in 1978-1979 were essentially produced by automatic interaction of expenditure and revenue to such an extent that in its three-year plan of 1978, the Government provided for measures intended to enable it to control more closely the trends of expenditure and revenue, but these have not yet been formally adopted. The stabilization measures intended to prevent the deficit from expanding excessively in 1979 consisted mainly of some reductions in the burden of social security payments and especially of increases in social security contributions. In spite of these measures, the deficit will probably increase again considerably, reaching 11.5 % of GDP, as the figures for general

government show. The apparent contradiction between this observation and the trend expected at central government level - i.e. the Treasury - is merely technical, for it is due to movements of funds resulting from the decision to aggregate public cash assets. In Belgium, where the deficit has risen from 5.6 % of GDP in 1977 to 7.2 % in 1979 the resulting stimulus was largely due to the spontaneous disparity between the rates of growth of tax revenue and of current expenditure. Current expenditure had to be held in check as far as possible so that investment expenditure could be appropriately incraesed, and in particular so that the already heavy tax burden would not have to be increased further. The government deficit in Denmark has in two years increased by 0.8 % of GDP and the government twice found it necessary to correct the spontaneous trend of the deficit to increase more rapidly, in August 1978 and again in June 1979, by reducing some items of expenditure, and especially by increasing taxation, particularly indirect taxation.

In the Netherlands the government's margin for manoeuvre was limited by the rapidly rising trends of interest payments and, especially, of current expenditure on transfer payments; steps were taken in the summer of 1978 to neutralize these trends in the medium term. As important new measures were taken by the Government in 1978 to support investment and employment - in particular, the introduction of a generalized scheme of investment bonuses - it had to offset, even to the extent of increasing some taxes, the reductions due to index linking of personal income tax brackets as well as extending the time scale of some expenditure so as to keep growth of the deficit within reasonable limits - 0.6 % of GDP between 1977 and 1979.

Unlike the four countries described above, the United Kingdom and Ireland changed their policies between 1978, when their budgets were strongly expansionist, and 1979. The United Kingdom budget for 1978-1979 had been drawn up with a view to boosting domestic demand, in particular

consumer demand. It included considerable reductions in personal income tax, but it also reflected the relaxation announced in the pluriannual plan published in January 1978 of the constraints imposed earlier on planned expenditure. The budget for 1979-1980 reimposed a stricter attitude towards expenditure, and made up for new reductions in personal income tax by substantially raising indirect taxes. After the large increase in the deficit in 1978, 1979 should show a decrease at the level of general government, and an even larger decrease at the level of the public sector. Similar developments are expected in Ireland where the 1978 budget was extremely expansionist, involving large tax concessions and greatly increased expenditure, particularly capital expenditure. The 1979 budget is considerably more cautious and the underlying deficit should be reduced sharply in comparison with the level of 12,7 % reached in 1978.

Budget policy in France has followed a similar course and in 1979 management will be stricter than in 1978 giving, for the two years as a whole, a controlled boost to the economy. Budget management was, in fact, relatively flexible in 1978, although the tax concessions granted were, on balance, limited, and the only departures from earlier austerity on the expenditure side were those in favour of investment and employment. The deficit was much higher than that of the preceding year at central government level (1.6 % of GDP as against 1.0 %), and even more so at general government level, where the deficit rose from 1.3 % of GDP to 2.3 %, because of the deterioration of the position of social security funds. The measures agreed in December 1978 and July 1979 to improve this situation, in conjunction with a more or less neutral management atcentral government level stricter management of the central government budget, should reduce the general government deficit considerably in 1979.

The authorities in Germany had the greatest scope for deliberate budgetary stimulus because current expenditure was exceptionally well controlled at all levels of government. The Federal Government therefore adopted several sets of budgetary measures, the most important in

September 1977 and July 1978, to boost economic activity in the ways considered most appropriate to the situation, including increased expenditure on investment, and tax reductions for firms and reductions in direct taxes on households. These reductions were, however, partially offset by increases in value added tax, applied from 1 July 1979. The total effect of all these measures, in 1979, will be to increase the general government deficit from a level of 2.6 % of GDP to only 3.1 % between 1977 and 1979 but this in fact represents increases for 1978 and 1979 of 0.7 and 0.8 % respectively over the levels which would have resulted with unchanged policies.

Public finance structures : a comparison of trends

In 1979, the share of general government expenditure in Community GDP was probably 47 %, compared with 46,6 % in 1975, when the crisis had led to a very sharp acceleration in the observed long-term rate of growth of public expenditure (which, as a proportion of GDP, was only 41,6 % in 1973 and 32.7 % in 1960).Despite the greater support given to economic activity, the budgetary policies pursued in 1978 and 1979 implied a continuation of the efforts made in 1976 and 1977 to try and stabilize the weight of public finance in the economy. These efforts had become necessary because of the difficulty of imposing a sharp increase in taxation against a background of persistent slow growth and because of the need to avoid too great an expansion of budget deficits, which were already considerably larger than before the crisis (4.0 % of Community GDP in 1979 compared with 0.7 % in 1973). In 1976 and 1977, the reduction in public finance imbalances was brought about by stabilizing share of public expenditure in GDP and by an increase in total tax revenue. During the last two years, on the other hand, the generally cautions moves towards budgetary stimulation have led to a limited increase in public expenditure (+ 1 % of Community GDP), for the Community and to a slight moderation in the growth of government revenue (+ 0.4 % of GDP).

These overall trends conceal widely differing developments at national level. In 1978 and 1979, public expenditure increased much more rapidly than the Community average in Italy (+ 3.6 % of GDP), in Belgium and the Netherlands (about + 3 %), in France (+ 1.9 %) and Ireland (+ 2 %). Its growth was smaller in Denmark (+ 0.9 %) and it declined in the other countries (Germany, Luxembourg and the United Kingdom). In the period 1975 to 1977 divergences in the same direction and of similar magnitude were recorded for the different Member States, except Ireland. As can be seen from Tabel 6.2, these divergences are explained mainly by the differing trends in member countries' expenditure on current transfers and debt interest, which in the Community as a whole represents slightly more than half of total general government expenditure (i.e. 24.1 % of GDP in 1979). The same divergences reflects not only differences in the room for manoeuvre available to each country in pursuing its budgetary policy, but also an unequal ability to control the mechanisms automatically forcing up this category of expenditure. Public consumption expenditure (18.4 % of Community GDP in 1979) and, to a lesser extent, capital expenditure (4.5 % of GDP in 1979), which were the main targets of the efforts made in 1976 and 1977 to bring public finances into better equilibrium, are again increasing in most member countries, except in the United Kingdom and Luxembourg. This Shift reflects the authorities' concern to provide a budgetary stimulus by concentrating more on final demand of general government than on transfer income paid to the rest of the economy.

In all member countries except Luxembourg and the United Kingdom, the average growth of public revenue during the last two years has been lower than that of expenditure. In 1979, the level of total tax revenue(including social security contributions) will probably reach 40 % of Community GDP, as against 39,6 % in 1977. The differences between member countries in the trend of public revenue reflect those observed on the expenditure side and show the public authorities' determination to prevent a further increase in budget deficits and so to create scope for measures which might subsequently have to be taken in response to changes in the economic situation. Thus, in France, Ireland, the Netherlands and Belgium, the level of public revenue rose between 1977 and 1979 in line with an increase in expenditure that was more rapid than in the Community as a whole. In the other countries, by contrast, the weigth of total tax revenue has declined slightly. As

is shown in Table 6.3, the movement in the different components of total tax revenue indicates a continuation of the trend, observed after 1975, towards an increase, or at least a stabilization, in the level of indirect taxes, which represent 13.4 % of Community GDP. On the other hand, the yield from direct taxes in the Community as a whole increased a little less rapidly than GDP (their share in GDP fell from 12.5 % in 1977 to 12.2 % in 1979) mainly because of the slowdown in the nominal growth of incomes and the direct tax reliefs granted in certain countries as part of the moves to bolster economic activity. The fact that the share of social security contributions in GDP (14.2 %) is marking time may be attributable to persisten unemployment, the lower growth of nominal wages and the measures taken to lessen the relative cost of labour in order to helb reduce unemployment. However, this type of revenue continues to grow rapidly in France and, to a lesser extent, in Italy and in the Netherlands, to cover constantly rising social security costs.

Because of the low level of private investment and the relatively high personal savings ratios, the persistently large budget deficits and their further increase between 1977 and 1979 have not been accompanied by an equivalent deterioration in external balances; in 1979, member countries' net lending to or net borrowing from the rest of the world should remain et virtually the same level as in 1977, except in Belgium and the Netherlands, where these balances are deteriorating. As regards cover for these deficits, the severe effects of the crisis on public finance had led the Member States in 1975 to turn first to methods of financing which had a direct impact on the liquidity of the economy. Subsequently, recourse to borrowing from the banking system was appreciably cut back in relative terms in most member countries : in some cases, in the first place by a partial correction of budgetary imbalances, and, in all cases, by maintaining at a high level or by rapidly stepping up indebtedness to the resident non-banking sectors. Thus, in some countries (e.g. Denmark and Ireland), additional resources were obtained from sectors of the economy which, before the crisis, were not or were rarely asked to help finance the budget.

The continuing high deficits have led to a sharp increase in the resources to be spent on servicing the national debt. In Italy, the Netherlands, Belgium, the United Kingdom and Ireland, interest paid by general government has now reached or has already exceeded the level of expenditure on fixed capital formation. While the increase in the outstanding national debt hardly poses problems as regards solvency, except in the case of the external debt which remains marginal in all Member States, the increase in interest and redemption payments could well appreciably reduce the budgetary room for manoeuvre of a number of countries. If economic activity fails to show a stronger upturn, it will become extremely difficult in the medium term to correct public finance imbalances without a thorough reorganization of public authority budgets and, more particularly, of social security systems.

Table 6.1

Net borrowing requirement of central government (1) and of general government (2) as a percentage of GDP (1973-1979)

	Net central government borrowing requirement (3)							General government deficit						
	1973	1974	1975	1976	1977	1978	1979	1973	1974	1975	1976	1977	1978	1979
DK	+2,3	+0,5	-3,8	-3,0	-2,8	-2,8	-3,5	+5,6	+4,3	-1,6	-0,6	-0,2	-0,5	-1,0
D	-0,4	-1,9	-5,3	-3,9	-2,5	-3,0	-3,4	+1,2	-1,4	-5,8	-3,6	-2,6	-2,7	-3,1
F	+0,4	+0,4	-2,6	-1,0	-1,0	-1,6	-1,7	+0,9	+0,6	-2,2	-0,4	-1,3	-2,3	-1,7
IRL	-7,8	-11,5	-16,4	-11,3	-9,9	-12,7	-15,0 (5)	-3,8	-7,2	-11,3	-8,1	-9,0	-10,8	-15,8 (5)
I	-9,1	-8,5	-12,3	-10,0	-9,4	-13,1	-13,6	-6,3	-5,9	-14,5	-9,8	-8,1 (4)	-10,6	-11,5
NL	-0,7	-1,4	-3,2	-3,2	-2,1	-3,1	-3,8	+1,1	-0,1	-2,7	-2,7	-1,7	-2,0	-2,3
B	-4,6	-3,6	-5,2	-5,9	-6,4	-6,4	-7,2	-2,6	-1,6	-3,9	-5,2	-5,6	-6,3	-7,2
L	+3,2	+3,5	+1,1	-0,3	+1,4	+2,8	+1,8	+3,5	+5,1	+1,2	+1,7	+0,5	+2,8	+1,8
UK	-3,0	-5,8	-8,1	-4,7	-3,0	-4,9	-4,5	-3,4	-4,1	-5,0	-5,1	-3,2	-3,9	-4,1
EC	-2,0	-3,0	-5,9	-4,1	-3,2	-4,5	-4,6	-0,7	-1,7	-5,6	-3,8	-3,3	-4,0	-4,0

(1) Borrowing requirements resulting from the implementation of central government budgets, including financial transactions (loans, advances and equities).
(2) General government financial balance on the basis of harmonized national accounts, not including financial transactions (loans, advances and equities).
(3) For the United Kingdom, the reference period is the financial year (1 April to 31 March).
(4) From 1977, revised series due to an increase in GDP in Italian National Accounts. In terms of the unrevised GDP, the deficit for that year would have been - 9.8 %.
(5) 1979 figures reflect effects of postal strike. However the figures in Tables 6.2 and 6.3 have been adjusted for these effects.
Source : Commission departments. Balance of central governments : cash outturns provided by national government departments for 1973 and 1978 and estimates for 1979. Balance of general governments : 1977-1979 Economic Budgets. 1973-1976 OECD National Accounts for other countries.

Table 6.2

General government expenditure and its composition as a percentage of GDP

	Total expenditure					Consumption					Other current expenditure (1)					Capital expenditure (net)(2)				
	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979
DK	25,0	44,9	46,8	45,8	47,7	12,7	23,3	24,0	24,3	25,0	9,0	17,3	18,3	17,4	18,4	3,3	4,3	4,5	4,1	4,2
D	32,5	46,4	46,6	46,7	46,4	13,6	20,9	20,0	20,0	19,8	14,6	20,0	21,3	21,3	21,0	4,3	5,5	5,3	5,4	5,6
F	35,5	43,5	44,5	45,6	46,4	13,0	14,4	14,9	15,1	15,3	18,8	24,8	26,0	27,0	27,7	3,7	4,3	3,6	3,5	3,5
IRL	27,6	48,5	47,0	47,6	49,3(4)	12,1	19,0	18,4	18,7	19,9	12,4	23,7	22,2	22,8	22,5	3,1	5,8	6,3	6,2	6,9
I (3)	32,1	48,9	42,7	47,0	46,3	12,2	13,8	15,1	15,9	16,3	15,8	28,0	23,2	26,0	24,9	4,1	7,1	4,4	5,1	5,1
NL	35,3	54,5	55,4	56,1	58,3	13,4	18,2	18,3	18,3	18,7	16,7	30,7	32,6	33,4	34,4	5,1	5,6	4,5	4,4	5,3
B	30,5	45,5	49,2	50,9	52,0	12,8	17,1	17,3	18,0	18,1	15,6	24,9	27,8	28,8	29,5	2,1	3,5	4,1	4,2	4,4
L	30,5	49,1	54,9	54,3	54,4	10,1	14,4	15,8	15,8	15,9	15,4	26,9	30,1	30,3	30,1	5,0	7,8	8,9	8,2	8,4
UK	31,7	47,7	43,3	42,6	42,8	16,4	22,4	20,7	20,2	20,6	12,5	19,0	18,6	18,9	19,2	2,7	5,9	4,0	3,5	3,0
EC	32,7	46,6	45,9	46,7	46,9	14,0	18,3	18,1	18,3	18,4	15,1	22,9	23,3	24,0	24,1	3,6	5,4	4,5	4,5	4,5

(1) Current transfers and property and entrepreneurial income paid (mainly interest).
(2) Capital formation, purchases of land and intangible assets, capital transfers (net of capital transfers received).
(3) From 1977, percentages are calculated from the new GDP series, revised upwards.
(4) See footnote (5), Table 6.1
Sources : 1977-1979 : Economic budgets;
1960-1975 : ESA and OECD national accounts.

Table 6.3

General government current revenue and its composition as a percentage of GDP

	Total current revenue (1)					Indirect taxes					Direct taxes					Social security contributions (2)				
	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979	1960	1975	1977	1978	1979
DK	28,1	43,3	46,6	45,3	46,6	12,2	15,2	17,3	18,1	18,9	11,6	24,6	24,6	24,5	25,4	1,5	0,7	0,7	0,6	0,7
D	35,8	40,7	44,0	43,9	43,3	14,3	12,3	12,4	12,8	12,9	9,3	12,0	13,7	13,0	12,6	9,7	14,9	15,5	15,5	15,3
F	36,4	41,2	43,2	43,3	44,8	16,3	14,0	13,8	14,1	14,5	6,2	7,2	8,4	7,9	7,9	11,1	17,1	18,4	18,5	19,5
IRL	25,4	37,2	38,0	36,8	38,9(4)	16,4	16,9	17,3	16,5	16,7	4,7	10,3	11,6	11,2	12,0	1,1	6,7	4,8	4,5	4,8
I(3)	31,2	34,4	34,6	36,4	34,7	13,0	9,5	10,3	10,1	9,3	5,7	7,3	8,6	10,3	9,7	10,5	15,2	13,8	14,1	14,2
NL	36,0	51,8	53,7	54,1	56,0	10,8	11,5	12,4	12,6	12,5	12,5	16,5	16,4	16,5	17,9	8,9	19,7	18,0	18,2	18,5
B	27,6	41,6	43,6	44,6	44,8	11,3	11,5	11,8	12,0	11,9	7,6	16,6	17,0	18,2	18,5	7,1	12,8	12,7	12,4	12,4
L	33,6	50,2	55,3	57,1	56,2	9,5	12,8	13,1	13,2	12,8	11,9	17,4	20,5	22,0	21,5	9,0	15,1	17,0	16,5	16,4
UK	30,7	42,6	40,0	38,8	39,6	13,1	13,4	14,5	14,6	16,0	10,9	17,0	14,4	13,9	13,5	3,6	8,3	6,7	6,2	6,2
EC	33,4	41,0	42,6	42,7	43,0	14,0	12,5	12,9	13,2	13,4	8,7	11,8	12,5	12,4	12,2	8,1	14,1	14,2	14,1	14,2

(1) The difference between the total and the sum of taxes and social security contributions is accounted for by miscellaneous current receipts (property and entrepreneurial income, current international cooperation, gross operating surplus).
(2) Including imputed social security contributions.
(3) From 1977, percentages based on new GDP figures, revised upwards.
(4) See footnote (5), Table 6.1
Sources : 1977-1979 : Economic Budgets;
1960-1975 : ESA and OECD national accounts.

7. Monetary policies and trends

The need for more efficient coordination of national monetary policies within the European Monetary system

The introduction of the EMS accentuated mutual dependence between economies of the Member States participating in the system; national monetary policies in each individual Member State now affect developments in all the others more directly. Moreover, the purpose of the EMS is to contribute to the internal and external stability of the participating currencies; this aim can be achieved only if disparities between economic performances, and in particular between inflation rates, are gradually reduced. Inflation rates are to converge and remain at the lowest possible level compatible with balanced growth. To achieve this end concertation at Community level must be reinforced and sustained.

National monetary policies as a part of overall economic policies must be coordinated both in the short-term and in the medium term to ensure that the EMS works smoothly. Firstly, the day-to-day management of monetary policy instruments in a Member State, in particular the manipulation of official interest rates, may result in capital movements between the Member States and put pressure on the exchange markets. Secondly, the cumulative effects on internal prices of excessive expansion of liquidity in a Member State are bound to lead to a deterioration in that State's competitive position relative to its partners whose monetary policy is more moderate; pressures will be created, and par values will eventually have to be adjusted. Although it is true that such an adjustment is covered by the rules of the EMS, the credibility of the system cannot be but adversely affected if adjustments are required too frequently. The monetary authorities must therefore coordinate their medium-term aims at Community level so as gradually to reduce the rate of monetary expansion to a level compatible with the internal and external equilibrium of their economies.

However, the coordination of official monetary policies is not in itself sufficient to ensure the indispensable convergence of monetary expansion; monetary authorities have to consider their countries' ultimate objectives in terms of real growth rates and the balance of payments, as well as the effects of other national policies such as budgetary policy and incomes policy. If monetary policies are to be coherent at both Community and national levels, the ultimate objectives of all the Member States must be similar, and their other policies must be coordinated as well as monetary policy.

The national monetary authorities in the Community will have to collaborate more closely.

(i) when defining national monetary policies; future policies are often defined in terms of the expected or desired trend of a monetary aggregate (credit or money supply). The monetary authorities should bear in mind the principal goals of the EMS when defining monetary policy at national level;

(ii) when managing monetary affairs in the course of the reference periods for which aims or desired trends have been defined. The extent to which these aims or desired trends are being achieved should be considered jointly, as should any monetary measures taken by the authorities such as changes in the discount rate; for such changes may reflect a change in policy, if monetary policy aims include a specific rate of interest; on the other hand, they may be part of an unchanged policy, if the authorities have adjusted the rate for their interventions on the money market so as to correct a departure from the desired trend of the aggregate.

Further technical research into monetary policy instruments and comparative analyses of financial aggregates would make it easier to coordinate both the definition and the day-to-day management of national monetary policies. The Commission departments, in close collaboration with the national government departments involved, have therefore undertaken a study of the following questions.

(i) Is a sufficiently wide variety of instruments available to enable the monetary authorities in all the Member States not only to achieve their intermediate aims but also to reduce any unfavourable repercussions the use of these instruments may have on the money markets of their partner countries ? For example, if few instruments are available in a particular Member State the monetary authorities may concentrate on one particular instrument, e.g. the discount rate, adversely affecting their partner countries much more than they would have done had they been able to make simultaneous use of several instruments and spread the effects over a number of markets and over a longer period. In such a situation widening the range of available monetary instruments could lead to better coordinated management of monetary policies.

(ii) What methods are most suitable at Community level for assessing how far the policies defined are coherent with ultimate national objectives, and for comparing national policies ? To answer the first part of the question, more information is needed about the transmission mechanism, since the relations between real and monetary variables differ from one Member State to another, and indeed are not always stable within a single economy. The comparison of the different national policies, the second subject of the question, is somewhat complicated by the fact that Member States define their intermediate objectives in terms of different

aggregates (credit or the money supply, broad or narrow definitions). Commission departments in collaboration with the relevant national authorities have drawn up a simplified framework for recording the flow of funds that includes all the aggregates used by the various Member States as intermediate objectives as well as other financial variables. It is hoped that this framework will facilitate comparisons between the Member States. The framework is still in its trial stages, but it has already contributed to improving the analysis of structural differences between the Member States' financial markets; its usefulness in the area of predicting and comparing monetary and financial variables at Community level remains to be tested.

National monetary policy trends in 1978 and 1979

During the period under review, the aim pursued by the national authorities was still to contribute to maintaining or sustaining internal and external economic equilibrium; this often involved difficult choices between action to support economic activity and action to moderate inflationary anticipation or to defend the national currency on the exchange markets. Table 7.1 below shows the rates of growth of the money supply in the different Member States; it will come as no surprise that these rates sometimes differ considerably from one Member State to another, in view of the wide differences in the scale of the various economies and in the financial structures of their capital markets and between their initial rates of inflation, public sector deficits and balance of payments positions.

The rates of growth of the money supply are not strictly comparable because aggregates are defined differently from one Member State to another, a rate which is excessive in one country may be reasonable in another, but if the EMS is to work smoothly, monetary expansion must slow down in those Member States where inflationary pressures have been strongest and when external equilibrium has been threatened.

The trend of the money supply in the Member States during the first six months of 1979 shows that there are still wide differences between countries and between quarters. Thus, monetary expansion slowed down in the second quarter in Denmark, Germany and France, while it speeded up in the other countries, and particularly in Ireland, where it was already very rapid. It should be noted that the official measures taken to control monetary developments reflect a shared determination not to accomodate fully the inflationary pressures created by recent increases in the price of oil.

The higher inflation rates should, in fact, lead to a reduced liquidity ratio in the economy (i.e. the ratio of money supply to nominal GDP) if the monetary authorities manage to keep the growth of the money supply within the limits set for 1979 at the end of last year.

Table 7.2 compares the trends of short-term and long-term interest rates and of inflation rates in the Member States. It will be seen from the table that interest rates were fairly low in some countries relative to the rate of monetary erosion; this was largely because the monetary authorities in these countries controlled national market rates fairly strictly as to hold down the cost of financing the public deficit or private investment, or both.

Since the beginning of this year, interest rates on money markets and, to a lesser extent, the yields on bonds have been rising in most member countries; this development is due partly to the need to defend national currencies on the exchange markets, and partly to the monetary authorities' anxiety to break down inflationary anticipations. Moreover, the monetary authorities in all the Member States except Germany and Belgium have maintained or reinforced measures to limit the expansion of bank credit directly. These measures are considered particularly necessary in countries where nominal interest rates are still low, in spite of the increase, in relation to actual or expected inflation, and in countries where the demand for bank credit is not very elastic in relation to changing interest rates.

The actual trends of money supply or interest rate levels are not always a faithful reflection of official medium-term monetary policy. Interest rates on the money market often reflect flows initiated by non-residents; the yield on securities on the bond market is strongly influenced by the burden of financing the public sector deficit and by inflationary anticipations; and the private sector's demand for bank credit is often a function of the business cycle. Even official measures such as changes in the discount rate or the minimum reserve coefficient indicate frequently temporary reactions to pressures on the exchange markets or the capital markets and do not reflect medium term strategies. Medium-term policy should consequently be assessed by comparing the declared aims of the national monetary authorities.

Table 7.3 below shows that the monetary authorities in all the Member States except Belgium, Denmark and Ireland quantified monetary policy aims in terms of a desired rate of growth of a monetary aggregate (an intermediate objective) for the period under review (the calendar or budget year 1978/79). In all the large Community economies, the monetary authorities have quantified their objectives, but the aggregates used vary widely. In the smaller economies, which are of necessity more open to external trade, the authorities were unwilling or unable to quantify desired trends for the monetary aggregates, except in the Netherlands. Even here, however, the medium-term aim of reducing the ratio of money supply to net national income is flexible enough to allow of adjustment in view of the short-term situation and the trend of the balance of payments. In Ireland the authorities have adopted guidelines for the increase in bank lending to the private sector in order to restrain the expansion of domestic credit.

Comparing targets with results for 1978, we find that policy has been quite successful in the United Kingdom and France, but that expansion has been faster than desired in Italy and especially in Germany. The German authorities tolerated the excessively rapid trend because prices were behaving better than expected, and because the short-term situation was considered relatively fragile.

The desired rates of expansion for 1979 are slightly less rapid than those for 1978 in the four major economies, although the reduction is partially apparent rather than real in Germany where the basis for calculation has been changed and in the United Kingdom where the new targets affect only the remaining 10 months of the budgetary year 1979/80 and not the whole of the budgetary year.

It is difficult to estimate how nearly present targets are likely to be met on the basis of available data, but it is worth noting that monetary expansion in the United Kingdom during banking July and August, the first two months of the new reference period moderated sufficiently to be just within the new target range. The money supply grew faster than expected in France in spite of a fairly marked slow-down at the end of the first half-year; the monetary authorities have already set a target for 1980 in line with their aim of gradually reducing the liquidity ratio in the framework of medium-term policy. The rate of expansion of central bank money in Germany, which was slightly above the upper limit in the first five months of 1979, changed direction in the summer and is now tending towards the lower end of the target range.

In Italy the trend of total domestic credit was in line with the authorities' intentions in the early months of the year. In the other Member States, whose economies are more open to foreign trade, monetary policy concentrates rather on aims in terms of exchange rates, or interest rates, or both, than on quantified aims for a particular monetary aggregate (although the Netherlands are an exception).

The Belgian monetary authorities are endavouring to keep interest rates as low as possible, at a level consistent with maintaining the Belgian franc's EMS par value; however, interest rates have had to be raised several times already this year. In Denmark, where the aim of the monetary authorities is to defend the par value of the kroner and to ensure that the current account deficit is financed, a massive inflow of capital (due to the purchases of krone denominated bonds) in the early months of the year caused bond yields

to decline, and a temporary ban was imposed on the purchase of Government bonds by non-residents. In the summer the authorities had to raise the discount rate twice to protect the par value of the kroner. In Ireland, where the postal strike contributed to the very rapid monetary expansion in the first half of 1979, the monetary authorities were forced to increase the cost of resort by the commercial banks to central bank lending and also to strengthen other measures designed to limit the expansion of bank credit. In the Netherlands too, where the growth of money supply was fairly moderate and the outlook for the public sector deficit and the balance of payments improved, the monetary authorities have raised the rate for official intervention in the money market several times since the beginning of the year, although by relatively small amounts.

Table 7.1 GROWTH OF THE MONEY SUPPLY (BROAD DEFINITION) (1)

(as % of initial money stock)

Period	DK	D	F	IRL	I	NL	B	UK
1977(2)	9.8	11.1	13.9	16.3	21.9	3.6	9.9	10.0
1978 (2)	6.7	11.0	12.3	28.7	22.8	4.2	9.5	14.9 b)
First quarter 1979(3)	4.0	2.3	4.6	6.1	3.0	0.5	2.2	1.4
Second quarter 1979 (3)	1.9	1.4	2.6	8.8	4.0 a)	1.5	2.3	3.8

(1) M_2, except in Germany (M_3), Ireland (M_3) and the UK (sterling M_3).

(2) Figures not adjusted for seasonal variations.

(3) Figures adjusted for seasonal variations.

(a) March, April, May.

(b) This figure differs from the figure given in table 1.6 which refers to "banking months".

Table 7.2 Evolution of inflation rates and short and long term interest rates in the Member countries since December 1976

	Inflation rate (1)				Short term interest rate (2)				Long term interest rate (3)			
			(1)		December			June	December			June
	Dec 76 / Dec 75	Dec 77 / Dec 76	Dec 78 / Dec 77	June 79 / June 78	1976	1977	1978	1979	1976	1977	1978	1979
DK	13.0	12.3	7.1	8.6	13.4	19.0	15.2	9.7	15.6	16.8	17.4	16.7
D	3.9	3.5	2.4	3.9	4.9	4.0	4.1	6.5	7.4	6.0	6.6	8.0
F	9.9	9.0	9.7	10.2	10.4	9.3	6.7	7.2[a]	11.0	11.1	9.9	10.0[a]
IRL	20.6[b]	10.8[b]	7.9[b]	12.4[c]	13.3	7.5	13.0	15.5	15.5	11.3	13.4	15.4
I	22.0	14.0	11.6	13.5	16.7	13.0	12.3	12.3	14.2	14.1	13.5	13.7
NL	8.4	5.6	3.9	4.4	5.8	4.5	9.4	6.7[a]	7.8	7.0	6.7	7.2[a]
B	7.6	6.3	3.9	4.5	10.0	9.3	9.3	11.3	9.3	8.4	8.7	9.2
UK	15.1	12.1	8.4	11.4	14.0[d]	6.4[d]	11.9[d]	13.7[d]	14.8	10.9	12.4	11.4

(1) Change in the Consumer Price Index

(2) Money market rate

(3) Bond yield

(a) May 1979

(b) Fourth quarter over fourth quarter of preceding year

(c) Second quarter over second quarter of preceding year

(d) Last Friday of month

Table 7.3 TARGETS OF MONETARY POLICY FOR 1978 AND 1979, AND RESULTS FOR 1978

Country	Monetary aggregate	Reference period	Target	Result
			% Increase	
Germany	Central bank money	1977 average - 1978 average	8	11.4
		last quarter 1978 - last quarter 1979	6 - 9	
France	M_2	12 months to December 1979	12 (1)	12.3
		12 months to December 1979	11 (1)	
		12 months to December 1980	11 (1)	
Italy	growth of total domestic credit	12 months to December 1978	19 (2)	20.5
		12 months to December 1979	18,5 (2)	
Netherlands	ratio of M_2 to net national income	end 1976		41.3 (3)
		end 1980	37.0	
United Kingdom	sterling M_3	12 months to mid April 1979	8 - 12(4)	10.4
		12 months to mid October 1979	8 - 12(4)	
		10 months to mid April 1980	7 - 11(5)	

(1) upper limit

(2) defined in absolute figures : Lit. 46.000.000 million in 1978, Lit. 53.000.000 million in 1979

(3) the aim is to reduce this ratio gradually throughout the period

(4) targets set for a 12-month period, but reviewed after 6 months (rolling targets)

(5) target set for the 10 months to the end of the budget year, expressed as an annual rate.

8 . Balance of payments

World balance of payments summary

The balance of payments of the Community on current account showed a record surplus of some 17 bn USD in 1978 but many of the factors contributing to this success were transitory, and the balance in 1979 and 1980 will be much less favourable, partly because of the increase in the price of oil which amounted to nearly 60 % in the year to the end of June 1979.

In aggregate the current account balance of the United States remained unchanged in 1978, but showed a steady improvement during the year, moving, on a seasonally adjusted basis, from a deficit of 6.9 bn USD in the first quarter of last year to virtual balance in the corresponding period of 1979. US export volume has been rising strongly and the US surplus on non-oil trade in the first half of this year showed an improvement on the low level seen early in 1978. The latest trade figures and rising oil prices do not suggest that the US current account deficit will be completely eliminated this year, but that country does now seem to be benefitting from the favourable section of a J-curve initiated by past falls in the value of the US dollar. For the greater part of last year, however, market sentiment was influenced by the US current account deficit and the traditional outflow of direct investment from that country.

The cyclical situation was favorable to the current accounts of the EC and Japan in 1978 since the real growth in the US economy, 4%, while slightly slower than in the two previous years, was equal to the ten-year average achieved up to 1973, while growth in the EC and Japan was, at 3% and 5 1/2% respectively, significantly lower than their corresponding historic performances. Cyclical influences have reversed themselves in 1979 and must be expected to have the opposite effect on the 1979 current account balances of the EC and Japan.

Both the EC and Japan were able to off-set the effects of their current account balances last year only to some extent by net outflows of capital. Both also saw their net reserves rise sharply during the financial disturbances of 1978 (by USD 16.6 bn in the EC, and by USD 10.2 bn in Japan) and, at least for the Community, this caused problems for the execution of monetary policy.

In a slightly longer historical perspective, a remarkable feature of 1978 was the virtual disappearance of the OPEC current account surplus. In 1974 that surplus was, at 60 bn USD , approximately what commentators expected, but few expected it to be eliminated within four years. A major cause of the subsequent reduction has been the absence of growth in the volume of OPEC exports,attributable to the recession in the industrialised world and the development of non-OPEC sources of mineral fuels.The volume of exports by major oil producers as measured by the International Monetary Fund actually fell slightly between 1974 and 1978 : an annual real increase of 4% over that period would, given the actual price development, have added about USD 45 bn to the OPEC surplus last year. At the same time OPEC imports have risen slightly faster than expected, supported by the willingness of some member countries to borrow in support of development programmes, but recent events in Iran cast doubt on the prospects of further real growth in OPEC imports. A further contributory factor in 1978 was the fall in OPEC's terms of trade, but this has already been reversed.

The non-oil developing countries continued last year to be able to finance an aggregate current account deficit high by historic standards and in fact added to their gross reserves, a reassuring result since the channels of intermediation had to adapt to the fact that the ultimate lenders were, in 1978, concentrated in the OECD area rather than in the oil-producing countries.

The structure of the Community's balance of payments

The growth in the value of imports into the Community area was 9% in 1977 but only 1% in 1978, being damped last year, as has been noted, by favourable exchange rate developments. The Community's trade account also improved in volume terms last year, the ratio of export volume to import volume improving by some 2 points and thus continuing a favourable trend evident since 1974.

The volume gain over the period 1974-78 in part reflected the Community's relative cyclical position - until this year the EC was a follower rather than a leader in the recovery from the post-1973 recession - but it is also probably a by-product of the growing integration of the Community since its enlargement.

Between 1974 and 1978 intra-Community imports rose by 59% while imports from outside the EC area rose only 36%;imports from non-EC OECD countries grew 53% over the same period.

Analysis of the geographical structure of EC trade with non-Community countries reveals that it is dominated by two groups : the European members of OECD (accounting for 24% of imports and 28% of exports in 1978) and the developing countries (40% of imports and 38% of exports in that year). In spite of rapid growth, Japan accounted for only 5% of EC imports last year. The structure of the Community's trade balances is disquieting in its implications for competitiveness : the improvement since 1974 has been achieved exclusively with the developing countries, while the balances with developed market economies have uniformly deteriorated. The fall in the Community's surplus with state trading countries is largely attributable to the financial constraints on that group.

The Community's substantial surplus attributable to merchandise trade in 1978 was enhanced by a greatly increased surplus on services account. This surplus was boosted by a surge in the erratic flow of interest,profits and dividends, and also by the steady growth of net receipts from tourism. A particularly significant contribution also came from the rapidly growing receipts by France for civil engineering and professional services. The growth in the outflow of net transfers was damped last year and their level is expected to be unchanged in 1979 for cyclical reasons. This item, which is dominated by migrants' remittances is a permanent part of the EC current account, representing a structural feature of the Community's productive process.

In 1978 the current account surplus of the EC was partly offset by an increased net outflow of direct and portfolio investment (particularly direct investment - see below) and by an increase in the net flow of commercial and other credits made by the non-bank private sector. These features of the capital account were,however,less than the net inflow through the banking system and the errors and omissions item. The net result of commercial banking operations reflects the world-wide shift out of dollar assets concentrated in the last quarter (even though the pressure was largely taken on the exchange

rate) while the errors and omissions figure probably reflects a shift in leads and lags having a similar explanation. The establishment of figures for 1979 can only be very tentative, but preliminary evidence indicates that the net outflow of direct investment has continued. On the other hand the disappearance of the trade surplus should improve the balance of new trade credit extended and taken. Although the speculative funds which moved into Community banks last year have already flowed out again to some extent and further withdrawals are to be expected, the renewed OPEC surplus should nevertheless enable those banks to be net takers of funds on a significant scale this year. Thus in overall terms the capital account should largely offset the current account deficit this year, but there may also be some drawing on net reserves in addition to significant repayments to the IMF.

The estimates given in Table 8.2 for the Community's merchandise trade in 1979 include an increase of EUA 9.3 bn in the oil bill, offset by extra exports of EUA 3.8 bn to the oil producing countries. Allowance is also made for a significant rise in the dollar cost of raw materials, and a rise in the dollar cost of other imports. It has, however to be borne in mind that because the major fall in the exchange value of the US dollar came late last year, the average exchange rate of the EUA against the US dollar is expected to be about 6% higher this year than last, giving a boost to the trade account that cannot be expected to be repeated in 1980 and may well be reversed. The trade account next year will also be adversely affected by the US recession. The process reflected in the deterioration of the current account in 1979 therefore cannot be regarded as complete. The Community, however, had net reserves of EUA 88 bn at the end of 1978, equal to 56% of 1978 merchandise imports, and is therefore well placed to cope with the emerging situation.

Developments over recent years, and particularly exchange rate changes, have given the US a marked advantage in terms of unit labour costs and it has been suggested that this must influence decisions on the location of production and new investment, with consequences for the capital account in the Community's balance of payments, particularly vis-à-vis the US . The impact of location decisions on a country's external account is greatly damped by the ready

recourse of non-resident firms to local (or third country) finance, but published figures on direct investment - in spite of the difficulties of observation involved, which are illustrated by the discrepancies among the figures for intra-Community flows appearing in Table 8.4 - may give an indication of trends. Intra-Community direct investment has grown rapidly in recent years, although since, in 1977, it represented only 1% of gross fixed investment in the EC, its significance as an indicator of integration should not be exaggerated. At the same time the inflow from the US has stagnated in value terms (and therefore fallen in real terms) while the flow in the reverse direction has increased rapidly, so that the flows between the EC and the US were virtually balanced in 1977.

Recent data recorded by the US Department of Commerce indicate that the flow of US direct investment to Europe increased substantially in 1978, that the (negative) balance net of flows in the reverse direction increased by about EUA 800 million (while remaining below its 1973 level) and that this net outflow increased again in the early months of 1979. These outflows may however have been swollen by intra-company cash flows motivated more by exchange rate fears than by production strategy. Such evidence as is available from within the Community of a significant outflow of direct investment to the US this year is anecdotal and relates largely to the chemical industry.

In global terms, the net flow of direct investment from the US has risen regularly since 1971 and exceeded EUA 8 bn in 1978 (inward EUA 5 bn, outward EUA 13 bn). It may tentatively be concluded that the global US figures indicate the cost advantage of the developing countries while the figures for flows between the Community and the US between 1971 and 1977 point to an advantage which the US has vis-à-vis its industrialised competitors.

While the role of the Community is still small when compared to that of the US, it is of interest that the EC emerged between 1971 and 1977 as a significant supplier of direct investment in net terms, particularly to its neighbours in Europe and to the developing countries. In net terms the EC was a provider of EUA 2.1 bn of direct investment in 1978.

The positions of Member States

The Community's ability to build up a substantial cumulative surplus of merchandise trade in recent years has been very largely attributable to the Federal Republic of Germany which had a surplus of EUA 19 1/2bn (fob/fob) in

1978 on this account and had a dominant position also among the extra-Community figures. In terms of recent historical development, however, the performance of France and,even more, Italy in shifting from substantial merchandise trade deficit positions in 1976 to significant surpluses in 1978, is also noteworthy. The emergence of deficits in the Netherlands and the BLEU and the persistence of Danemark's are, however, disquieting. The turn-round in the Community's external position in 1979 will be most apparent in the German figures, although the Federal Republic will retain a substantial merchandise surplus. The deterioration in the positions of France and Italy will be less dramatic as their export prices are expected to rise at least as rapidly as those of their competitors, while German export prices are expected to rise less rapidly, an adjustment necessary to restore the Federal Republic's competitiveness. Italy's merchandise trade account will also be adversely affected by an acceleration of economic growth. A particularly disturbing feature of 1979 has, however, been the growth in the merchandise trade deficit of the U.K. (and notably the growth in the volume of UK imports) while the benefits of North Sea Oil have been substantial and increasing..

The Federal Republic of Germany continues to be the only member country with a substantial deficit on services account (EUA 6 1/2 bn last year) : the UK continued to record the largest surplus in the Community on this account (EUA 6.2 bn in 1978) but its position is now deteriorating, and is in danger of being overtaken by France with EUA 4.3 bn last year and Italy - benefiting from a continuing rise in tourist receipts - with EUA 3.0 bn. To some extent the Community's deficit on transfer account reflects its commitment to economic development programmes overseas, but other factors are also at work. The Federal Republic and France together experienced an outflow of EUA 3.6 bn in migrants's remittances in 1978, some of which benefited Italy.

The Community's favourable current account balance in 1978 was the resultant of divergent performances of Member Countries. The deficits were concentrated among the smaller countries and performances ranged from those of Italy (current account surplus equal to 2.4% of GDP) and the Federal Republic of Germany (1.4%) to that of Ireland (current account deficit equal to 2.6% of GDP).

Among capital transactions Germany and the UK were distinguished from other members by being, in net terms, large providers of direct and portfolio investment last year, a role expected to continue in 1980. The substantial influx of liquid funds to the Community in 1978 was essentially a function of the strength of the Deutsche mark and West German banks increased their net liabilities by EUA 6.4 bn while the banking systems of France and Italy, on the other hand, decreased their net indebtedness in line with official policy and there was also a significant outflow from UK banks and money market assets. In general, the external capital transactions of member countries was far from homogeneous in 1978. The Community's gain of net reserves was of the same order of magnitude as the current account surplus in 1978, but the gain was concentrated in Germany, in Italy and, to a smaller degree, in France, while the UK suffered a reserve loss which was perhaps to be expected after the massive inflows received by that country in 1977. The Dutch authorities also drew down their reserves last year while the Danish reserves actually rose significantly.

In 1979, Germany has been affected by a predictable reversal of some of the speculative flows of 1978 and this, together with a continuing outflow of direct investment is expected to reduce that country's massive reserves over the year as a whole. On the other hand, the UK reserves showed a substantial increase in the first seven months of the year attributable to both banks and non-banks, but it must be supposed that much of this gain will be required to finance the current account deficit from now on. It appears that the Italian banking system also is increasing its indebtedness this year to finance repayments of quasi-official market borrowing to make a contribution to a further increase in official reserves.

Italy and the UK have taken advantage of their favourable financial position over the last eighteen months to make substantial repayments to the International Monetary Fund, for the most past ahead of schedule, and both countries have now repaid all their borrowings in the credit tranche and reduced (in Italy's case liquidated) their recourse to the Oil Facility. In 1978 Italy also completed repayment of its medium term financial assistance from the EC and of its gold-backed loan from the Deutsche Bundesbank.

TABLE 8.1

World current account balances 1974-1979 (USD billion)

	1974	1975	1976	1977	1978*	1979*
EC	-11.4	1.1	- 7.0	1.3	17.9	- 4 1/2
US	2.1	18.3	4.6	-14.1	-13.9	- 5
JAPAN	- 4.7	- 0.7	3.7	10.9	16.5	- 3
OECD total	- 27.5	- 0.3	-19.1	-26.3	8.9	-31
OPEC	59.5	27.3	36.5	29.0	7.0	44
Other developing countries	-23.5	-37.5	-25.5	-23.0	-35.0	-44
Other countries	- 6.5	-14.0	-10.0	- 7.0	- 5.0	- 7
Residual	- 2	24.5	18.1	27.3	24.0	38
p.m. 1 EUA = USD	1.19	1.24	1.12	1.14	1.27	1.35

Source : Commission staff

*) Estimate

TABLE 8.2

Balance of Payments of the Community 1974-1979 (EUA billion)

	1974	1975	1976	1977	1978	1979
Merchandise trade :						
Exports (fob)	113.62	120.20	140.73	162.79	172.33	199
Imports (fob)	116.55	111.47	141.73	154.80	156.25	198
Net	- 2.93	8.73	- 1.00	7.99	16.08	1
Services, net	2.04	1.29	4.75	4.48	9.29	5,5
Transfers, net	- 8.64	- 9.19	- 9.99	-11.29	-13.05	- 9,8
Current account	- 9.53	0.83	- 6.24	1.18	13.37	- 3,3
Capital account :						
Direct and portfolio investment	0.83	- 1.42	- 1.34	- 0.23	- 2.78	
Other non-monetary transactions	3.16	6.43	6.63	8.39	- 2.09	
Commercial banking operations	-2.48	- 7.43	- 0.93	4.81	2.72	
Errors and omissions	0.88	1.40	0.80	7.76	1.92	
Official Settlements Balance	- 7.14	- 0.19	- 1.08	21.91	13.14	

Source : Eurostat; figures for 1978 and 1979 are estimates of Commission Staff.

TABLE 8.3

Geographical structure of EC trade (fob-cif EUA billion)

	Imports			Exports			balance	
	1974	1978	% change	1974	1978	% change	1974	1978
Intra-Community trade	115.7	183.9	+ 58.9	117.1	185.8	+ 58.7	+ 1.4	+ 1.9
Extra-Community trade								
US	20.3	28.3	+ 39.4	15.9	23.1	+ 45.3	- 4.4	- 5.2
Japan	4.4	8.7	+ 97.7	2.8	3.7	+ 32.1	- 1.6	- 5.0
OECD Europe	25.3	42.6	+ 68.4	36.0	49.1	+ 36.4	10.1	6.5
OECD Total	56.0	86.2	+ 53.9	60.5	82.8	+ 36.9	4.5	- 3.4
Developing countries	61.4	71.2	+ 16.0	35.2	66.5	+ 88.9	-26.2	- 4.7
Countries with state-trade	8.9	14.0	+ 57.3	10.9	15.4	+ 41.3	2.0	1.4
Total	130.8	178.3	+ 36.3	114.2	173.9	+ 52.3	-16.6	- 4.4
Total trade	246.5	362.1	+ 46.9	231.3	359.7	+ 55.5	- 15.2	- 2.4

Source : Eurostat and OECD series A

TABLE 8.4

EC Direct investment flows EUA billion

	Inward		Outward		Net	
	1971	1977	1971	1977	1971	1977
Transactions with :						
EC	1.09	2.92	1.52	2.84	-0.43	0.08
US	1.62	1.68	0.44	1.53	1.18	0.15
Japan	0.02	0.16	0.02	0.07	0	0.09
Other OECD	0.61	1.16	0.60	1.63	0.01	-0.47
Developing countries	0.20	0.48	0.74	1.70	-0.54	-1.22
Total	3.85	6.92	3.64	8.50	+0.21	-1.58

Source : Eurostat and UK Department of Industry

TABLE 8.5

Summary balance of payments of Member States 1966-1978* (EUA billion)

		1974	1975	1976	1977	1978	1979
DK	Current account	- 0.77	- 0.41	- 1.71	- 1.47	- 1.16	- 1.8
	Capital movements (1)	0.41	0.39	1.63	2.16	2.36	.
	Official settlements balance	- 0.36	- 0.02	- 0.08	0.69	1.20	.
D	Current account	8.23	3.21	3.44	3.24	6.88	- 0.9
	Capital movements (1)	- 8.85	- 3.94	- 0.32	0.71	0.86	.
	Official settlements balance	- 0.62	- 0.73	3.12	3.95	7.74	.
F	Current account	- 5.01	- 0.05	- 5.45	- 2.92	2.92	0.3
	Capital movements (1)	4.75	2.95	2.99	3.56	- 0.67	.
	Official settlements balance	- 0.26	2.90	- 2.46	0.64	2.25	.
IRL	Current account	- 0.57	- 0.02	- 0.27	- 0.25	- 0.25	- 0.9
	Capital movements (1)	0.69	0.34	0.72	0.60	0.33	.
	Official settlements balance	0.12	0.32	0.45	0.35	0.08	.
I	Current account	- 6.72	- 0.47	- 2.52	2.00	5.00	3.5
	Capital movements (1)	2.86	- 1.75	2.31	3.03	0.28	.
	Official settlements balance	- 3.86	- 2.22	0.21	5.03	5.28	.
BL	Current account	0.77	0.55	- 0.28	- 0.33	- 0.67	- 0.9
	Capital movements (1)	- 0.61	- 0.15	- 0.25	0.27	0.42	.
	Official settlements balance	0.16	0.40	- 0.53	- 0.06	- 0.25	.
NL	Current account	1.73	1.34	2.39	0.26	- 0.91	- 0.3
	Capital movements (1)	- 0.90	- 1.05	- 2.16	0.01	0.19	.
	Official settlements balance	0.83	0.29	0.23	0.27	- 0.72	.
UK	Current account	- 7.19	- 3.29	- 1.83	0.46	1.55	- 2.3
	Capital movements (1) (2)	4.27	2.18	- 0.16	10.59	- 3.99	.
	Official settlements balance	- 2.92	- 1.11	- 1.99	11.05	- 2.44	.
EC(3)	Current account	- 9.53	0.83	- 6.24	1.18	13.37	- 3.3
	Capital movements	2.39	- 1.02	5.16	20.73	- 0.23	.
	Official settlements balance	- 7.14	- 0.19	- 1.08	21.91	13.14	.

(*) Figures in this table differ from those appearing in chapter 1 because chapter 1 is based on national accounts data whereas the above table is based on balance of payments definitions. Figures for 1979 however are estimates based on national accounts definitions.

(1) Including errors and omissions.

(2) For the sake of consistency, the UK figures for capital movements include foreign currency borrowing by the Government and the public sector under the exchange cover scheme.

(3) EC figures differ from corresponding totals of member country figures because of methodological and timing differences affecting the compilation of national figures.

Sources : Eurostat and estimates of the Commission's departments for 1979.

9. The European Monetary System: the first six months

On the 13th March the EMS came into operation after a delay of 2 1/2 months due to difficulties concerned with the implications of the system for certain aspects of the Common Agricultural Policy. On the 12th March central rates against the European Currency Unit (ECU) were chosen by the participants; for the members of the snake they were based on the snake central rates and for Ireland, Italy and France they were based on their market rates. Although the UK decided not to participate in the exchange rate obligations of the system a market related central rate for sterling was chosen for the purposes of calculating the divergence indicator.

During the first six months of its existence the EMS experienced some strains, but for most of this period, these were not unduly severe. Among the narrow band currencies, i.e. those currencies adhering to margins of 2 1/4 % on either side of their central rates, the Belgian franc, which had previously been weak in the snake, remained so in the EMS and had to be supported, at first against the Danish Krone and later against the Deutschmark. Furthermore the Belgian franc crossed its threshold of divergence in early May and remained divergent continuously until towards the end of June. As a result of these pressures the Belgian authorities tightened their monetary policy and commenced diversified interventions in the currencies of the other participants as provided for in the rules of the system. These actions led to an easing of the pressures on the franc which moved out of its zone of divergence in late June. Subsequently the franc remained close to its bilateral limit against the Deutschmark but only breached its threshold of divergence briefly again at the end of August.

During the period immediately following the start of the system the Danish krone was at the top of the narrow band and touched its upper intervention limit against the Belgian franc. However, at the end of May it weakened sharply and fell from the top of the band to the bottom in the course of a few days. Over the next three months it remained at or very close to its lower intervention limit against the deutschmark. It was also below its threshold of divergence throughout the first half of June and fell below it momentarily on a number of occasions during the following months.

The other currencies participating in the narrow band remained well within their intervention points with the exception of the Deutschmark and very briefly the Irish pound. Although Ireland had chosen a central rate that was slightly different to that of the UK, the Irish authorities had decided to maintain the market rate at par with sterling for as long as possible. However, the steep rise in sterling resulted in the Irish pound reaching its intervention ceiling against the Belgian franc on the 30th March and the Irish authorities were led to break the parity with sterling in order to maintain the Irish pound within its EMS limits. The Central Bank of Ireland then began to administer the Irish pound within the EMS for a transitional period pending the development of the Irish foreign exchange market.

The Deutschmark moved to the top of the narrow band in May and remained there, almost without interruption, for the next four months, in opposition to the Belgian franc and the Danish krone. Throughout most of this period, however, such strains as the system experienced resulted from the weakness of the Belgian franc and the krone, not only against the mark, but also against other Community currencies rather than from the strength of the deutschmark against other Community currencies in general. The French franc and the Dutch guilder both remained comfortably inside the permitted margins.

Moving in its wider band of 6% the Lira was strong from the moment when the system went into operation and from the end of March it consistently stood at a premium, varying between 1% and 3 1/2% against which ever was the strongest currency in the narrow band.

The pound sterling, which remained outside the exchange rate regime of the EMS, was even stronger than the Lira. The upward pressure which had commenced in February, strengthened considerably in March so that in early April the UK authorities decided to confine their intervention in the foreign exchange market to smoothing operations, as the inflows of capital were threatening the UK's domestic money target. Sterling, however, continued to strengthen through June and July and by the end of July had appreciated by 11.7% in effective terms and by 9.7% against the ECU since the 15th of March. In August sterling fell back from

the high point reached at the end of July but nevertheless remained firm until mid-September, when it weakened sharply.

There was substantial intervention by the EMS participants in the six months under review. The main currency used for intervention at the bilateral limits was the deutschmark, which was at or close to its ceiling in the narrow band for nearly four of the first six months of the system's existence. The central banks of both Belgium and Denmark also had to intervene at the bilateral limits from time to time.

One of the provisions of the Resolution of the Council was that intervention within the EMS should in principle be in Community currencies (Article 3.3). However, most of the intervention by Community central banks that actually took place during the months following the start of the system was designed to control movements of the dollar rather than to relieve strains within the EMS. For this reason, the greater part of official intervention by the EC Central Banks continued to be in dollars.Although the Community as a whole was a net purchaser of dollars there were, in effect, both substantial sales and purchases in the period under review. Much of the intervention took place in the context of the wider cooperation among central banks and more especially in the context of the cooperation between the US authorities and some other major central banks, which had been intensified after the US measures of November 1st 1978 and whereby the US undertook a much more active role in supporting the dollar on the foreign exchange markets.

Nevertheless, intervention in Community currencies within the margins has increased substantially. Such intervention had been relatively rare in the snake but is provided for in the EMS rules in terms of diversified intervention by the authorities of a currency which has been indicated as divergent. Here too the Deutschmark was used extensively in intervention although other Community currencies were also used, for example sterling by the Irish authorities.

In accordance with Article 3.6 of the Resolution of the European Council of 5 December 1978, the performance of the EMS was reviewed after the system had been in operation for six months. The conclusion of this review was that the system was,on the whole, working satisfactorily, and that no changes were necessary, at least for the time being.

Following certain disturbances on the foreign exchange markets in the third week of September, which had their origin largely outside the Community, the finance ministers and central bank governors of the countries participating fully in the EMS met on 23rd September and agreed on a realignment of exchange rates whereby the deutschmark was revalued by 2 % and the Danish krone devalued by 3 % against the other participant currencies. The changes in central rates against the ECU thus entailed are shown in Table 9.1 below.

Table 9.1

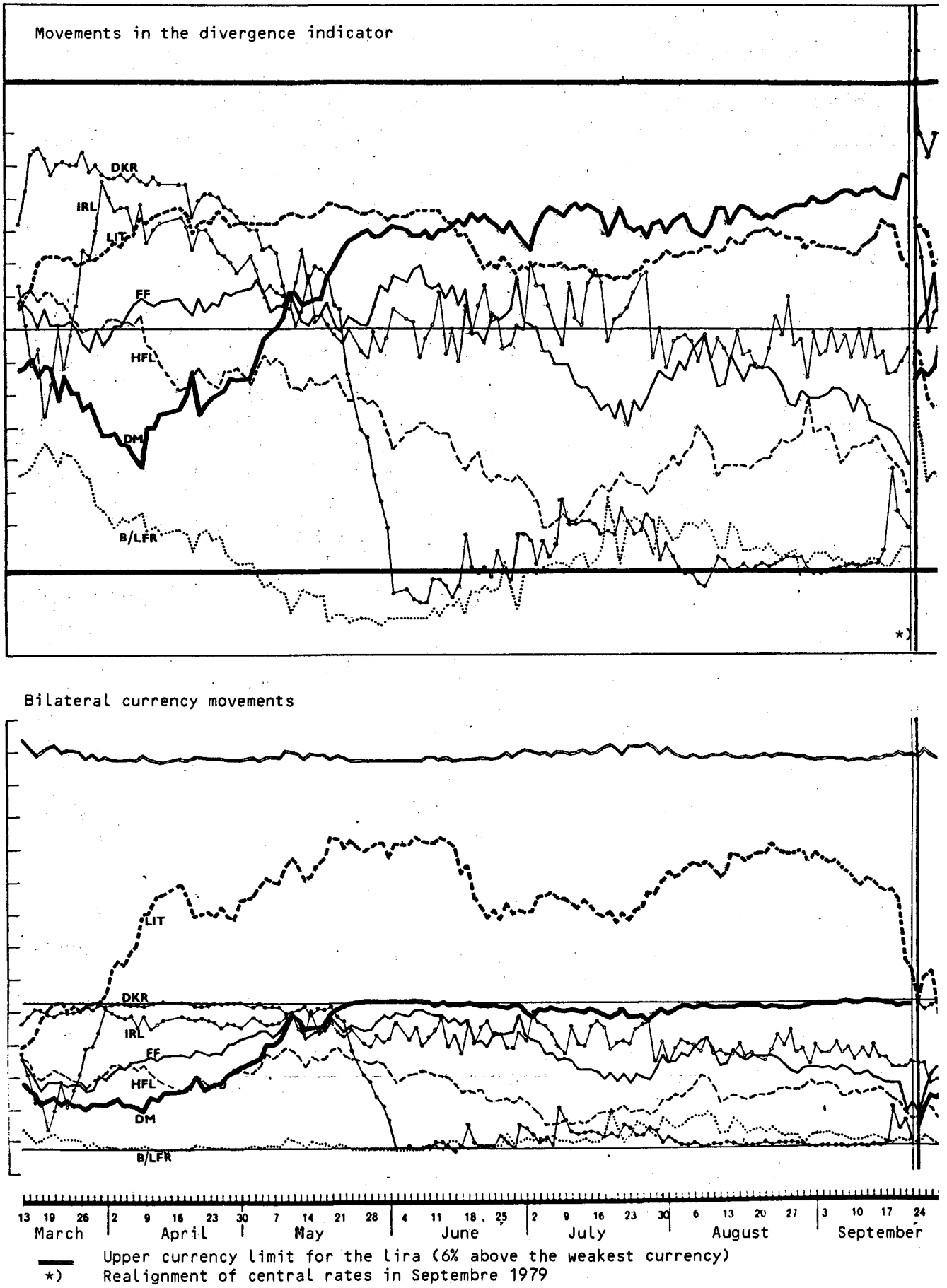
Central rates of Community currencies vis-à-vis the ECU

(units of national currency per ECU)

	BFR/LFR	HFL	DKR	DM	LIT	FF	IRL
12 March 1979	39.4582	2.72077	7.08592	2.51064	1148.15	5.79831	0.662638
24 Sept. 1979	39.8456	2.74748	7.36594	2.48557	1159.42	5.85522	0.669141
% change (– = revaluation of national currency)	+0.98	+0.98	+3.95	-1.00	+0.98	+0.98	+0.98

EUROPEAN MONETARY SYSTEM

GRAPH 9.1



Upper currency limit for the lira (6% above the weakest currency)

*) Realignment of central rates in Septembre 1979

10. Energy

This chapter describes the economic aspects of the trend of demand for energy and examines how this demand has been met from the various sources (in particular imported energy) in the European Community since 1973.

Three major developments characterised the Community's demand for energy and the ways in which it was met during the twenty years up to the oil crisis of 1973-1974. Total energy demand increased steadily at a rate close to that of economic activity, for the elasticity of energy demand to DGP was close to unity (see Table 10.1). The proportion of the demand met by oil grew very rapidly. In the Community as a whole, it increased from 39.4% in 1963 to 61% in 1973 (see Table 10.2). The posted price of oil remained stable - or even declined in nominal terms ($1.84 per barrel in 1953 and $1.90 per barrel in 1972), while market prices for crude generally settled at lower levels owing to discounts. The nominal price of regular grade petrol, exclusive of tax, generally fell from the beginning of the 1950s to the beginning of the 1970s, while nominal prices at the pump remained more stable owing to successive increases in taxation.

Trends since 1973

Since the 1973-1974 oil crisis, consumption in the Community has been declining : gross consumption of primary energy was practically the same in 1978 as in 1973. However, it is very difficult to say whether the decline implies any significant reduction in the ratio between the rate of growth of energy consumption and that of economic activity. It is difficult to draw conclusions from the experience of recent years, which have been characterized by recession, sharp changes in relative prices, the implementation of target-oriented programmes and accelerating sectoral and technical changes. Furthermore, experience seems to vary greatly from one member country to another.

As the demand for energy peaked the proportion of primary energy requirements covered by oil fell markedly from 61% in 1973 to 55.7% in 1978. During the same period, the shares of natural gas and nuclear energy increased, while that of solid fuels continued to diminish, although much less rapidly than before 1973. This trend in the structure of the energy balance is moving in the required direction of a reduction in the Community's dependence on imported oil; the contribution of imported oil to cover the Community's energy needs fell from 60.5% in 1973 to 48.4% in 1978.

This reduction is the result of two factors. Firstly, the Community's domestic production of oil increased considerably during the period in question (from 11.8 million toe in 1973 to 64.5 million toe in 1978) and will probably have doubled by 1990. This was mainly due to the exploitation of North Sea oil, spurred on by the rise in the price of crude oil in 1973. Secondly, there have been changes in the proportions of the various fuels used in thermal power stations for the production of electricity. The share of oil fell steadily from some 35% in 1973 to only 25.5% in 1977 (see Table 10.3).

In addition to these two factors, the increase in the generating capacity of nuclear power stations and the introduction of energy-saving measures also played a role.

Not all member countries have launched nuclear programmes or pursued such programmes to the same extent. Denmark, Luxembourg and the Netherlands have chosen not to build nuclear power stations. Between 1973 and 1978, the installed generating capacity of reactors linked to the network in the Community increased from 11.5 GW(e) to 28.10 GW(e), while the capacity of reactors under construction increased from 22.3 GW(e) to 42.9 GW(e). If we add the figures for reactors ordered or planned (which show an increase from 20 GW(e) in 1973 to 40 GW(e) in 1978), the total generating capacity of existing nuclear power stations and of those under construction or planned more than doubled in five years, despite difficulties and resistance, from 53.9 GW(e) in 1973 to more than 111 GW(e) in 1978. Table 10.4 gives a breakdown by country of this unevenly distributed increase in the generating capacity of nuclear power stations.

In the same period, the proportion of electricity generated by nuclear power stations almost doubled in the Community, reaching more than 10% in the Federal Republic of Germany, France and the United Kingdom and almost 25% in Belgium.

In the energy-saving field, various programmes have been implemented in each of the Community countries and have continued to spread between 1975 and 1979. It is difficult to gauge the impact of these measures. If it is assumed that, without these measures, the relationship between energy consumption and economic growth would have remained steady on balance (non-verified hypothesis), then the amount of energy saved in 1977 (i.e. the difference between theoretical consumption and observed consumption) was between 70 and 80 million tonnes, or between 7% and 8% of the Community's total energy consumption in that year. This saving was due both to the energy-saving measures and to trends in energy prices and production techniques, although the precise role played by each of these factors cannot be distinguished. It is certain, however, that considerable technological potential for energy savings still exists. Various studies suggest that by 2000-2020, energy savings could amount to:

- 15% to 35% in the industrial sector
- 20% to 35% in the transport sector
- up to 50% in the domestic and tertiary sectors.

The movement in the real consumer prices of energy products is a critical indicator in this connection, since it measures the real impact of increases in current prices. Table 10.5 shows the index of the relative price of regular grade petrol at the pump and exclusive of taxes compared with the price paid by the consumer.

The price of petrol at the pump can have played only a very limited part in reducing demand, since, in relative terms, it has fallen or marked time in six countries out of nine since 1970 the sharpest increase - 14 % - having been recorded in France and Italy over a ten-year period). If we examine the movement of real prices at the pump since 1975 (after the immediate crisis of 1973), the trend is one of steady or even falling prices. The table also shows that in some member sountries the relative price of petrol is even lower than in the 1960s.

This result, which relates only to regular grade petrol, seems to be corroborated by the movements in a more summary indicator of the price of energy. The index of final energy uses in the general consumer price index shows prices holding steady or falling between 1974 and 1978 in all but one country (see table 10.6).

Consequences of the recent oil price increases

The suspension of oil exports from Iran between 27 December 1978 and 4 March 1979, followed by their resumption at a rate almost two million barrels a day below that expected (oil exports from Iran had reached almost five million barrels a day in 1978), combined with increasing demand as a result of the severe winter of 1978/79, led to great strains on the oil market. Although the deficit in supply in relation to demand was slight - some two million barrels a day, or 3 % to 4 % of world demand - these strains led to a series of price increases, scattered at first but eventually involving all OPEC countries on 26 June. The nominal reference price of crude oil increased from $ 12.70 per barrel on 31 December 1978 to $ 18 per barrel on 1 July 1979 (i.e. increase of almost 42 % in six months). At the same time, other categories of crude oil, which were subject to various premiums over and above the price of Arabian light, reached $ 23 per barrel. All in all, given the structure of Community oil supplies from various sources, the dollar price (fob) per barrel of imported oil increased by almost 60 % between 1978 and 1 July 1979. Given no further

price increases in 1979 and a stable supply structure, it is estimated that the average dollar price (fob) per barrel of oil imported by the Community will be 37. 5 % higher in 1979 than in 1978.

The cost of imported oil, or the "oil bill" will be some $ 12 500 million more in 1979 than in 1978, even allowing for increased production by the United Kingdom. This increase corresponds to 0.5 % of Community GDP in 1979 and it will rise to about $ 20 000 million or almost 1 % of Community GDP between 1 July 1979 and 1 July 1980.

It is still too early to judge to what extent the latest crude oil price rises have been passed on in the prices of petroleum products. Pricing and tariffication systems vary greatly from one country to the next, so that adjustments may take anything from a few weeks to several months. However, between 1 January 1979 and 15 July 1979, prices at the pump increased less rapidly than prices exclusive of taxes in almost all member countries. Over a longer period, from January 1978 to July 1979, the method of taxation in almost all the Community countries has meant that the selling prices of all fuels increased less rapidly than pre-tax prices. Thus, the proportion of duties and taxes in the selling price of fuels has fallen since January 1978 in all but two Community countries. On 15 July 1979, duties and taxes represented between about 65 % of the price of petrol to the consumer in Denmark and 44 % in the United Kingdom and between 34.7 % of the price of domestic fuel in Denmark and 5.3 % in the United Kingdom or 3.6 % in Ireland.

Outlook

All the member countries will be faced for several years with a twofold task, more difficult in some countries than in others, depending on specific national situations.

First, they must renew and intensify their efforts to save energy, to develop energy resources other than oil and to find new sources of energy. Secondly, they must also be permanently ready to

adjust their short-term economic policies so as to minimize the effects of any further oil price rises. Temporary shortages of the type that affected the oil market during the first few months of 1979 may reappear, with consequences similar to those briefly described above.

Ways of reducing oil imports were consideredat national level prior to the last European Council meeting, using the time horizon 1990. At that stage, all the Member States aimed at limiting the amount of oil imported, but all except two (Denmark and the United Kingdom) forecast an increase in their oil imports between now and 1990 in the programmes presented in February 1979. Efforts to reduce dependence are being made : virtually everywhere oil imports are expected to expand less than energy demand generally. But two countries - Belgium and in particular the Netherlands - still forecast that the proportion of their energy requirements met by imported oil will remain steady or even increase.

Electricity generation programmes are even more varied. Three countries, France, Ireland and Italy, expect demand for electricity to expand very rapidly, but it is to be feared that - at least in Ireland and Italy - greater demand will not be accompanied by a corresponding increase in the number of coal-fired power stations and the number of nuclear power stations (see Table 10.7).

The figures for the period 1973-1978 show the very unequal commitment of Community countries to nuclear programmes. To achieve the original aim of 140 GWe of installed nuclear generating capacity by 1990 - which would enable the Community to cover some 210 million toe of primary energy requirements in the electricity generating sector - it would be necessary, this year and in each succeeding year, for between 12 and 15 new power stations to be ordered and started on. This aim now seems to be out of reach.

Coal production (210 million tonnes in 1978) should increase to 240 million tonnes, but the financial cost will be heavy even if oil prices rise further during the period.

Since this assessment of objectives, the European Council, meeting in Strasbourg on 21 and 22 june 1979, has adopted an aim, subsequently reaffirmed at the Tokyo Economic Summit, of limiting oil imports and of maintaining Community imports at the 1978 level or lower (i.e. 472 million tonnes) during the period 1980-1985).

The achievement of this objective entails the need to fix new objectives for each member country; if it is not to be achieved by means of a growth rate as low as to have intolerable effects on employment, even greater efforts than at present will be needed to dissociate energy consumption from economic growth, to reduce the proportion of energy requirements met by imported oil and to develop alternative sources of energy.

The medium term relationship between economic growth and energy consumption must therefore be considered attentively. The time scales normally associated with the energy sector are such that potiental energy resources for the next five to ten years have already been more or less determined technically. If it is assumed, in the light of OPEC's production target, that the total energy supply to the OECD area will grow by 2,5 % to 3 % a year at most between now and 1985 (as against 5 % a year between 1960 and 1973), medium-term economic policies of the Community countries must take account of the need to minimize the energy constraint on growth potential.

A mechanical calculation, based on tne available estimates for crude oil supplies from OPEC countries, present energy consumption patterns and the structure of foreseeable energy balances, gives 3,5 % a year up to 1985 as the maximum rate of economic growth compatible with the supply of energy (maximum not excluding vulnerability to possible strains on the oil market). Although the validity fo this result should

not be overestimated, since it is based on many uncertain hypotheses about both energy supply and energy demand, it does illustrate well the new constraint which availability of energy will constitute in the medium term for the growth of oil importing industrialized countries - at least until a new relationship is established between the rate of growth of GDP and that of energy consumption.

TABLE 10.1

Elasticity of energy consumption to GDP (ratio of the average annual rate of growth of energy consumption to that of GDP

	1970/1963	1973/1968	1978/1973	1978/1975	1978/1976	1978/1977
DK	1.57	0.83	0.41	1.68	2.85	*
D	0.92	1.09	0.31	1.12	0.87	2.17
F	0.97	1.15	0.07	0.94	0.67	1.14
IRL	1.37	1.20	0.14	0.85	0.67	0.35
I	1.67	1.39	0.21	0.28	- 0.87	- 1.32
NL	1.38	1.71	- 0.17	0.23	- 2.08	- 3.50
B	1.06	0.97	- 0.15	1.03	0.78	1.77
L	0.93	0.67	- *	- 0.72	- 1.63	- 1.27
UK	0.64	0.51	- 0.77	0.80	1.10	0.71
CE-9	1.00	1.03	0.04	0.84	0.51	0.87

Source: 1963 to 1977 : Eurostat;
1978 : Commission estimates.

TABLE 10.2

Community energy balance, 1958-1990

	1958 EC-6			1963			1970			1973		
	Domestic Prod.	Net Imports	Gross Cons.	Domestic Prod.	Net Imports	Gross Cons.	Domestic Prod.	Net Imports	Gross Cons.	Domestic Prod.	Net Imports	Gross Cons.
						million toe						
Solid fuels	177,9	2,5	180,4	304,6	29,8	334,4	222,9	21,9	254,5	194,1	25,5	219,6
Oil	3,0	30,8	33,8	14,3	235,9	246,1	14,4	499,5	502,7	11,8	587,6	592,5
Natural gas	1,7	-	1,7	12,4	-	12,1	61,0	9,9	61,6	114,2	3,6	117,8
Nuclear energy	22,6 **	0,5 **	23,1 **	29,5			29,47					
Other					1,3	30,8		1,9	42,2	12,5	14,5	27,0
TOTAL	205,2	33,8	239,0	360,8	267,0	623,4	327,77	533,25	861,8	346,7	631,2	971,0
						as % of total						
Solid fuels	86,8	7,4	75,5	84,4	11,2	53,6	68,0	4,1	29,5	55,9	4,1	22,6
Oil	1,4	91,1	14,1	3,9	88,3	39,4	4,4	93,7	58,3	3,4	93,0	61,0
Natural gas	0,8	-	0,7	3,4	-	1,9	18,6	1,8	7,1	32,9	0,6	12,1
Nuclear energy	11,0 **	1,5 **	9,7 **	8,2	0,5	5,0	9,0	0,3	5,0	4,0	-	1,4
Other										3,6	2,3	2,8
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

(*) Any differences between the sum of the first two columns and the figures in the third column represent variations in stocks.
(**) 1958: Primary electrical anergy.
Source: SOEC - Overall energy balance-sheets.

TABLE 10.2 (Cont'd)

1978			1990 (a)			1990 (b)		
Domestic Prod.	Net Imports	Gross Cons.	Domestic Prod.	Net Imports	Gross Cons.	Domestic Prod.	Net Imports	Gross Cons.
			Million toe					
172,8	25,6	203,2	194	57	251	175	55	230
64,5	470,0	541,7	87/147	572/497	659/644	145	470	615
135,1	30,8	163,4	115/130	121	236/251	130	120	250
28,3	-	28,3	204	-	204	160	-	160
32,7	2,7	35,4	39	4,0	43	40	5	45
433,4	529,1	972,0	639/714	754/679	1393	650	650	1300
			As % of total					
39,8	4,8	20,9	30,3/27,2	7,5/ 8,4	18,0	26,9	8,4	17,7
14,9	88,8	55,7	13,6/20,6	75,8/73,2	47,3/46,2	22,3	72,3	47,3
31,1	5,8	16,8	18,0/18,2	16,0/17,8	16,9/18,0	20,0	18,5	19,2
6,5	-	2,9	31,9/28,5	-	14,6	24,6	-	12,3
7,5	0,5	3,6	6,1/ 5,4	0,5/ 0,6	3,1	6,1	0,7	3,5
100	100	100	100	100	100	100	100	100

Any differences between the sum of the first two columns and the figure in the third column represent variations in stocks.

1990 (a): National sources, mid-February 1979 programmes.

1990 (b): Alternative projection by the Commission's staff.

Source: "Energy objectives of the Community for 1990 and convergence of policies of Member States" (Doc. COM(79) 316 of 14 June 1979).

TABLE 10.3

Shares of the different fuels used in electrical power stations in the Community (EC-9

	1970	1971	1972	1973	1974	1975	1976	1977
Coal, lignite and peat	54,9	51,3	45,1	45,0	42,6	43,9	46,2	47,1
Oil	29,6	31,8	35,4	34,7	33,0	29,0	28,0	25,5
Natural gas	6,1	7,6	9,6	10,6	13,7	14,8	13,4	13,1
Heat (particularly nuclear)	5,8	6,0	6,7	6,4	7,3	9,1	9,3	11,4
Other	3,6	3,3	3,2	3,3	3,4	3,2	3,1	2,9
Total	100	100	100	100	100	100	100	100

Source: Eurostat, overall energy balance-sheets, 1970-77.

TABLE 10.4

Nuclear power stations - installed generating capacity and capacity under construction GW(e)

1973 - 1978

		DK	D	F	IRL	I	NL	B	L	UK	CE-9
1973	in service	-	2,23	2,86	-	0,6	0,5	0,01	-	5,3	11,52
	under construction	-	9,8	3,6	-	0,8	-	1,65	-	6,4	22,33
	orders and plans	-	8,6	8,6	-	1,9	0,9	-	-	-	20,06
1973	in service	-	8,98	7,44	-	1,44	0,5	1,66	-	8,08	28,10
	under construction	-	10,6	22,9	-	1,96	-	3,76	-	3,70	42,96
	orders and plans	-	14,4	13,3	0,62	9,2	-	-	-	2,50	40,10

* Plans at advanced stage
** Plans being worked out

Source: Eurostat, electrical energy statistics.

TABLE 10.5

Trends in the relative price of regular grade petrol(*) in Community countries[1] (1970 indices = 100

	DK		D		F		IRL		I		NL		B		L		UK	
	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC	PE/PC	PH/PC
1953			179,2	385,8	117,7	167,7			155,1	252,6	113,0	182,3	112,2	165,1	114,2	345,2		
1958			158,3	314,4	145,6	141,9			150,0	194,5	120,4	162,6	103,8	147,6	102,2	138,0		
1963			128,7	211,8	123,3	122,8			86,9	118,0	104,7	139,0	109,0	112,8	100,7	117,9		
1968			120,1	161,8	101,8	103,7			92,3	107,5	95,3	98,6	104,2	101,9	105,6	107,5		
1970	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1973	88,5	103,5	92,0	90,8	88,6	99,9	83,7	85,9	92,5	98,3	92,7	80,4	100,4	78,7	92,6	89,4	86,5	105,3
1974	95,6	109,9	107,1	130,4	87,3	111,9	85,1	113,0	95,5	129,9	100,0	121,5	98,2	99,5	91,3	100,3	89,1	146,7
1975	106,4	125,3	108,9	150,0	105,9	183,5	111,7	143,2	123,0	180,7	97,1	108,8	107,2	148,3	100,9	144,4	126,6	226,7
1976	98,0	104,2	106,8	152,3	100,7	181,0	110,0	168,9	139,8	226,6	100,3	132,8	105,5	158,0	98,0	148,4	115,2	213,5
1977	108,2	112,0	104,0	150,7	110,1	172,9	122,2	174,9	147,4	189,4	96,7	121,8	100,3	152,6	93,6	144,0	104,5	195,1
1978	103,4	96,5	102,7	147,7	106,7	168,1	112,4	159,6	130,8	169,0	90,5	110,8	101,7	137,2	88,8	134,2	96,0	179,3
1979	99,8	94,3	102,6	154,7	114,0	142,1	99,3	137,4	114,9	148,5	92,9	123,9	105,2	155,2	93,0	144,9	86,2	157,4

(*) Calculated as the ratio of the index (1970 = 100) of the price of petrol at the pump (PE) and of the price of petrol exclusive of taxes (PH) to the index (1970 = 100) of private consumption prices (PC) in the national accounts.

(1) Price as at 1 January in each year

Table 10.6

Variations in the relative prices of energy for consumers (*)

(1973 = 100)

	1974	1975	1976	1977	1978
DK	131,4	126,3	126,5	124,0	122,9
D	110,0	111,8	114,1	110,1	110,4
F	122,1	116,2	116,4	121,3	121,1
IRL	129,0	124,2	119,3	125,8	121,1
I	125,2	116,3	121,5	129,2	122,5
NL	105,7	111,7	114,4	116,0	121,4
UK	108,0	116,7	117,5	114,5	109,6

(*) Energy component of the consumer price index (fuels, electricity and petrol) divided by the total consumer price index.

Source : OECD, Economic Outlook, July 1979.

TABLE 10.7

Sources of electricity production, 1978-1990

million toe

	1978 (1)					1990 (2)				
	Solid Fuels	Oil	Nuclear Energy	Other	Total	Solid Fuels	Oil	Nuclear Energy	Others (3)	Total
					mill. toe					
DK	2,9	2,2	-	-	5,1	4,0	0,7	3,4	-	8,1
D	46,5	7,0	7,4	16,8	77,7	52,7	7,1	58,2	25,6	143,6
F	12,9	11,9	6,4	18,7	49,9	6,8	6,4	70,0	17,8	101,0
IRL	0,7	1,6	-	0,1	2,4	2,6	1,9	0,8	0,7	6,0
I	1,6	21,1	0,9	14,9	38,5	6,8	24,0	45,0	16,2	92,0
NL	11	2,3	0,8	9,4	13,6	5,8	7,4	2,7	4,6	20,5
BL	2,4	3,9	2,6	2,3	11,2	3,7/7,0	2,6/5,3	7,9	2,6	19,5/20,1
UK	45,3	13,1	7,1	2,2	67,7	58,0	15,0/17,0	20,0	3,0/1,0	96,0
EC-9	113,4	63,1	25,2	64,4	266,1	140/144	65/70	208,0	70/68	488/485
					as % of total					
DK	63,4	48,1	-	-	100	49,4	8,6	42,0	-	100
D	59,8	9,0	9,5	21,6	100	36,7	4,9	40,5	17,9	100
F	25,8	23,8	12,8	37,5	100	6,5	6,1	66,7	20,7	100
IRL	29,2	66,7	-	4,1	100	43,3	31,6	13,3	11,8	100
I	3,3	43,5	1,8	30,7	100	7,4	26,1	48,9	17,6	100
NL	8,1	16,9	5,8	69,1	100	28,3	36,0	13,2	22,5	100
BL	21,4	34,8	23,2	20,5	100	22,0/30,7	16,8/23,2	34,6/47,0	13,6/10,1	100
UK	66,9	19,3	10,5	3,3	100	60,4	15,6/17,7	20,8	3,2/1,1	100
EC-9	42,6	23,7	9,5	24,2	100	29,0	13,7/14,2	44/42	23,3/14,8	100

Sources: (1) Eurostat (estimates); (2) "Energy objectives of the Community for 1990 and convergence of policies of Member States" (Doc. COM(79) 316 of 14 June 1979); (3) Hydroelectricity, etc.

11. International specialization and division of industrial labour

With trade by the industrialized countries subject to open competition and with the emergency of new competitors who are beginning to make inroads in the most vulnerable sectors of the economy, the industrialized countries' ability to cope with the changes in the pattern of world trade hinges on the structure and degree of their involvement in that trade.

Depending on their "comparative advantage" in terms of labour, capital, natural resources, etc., the industrialized countries have opted for differing degrees of export specialization or reliance on imports so that some of them now account for a larger share of the world market than others.

However, a country's control of part of world trade is only one factor : even more important as a measure of its chances of making its economy benefit from current international adjustments is its flexibility in adapting to changes on the world market. In other words, what matters is its ability gradually to switch over from the domestic manufacture of products with a low value-added element to imports from less-industrialized countries and at the same time to gear its industry to exports of high-technology goods.

An analysis of the trends in export and import specialization in the main OECD countries permits an initial comparative assessment of the respective position of each country in the face of the constraints imposed by the present international division of labour.

These studies[1] have brought to light a number of basic trends from which the following main conclusions derive :

By increasingly switching to imports in the case of goods with a low skilled-labour content and by maintaining or expanding exports of goods with a high skilled-labour content, the United States, the Federal Republic of Germany and Japan have preserved or built up a clear lead over the other industrialized countries.

By stepping up its exports of goods with a high unskilled-labour content, which some fifteen years ago accounted for only a small proportion of its exports, the United Kingdom is moving in the opposite direction, with its relative position deteriorating.

France and Italy, on the other hand, have significantly improved their situations but numerous points of weakness remain, making their achievements to date more precarious. Italy, like the United Kingdom, is more directly threatened by products from certain developing countries although, for the time being, this "potential" risk is still highly localized in a limited number of sectors.

The Benelux countries, which are more strongly geared to supplying the Community market, depend above all on the economic well-being of their European partners and are, therefore, less vulnerable to fluctuations in world trade.

Basic method

In order to refine the classical analysis of specialization, it was felt useful to estimate the skilled-labour content and the capital content of the various categories of traded products.

Since competition from the newly industrializing countries relates mainly to products with a very low skilled-labour content, whereas competition between industrialized countries concentrates on products with a high skilled-labour content, the OECD's foreign trade data for the United States, Japan and the countries of the Community, broken down into 160 product categories, have been classified according to factor proportions.[1]

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[1] See Ph. Rollet, "Forces et faiblesses de la spécialisation internationale des pays de la CEE face à la nouvelle division du travail industriel", CIRSH, Lille (France), April 1979 (in French).

These groups of products have been defined as follows :

- Products with a very low skilled-labour content, covering the production activities most commonly encountered in developing countries not possessing specialized manpower (35 product categories). Prominent among such products are most textile articles, household electrical appliances, bicycles, toys, furniture, leather articles, and footwear

- Products with a high skilled-labour content, denoting a high level of technical sophistication of the production process. In these products there is less to fear, in the medium term, from competition from the newly industrializing countries (NICs) because of their lack of sufficiently trained personnel (30 product categories). These sectors of activity are the ones to which, following the logic of the international division of labour, the advanced industrialized countries should switch. Those advanced industrialized countries which are already involved in these sectors therefore enjoy a definite lead over their partners. This group includes chemicals, engines and turbines, most industrial machinery, products of the aerospace industry, precision electronic machinery and equipment, etc.

- The third group takes in products considered fundamental in world trade either because they strongly influence the efficiency of the productive system (computers, machine tools, activities linked to research and development, telecommunications) or because their position in the economy is basic to the production of all other goods (key products of the chemical, steel goods industry and capital goods). The 60 product categories include most of those falling within the previous group.

For these three product groups, the export specialization indices, the import penetration indices and the trend in market shares have been systematically analysed.

The relevance of the classification of products by their skilled-labour content is confirmed by the analysis of the import structures of industrialized countries based on the geographical origin of products (cf. Table 11.1). Thus, 56 % of imports from NICs have a very low skilled-labour content as against an average figure of 22 % for trade between developed countries.

The capital intensity of products is, by contrast, a less discriminating criterion (exports from Eastern European countries and, indeed, from South-East Asian countries are relatively "capital-intensive") but is of some operational interest given the high proportion of products with low or very low capital intensity in the developing countries' exports to the OECD countries.

Thus, by combined application of these two criteria it is possible to rank products ranging from the category most vulnerable to competition from NICs (low skilled-labour content, high physical-capital content) to the category which is least vulnerable (high skilled-labour and capital content). The more a country is "engaged" (i.e. exporting relatively more and importing relatively less than the other industrialized countries) in the activities most vulnerable to competition from NICs, the less favourable its position is deemed to be : this means that it must make greater efforts at conversion, restructuring or bringing down production costs.

Products with a very low skilled-labour content

Table 11.2 (A, B, C, D) gives the specialization indices and the indices of relative dependence for each of the countries examined in the product categories deemed to be most vulnerable, and also the import and export market shares.

The groups of products shown in sub-tables A, B and C are particularly exposed to competition from NICs whereas those in sub-table D (high capital intensity) are in addition up against competition from the Eastern European countries, which are concentrating their exports in this proudct range; in future, competition might well come not only from the NICs already covered here but from certain OPEC countries or other developing countries where the industrialization drive has focused on more capital-intensive sectors.

Overall, analysis of these tables reveals a fairly distinct consistency between specialization indices and indices of relative dependence : in general, involvement in a given type of activity is expressed both by a high or rising specialization index and by a low or falling dependency index.

By country, the salient features are the following :

The strong position of the United States, which despite a slightly greater involvement since 1970 in all these sectors, probably linked to the improvement in its price competitiveness, still specializes very little in exports and remains fairly open to imports of this type or product. Although this picture does not tell us much about the capacity of US industry to defend its domestic market, we can at least conclude that the United States is less concerned than others about the danger of seeing the developing countries increase their share of the world market for products of this type.

In the case of Japan, the indices clearly reflect the spectacular transformation of its productive apparatus, which is apparent in the rapid expansion of export market shares, a decline in specialization in products with low skilled-labour and physical capital contents (sub-tables A, B and C) and an increasingly distinct opening up to imports of these products. These apparently contradictory factors simply reflect Japan's growing weight in OECD trade. In 1963, Japan was still at the level of the least advanced countries of the EEC whereas by 1977 it had caught up with the United States and the Federal Republic of Germany.

Since 1963, the EEC as a whole has broadly maintained its low degree of specialization in exports of products in these categories, although it has placed slightly more emphasis on products with low skilled-labour and capital contents at the expense of product categories that tend to face competition from the countries of Eastern Europe (sub-tables C and D). At the beginning of the 1960s, the Community's relative dependence was already high and it has since further increased and is now greater than that of the United States or Japan. In the case of products facing keen competition from the NICs, the EEC has thus maintained overall a greater degree of specialization in imports than exports, which since 1963 has been reflected in greater reliance on imports and an increasing run-down of exports.

Germany was the only EEC country in 1977 to find itself in a position similar to that of the United States and Japan, which have a low degree of specialization in exports of these products but a large degree of openness to imports. Depending on the product group, Germany is sometimes ahead of and sometimes behind these two countries but overall, it is clearly a case apart from its EEC partners. Like the United States, it has seen a slight rise in its specialization indices since 1970 but, unlike the United States, it has also increased the share of its imports : this suggests a higher percentage of re-exports, with certain stages of the production process being relocated.

In Italy, the situation is quite the opposite since involvement in these sectors, very great in 1963, has hardly changed or has actually become more pronounced since 1970. Italy's fairly high and constant specialization in the least capital-intensive sectors (i.e. the most labour-intensive sectors) is consistent with the maintenance over a fairly long period of a rate of productive investment very much lower than in the other European countries.

The United Kingdom is becoming more and more closely involved in these sectors, where, formerly as "disengaged" as the United States or Germany, it is increasing its export specialization. Its present position does not, however, place it on a level with the weakest of the European countries although there was evidence of a very definite deterioration up to 1977. What is remarkable is that its industry seems less exposed in the sectors with very low human-capital content (sub-tables A and C) than in the sectors with low or very low physical-capital content, in which it is becoming increasingly involved (sub-table B). The explanation therefore seems to lie at least as much in the weakness of productive investment in the past as in the exploitation of the relative fall in the country's wage costs.

France is carrying out a slow but steady disengagement at the level of exports but is not yet very open to imports. Starting in 1963, from a fairly pronounced position of involvement, it is now, despite a switch to sectors more in line with the maturity of its industry, in a position which is still precarious notably because it does not yet rely very strongly on this type of import . This means that France, though to a lesser extent than Italy, will have to step up its conversion efforts if it is to hold its own in a more liberal world trading environment.

The BLEU is in many respects in much the same situation as France although the greater share of processing activities (products imported then re-exported) makes it impossible to produce a reliable assessment.

Lastly, the Netherlands, which is very open to imports, is at present among the countries in Europe least involved in these sectors at the level of exports.

It can be seen from this analysis of their foreign trade that most EEC countries are more involved than the United States or Japan in the sectors vulnerable to competition from the NICs. If intra-EEC and extra-EEC trade are analysed separately, it emerges that the relatively high specialization indices in these sectors stem from intra-Community trade, which includes a larger share of products with low capital and low skilled-labour content. Taking member countries' extra-EEC trade alone, the indices show for each of them a slightly stronger position (although still lagging behind that of the United States and less dynamic than that of Japan) than the one shown in sub-tables A to D. Nevertheless, even for extra-EEC trade alone, there still remains a fairly large gap between Germany's degree of exposure and that of the other member countries.

Furthermore, the fact that it is the intra-EEC component of member countries' exports which includes the "highest" share of products vulnerable to competition only slightly reduces the threat hanging over the most exposed countries and hence the need for adjustment. These countries can hardly be sure of holding onto their share of the Community market for these products against competitors which also include associated countries and countries applying for accession.

Products with a high skilled-labour content

For these products (cf. Table 11.3 - A and B), the comparison of the United States and Japan with the EEC countries is less unfavourable to the latter. The EEC's relative dependence in this category of products, which have a high technological content, is slightly less marked than in 1963 and much less marked than in 1970, although it is still much more pronounced than in the United States but less pronounced than in Japan. Although

the Community's degree of specialization is increasing only gradually and is still lower than that in the United States for all these products, it is much higher than in Japan, which has as yet been unable to make a breakthrough or to specialize on this market. The large market shares in extra-Community trade of these high-technology products (22 % of imports as against 32 % of exports) are a clear indication of the EEC's leading position in this field, which has not been seriously challenged by its competitors in recent years.

Germany retains a strong position, with some 20 % of the export market and a fairly low relative dependence. However, in contrast with the previous analysis, it is less "isolated" in its strong position thanks mainly to the United Kingdom, which is still fairly highly specialized in this type of activity despite the fact that its market shares are contracting, to the headway made by France and to the good performance of the Netherlands. Of the large EEC countries, only Italy still has an unfavourable specialization overall in these sectors.

If the diagnosis is slightly more favourable to the Community than the one in the previous analysis (the Community is better placed than Japan and the positions of the different member countries more balanced), it must not, however, be allowed to conceal the relative precariousness of the positions of certain large countries (such as Italy and, in some respects, France) or the lead still enjoyed by the United States in this type of activity.

"Fundamental" products

The new competition from the NICs will not only compel the most advanced countries to make efforts at restructuring or conversion that are confined to the most traditional sectors or industries. There will be a growing tendency for the most industrialized countries to hold onto the sectors of activity considered the most productive. In this new phase of competition between advanced countries, control of the sectors in the forefront of technical progress is a key factor in the strength of productive systems (cf. Table 11.4 - A, B and C).

For this reason, the OECD foreign trade products with a more or less high-skilled-labour content have been reclassified into three specialized categories :

- a "technological control" category, grouping together the activities which are undergoing the greatest changes and which are the pace-setters in technical progress : activities linked to research and development, computers, telecommunications, machine tools;

- an "intermediate-goods" category : goods used in all the major production processes and hence conditioning the functioning of the productive appartus;

- a "principal capital goods" category : machinery, electrical equipment and motors, but excluding transport equipment that is not directly productive.

The countries' external performance in these categories of activity reveal their capacity to influence the international division of labour rather than to submit to it passively, since a favourable situation in these sectors not only permits relative independence in achieving specialization and possibly changing its direction, but also ensures some degree of control over the other productive systems through the spread of their own production standards.

At present, these "fundamental" activities are concentrated in three countries: the United States, Germany and Japan. Whereas these countries' overall market share is of the order of 49 % for manufactures generally, it is as high as 54 % for fundamental activities (55 % for capital goods and 60 % for activities which provide them with technological control). The other Community countries do not overall occupy a favourable position except in the intermediate goods category.

Japan's progress since 1963 is more than spectacular; on the exports side, it doubles its market share between 1963 and 1977 in all fundamental activities. This rise was primarily at the expense of the United States and the United Kingdom. The United States has seen its situation deteriorate fairly substantially since 1963, with its spcialization being reduced and its relative dependence increased. However, it still occupies a very important position, and its situation seems to have stabilized since 1973. In 1977, Germany, with some 20 % of the world market in fundamental products, was in a position scarcely less favourable than in 1963.

The position of the other industrialized countries, and in particular that of the other large EEC countries, is much less favourable. The deterioration in the United Kingdom's position , already substantial in manufactures as a whole, is even more pronounced in fundamental activities since its specialization is decreasing at the same time as its dependence is increasing. The Benelux countries and Denmark are badly placed here, since export success in this type of activity is determined not only by research and development but also by a large domestic market (and public contracts).

The trend in the other large EEC countries, France and Italy, showed a fairly definite improvement between 1963 and 1977; the growth of their exports in fundamental activities was more rapid than in other fields. However, these real improvements are still far from placing these two countries on a par with their main partners. France is still very dependent on imports of capital goods and intermediate goods, and its specialization in "technological control" activities is still low, as is Italy's.

Although the EEC as a whole has seen its market shares contract since 1963, there has been an improvement in the situation since 1970 mainly because of larger market shares in principal capital goods. Its relative dependence on imports, rising steadily since 1963, is still far below that of the United States and its specialization in exports of fundamental products in 1977 was back to its 1963 level. At world level, the EEC is in a leading position since its shares of export markets are at present, greater than those of the United States and Japan together.

Table 11.1

COMPARISON OF THE IMPORTS STRUCTURE OF THE ADVANCED INDUSTRIALIZED COUNTRIES BASED ON SKILLED-LABOUR CONTENT AND CAPITAL CONTENT

(as percentage of imports of all manufactures)

	Imports from the NICs[1]		Imports from Eastern European countries[2]		Trade between developed countries[3]	
	1970	1977	1970	1977	1970	1977
Skilled-labour content : H						
Very low H	60	56	30	41	22	22
Low H	12	14	36	28	32	32
Medium H	11	15	10	11	21	21
High H	17	15	24	20	25	25
Total	100	100	100	100	100	100
Capital content : P						
Very low P	29	34	14	19	6	6
Low P	34	34	21	29	36	36
Medium P	11	9	9	7	10	8
High P	26	23	56	45	48	50
Total	100	100	100	100	100	100
Combination of the two criteria						
1. High H and P	9	5	16	14	9	11
2. High H, low or medium P	8	10	8	5	15	14
3. Medium H, high P	5	5	5	5	8	9
4. Medium H, low or medium P	6	10	6	6	31	31
5. Low or very low H, high P	12	12	35	26	13	12
6. Low H, low or medium P	5	5	4	7	6	6
7. Very low H, low or meidum P	26	19	14	19	12	11
8. Very low H and P	30	24	12	18	6	6
Total	100	100	100	100	100	100

1. Spain, Portugal, Greece, Turkey, Yugoslavia, Hong Kong, Taiwan, Singapore, Korea, the Philippines, Malaysia, Brazil, Mexico, Venezuela, Argentina, Chile.
2. USSR, Poland, Hungary, Rumania, Bulgaria, Czechoslovakia, the German Democratic Republic.
3. OECD countries minus Spain, Portugal, Greece, Turkey and Yugoslavia.

Table 11.2

Specialization indices and indices of relative dependence for products facing keen competition from the NICs on the basis of their skilled-labour and capital intensities.

A. Activities with very low skilled-labour content

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	2.8	1.1	2.6	1.4	2.2	1.4	1.00	1.33	1.39	0.97	1.08	1.04
D	14.5	12.0	15.4	13.8	17.0	15.4	0.62	0.73	0.79	1.33	1.23	1.23
F	5.6	9.6	7.0	8.2	9.1	8.8	1.13	1.00	0.97	0.66	0.79	0.91
I	3.9	9.3	3.7	11.1	3.6	12.0	1.60	1.64	1.69	0.54	0.67	0.72
NL	7.6	4.8	7.6	4.8	7.5	4.6	1.19	1.16	1.05	1.01	1.13	1.15
BLEU	6.4	6.9	5.8	7.1	7.6	7.2	1.29	1.27	1.34	1.03	1.06	1.20
UK	11.1	10.7	10.2	10.0	11.1	10.7	0.78	1.03	1.25	1.38	1.35	1.25
EC (1)	21.5	29.8	21.1	27.0	26.1	27.4	0.86	0.92	0.92	1.15	1.22	1.35
US	23.4	14.8	22.8	8.9	18.1	8.9	0.70	0.50	0.60	1.58	1.20	0.97
JAPAN	1.2	12.0	5.8	12.7	3.9	10.3	1.64	1.15	0.71	0.37	0.80	1.19

(1) Extra-Community trade (excluding Ireland).

M : imports

X : exports

Table 11.2 (cont'd)

Specialization indices and indices of relative dependence for products facing keen competition from the NICs on the basis of their skilled-labour and capital intensities

B. Activities with very low capital content

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	2.5	2.1	2.4	2.4	2.0	2.2	1.92	2.19	2.10	0.87	0.97	0.94
D	16.0	11.5	18.1	13.1	20.5	16.9	0.59	0.69	0.87	1.47	1.46	1.48
F	6.1	13.6	6.7	10.6	8.5	11.6	1.60	1.30	1.27	0.72	0.76	0.86
I	2.7	18.7	2.2	22.1	1.9	23.8	3.23	3.24	3.37	0.37	0.39	0.38
NL	8.9	4.3	9.4	4.4	9.2	4.0	1.05	1.06	0.92	1.19	1.40	1.41
BLEU	5.3	6.6	5.0	6.6	6.5	6.3	1.24	1.18	1.17	0.84	0.91	1.02
UK	11.3	8.3	6.2	7.3	6.7	8.0	0.61	0.75	0.93	1.40	0.82	0.75
EC (1)	18.2	34.0	14.2	28.1	22.7	28.3	0.99	0.96	0.95	0.98	0.82	1.18
US	23.7	9.5	26.9	5.7	21.2	6.1	0.45	0.32	0.41	1.61	1.42	1.13
JAPAN	0.6	11.5	1.7	9.5	3.5	3.3	1.58	0.85	0.23	0.18	0.46	1.06

(1) Extra-Community trade (excluding Ireland)

M : imports

X : exports

Table 11.2 (cont'd)

C. Activities with very low skilled-labour content and low or very low capital content.

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	2.7	1.1	2.5	1.4	2.1	1.4	0.97	1.31	1.34	0.93	1.04	0.99
D	13.5	14.1	13.9	15.9	14.7	15.6	0.72	0.84	0.80	1.24	1.12	1.06
F	6.0	8.8	6.8	8.1	8.7	8.6	1.03	0.99	0.94	0.71	0.77	0.88
I	4.2	9.2	4.0	9.5	4.4	9.2	1.59	1.40	1.30	0.58	0.72	0.86
NL	7.3	4.7	7.0	4.9	6.6	4.6	1.15	1.19	1.06	0.97	1.05	1.00
BLEU	7.9	7.0	6.5	7.5	8.8	8.2	1.31	1.34	1.54	1.26	1.18	1.39
UK	9.1	12.7	11.4	13.8	13.2	13.6	0.92	1.31	1.58	1.13	1.51	1.49
EC (1)	17.7	32.1	21.0	30.7	26.1	30.8	0.93	1.05	1.03	0.95	1.21	1.35
US	20.7	17.5	20.5	8.9	16.0	9.0	0.83	0.50	0.61	1.40	1.08	0.86
JAPAN	1.7	13.0	3.9	16.4	4.6	14.8	1.78	1.48	1.02	0.51	1.05	1.41

(1) Extra-Community trade (excluding Ireland).

M : imports

X : exports

Table 11.2 (cont'd)

D. Activities with high capital content and low or very low skilled-labour content

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	3.1	0.3	2.4	0.3	2.0	0.3	0.25	0.25	0.32	1.09	0.99	0.92
D	11.0	20.0	12.0	18.9	12.1	19.5	1.03	1.00	1.00	1.01	0.97	0.87
F	8.4	9.7	8.3	9.1	9.3	9.9	1.14	1.12	1.08	0.99	0.94	0.93
I	8.2	3.7	5.9	4.6	5.3	5.5	0.65	0.67	0.77	1.13	1.06	1.05
NL	6.9	2.8	5.9	2.5	5.7	2.6	0.69	0.60	0.59	0.92	0.87	0.86
BLEU	6.0	7.9	5.6	8.6	6.5	7.2	1.48	1.54	1.34	0.96	1.03	1.03
UK	7.0	15.6	5.5	8.9	7.6	6.6	1.14	0.92	0.77	0.86	0.73	0.86
EC (1)	17.1	35.6	14.1	27.4	14.3	25.6	1.03	0.94	0.86	0.92	0.81	0.74
US	18.9	17.1	25.5	14.4	25.3	12.2	0.81	0.81	0.81	1.28	1.34	1.35
JAPAN	1.5	7.2	1.9	11.2	1.4	17.6	0.99	1.01	1.21	0.45	0.51	0.43

(1) Extra-Community trade (excluding Ireland)

M : imports

X : exports

Table 11.3

Activities with high skilled-labour intensity

A. High capital content

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	3.3	0.8	2.1	1.0	1.5	0.9	0.77	0.93	0.86	1.14	0.86	0.72
D	10.3	22.0	12.5	21.0	14.9	20.8	1.14	1.11	1.07	0.95	1.00	1.08
F	11.6	8.5	10.8	9.0	11.8	9.5	0.99	1.08	1.04	1.36	1.22	1.19
I	8.1	4.5	7.4	5.0	7.1	4.3	0.81	0.71	0.60	1.12	1.35	1.40
NL	5.6	5.5	6.6	7.0	6.9	8.1	1.32	1.62	1.85	0.74	0.98	1.04
BLEU	5.6	3.0	5.6	4.5	6.2	5.7	0.58	0.81	1.06	0.89	1.01	0.98
UK	9.2	12.0	8.3	11.0	9.8	10.8	0.88	1.10	1.26	1.14	1.10	1.10
EC (1)	22.5	33.9	21.3	32.1	21.9	32.3	0.98	1.10	1.08	1.21	1.23	1.14
US	11.2	25.5	10.8	21.5	12.5	18.3	1.20	1.21	1.22	0.76	0.57	0.67
JAPAN	6.7	4.5	6.8	7.5	5.8	9.3	0.61	0.62	0.64	2.00	1.82	1.77

(1) Extra-Community trade (excluding Ireland)

M : imports

X : exports

Table 11.3 (cont'd)

B. Medium or low capital content

	Market shares (%)						Specialization indices			Indices of relative dependence		
	1963		1970		1977		1963	1970	1977	1963	1970	1977
	M	X	M	X	M	X						
DK	1.9	1.1	2.0	1.1	2.1	1.1	1.03	1.00	1.04	0.67	0.92	0.99
D	8.3	20.0	10.2	19.0	12.7	20.4	1.04	0.99	1.05	0.76	0.82	0.92
F	9.4	6.0	9.9	6.0	10.5	7.7	0.73	0.77	0.84	1.10	1.12	1.05
I	8.9	4.5	5.6	5.3	5.0	5.2	0.79	0.77	0.74	1.23	1.01	0.99
NL	9.0	5.0	6.9	4.0	6.7	4.6	1.28	0.99	1.06	1.19	1.03	1.02
BLEU	6.1	3.3	4.6	2.5	4.7	2.5	0.62	0.43	0.48	0.97	0.83	0.74
UK	8.7	13.0	9.2	10.0	9.7	8.9	0.99	1.03	1.04	1.08	1.22	1.10
EC (1)	20.8	32.3	21.3	28.6	21.8	32.1	0.94	0.98	1.08	1.12	1.23	1.13
US	10.3	31.0	16.3	29.5	19.5	23.9	1.46	1.65	1.60	0.70	0.86	1.04
JAPAN	4.5	4.7	6.0	10.3	3.7	13.9	0.64	0.92	0.96	1.48	1.60	1.12

(1) Extra-Community trade (excluding Ireland)

M : imports

X : exports

Table 11.4

Changes in market shares, specialization indices and dependence indices

Total for fundamental products /sub-tables A + B + C/

	Export market share (%)			Specialization indices			Indices of relative dependence		
	1963	1970	1977	1963	1970	1977	1963	1970	1977
DK	1.2	1.1	1.1	0.62	0.73	0.77	1.34	1.34	1.31
D	22.0	20.6	21.3	1.46	1.30	1.26	.85	.98	1.06
F	8.0	8.2	9.2	.97	1.01	1.02	1.15	1.21	1.18
I	4.7	6.0	6.8	.90	.99	1.06	1.30	1.00	.96
NL	4.0	4.3	4.6	.78	.79	.74	1.42	1.20	1.13
BLEU	5.9	5.9	5.0	1.18	1.10	.93	1.06	.96	.97
UK	13.3	9.2	7.9	1.13	1.04	0.96	.54	.76	1.02
EC (1)	35.4	29.9	32.3	1.21	1.15	1.19	0.60	0.71	0.75
US	22.1	18.6	15.3	.93	.94	.90	.65	.84	.88
JAPAN	7.1	12.7	15.9	1.26	1.42	1.38	.61	.47	.31
of which : A/ Products providing technological control									
DK	0.9	0.9	0.8	0.45	0.61	0.55	1.12	1.09	0.97
D	21.6	19.7	20.2	1.43	1.24	1.19	.62	.91	1.01
F	6.0	7.1	7.5	.73	.88	.83	1.08	1.07	.95
I	4.2	6.0	4.8	.80	.99	.73	1.40	.90	.93
NL	6.7	5.3	5.1	1.32	.97	.81	1.98	1.27	1.15
BLEU	3.0	3.2	3.4	.59	.59	.63	.99	.77	.80
UK	12.3	8.5	7.3	1.05	.96	.89	.61	.72	1.06
EC (1)	35.3	29.7	30.5	1.20	1.14	1.12	0.72	0.75	0.93
US	27.3	18.3	16.1	1.15	.93	.95	.67	1.18	1.23
JAPAN	8.2	18.6	23.7	1.47	2.08	2.04	.86	.57	.32

Table 11.4 (cont'd)

B. Principal capital goods

	Export market share (%)			Specialization indices			Indices of relative dependence		
	1963	1970	197 7	1963	1970	197 7	1963	1970	197 7
DK	1.9	1.6	1.5	0.97	1.07	1.04	1.24	1.26	1.39
D	23.6	22.0	22.6	1.56	1.39	1.33	.76	.88	.92
F	6.6	7.2	8.8	.80	.89	0.98	1.15	1.23	1.16
I	5.6	6.9	6.8	1.08	1.13	1.04	1.29	.96	.86
NL	2.8	3.3	3.5	.55	.61	.56	1.36	1.16	1.14
BLEU	2.2	2.4	2.5	.44	.45	.47	1.17	1.00	.94
UK	14.0	10.1	9.0	1.20	1.14	1.09	.56	.96	1.19
EC (1)	35.3	31.1	35.7	1.20	1.20	1.32	0.64	0.76	0.79
US	28.4	26.4	21.6	1.20	1.34	1.28	.36	.58	.66
JAPAN	3.1	7.1	10.5	.56	.79	.91	.85	.62	.42

C. Principal intermediate products

DK	0.7	0.7	0.9	0.37	0.46	0.60	1.50	1.51	1.41
D	20.7	19.9	20.5	1.37	1.25	1.21	1.00	1.09	1.18
F	10.1	9.5	10.4	1.22	1.17	1.15	1.18	1.26	1.31
I	4.1	5.2	8.0	.79	.85	1.23	1.28	1.07	1.06
NL	3.9	4.8	5.5	.76	.88	.88	1.25	1.21	1.11
BLEU	10.5	10.4	8.4	2.10	1.93	1.55	1.01	1.00	1.07
UK	13.1	8.7	7.1	1.11	.98	.86	.50	.63	.87
EC (1)	35.5	28.8	29.8	1.21	1.11	1.10	0.53	0.64	0.67
US	14.1	11.6	8.4	.60	.59	.50	.87	.92	.88
JAPAN	10.0	15.3	17.7	1.79	1.72	1.53	.33	.31	.22

(1) Extra-Community trade (excluding Ireland)

Annex 1 : Indices of foreign trade performance

Three types of index were used :

(1) An export specialization index :which relates a sector's share in the total exports of a particular country to the same sector's share in total exports of a reference set of countries. The formula is :

$$Sjk = \frac{Xjk}{Xjt} : \frac{Xnk}{Xnt}$$

where : X = exports
j = the exporting country
n = the reference set of exporting countries (in this instance, the OECD countries)
k = the product sector or category
t = all manufactures

(2) An index of relative dependence on imports : which is calculated in the same way as the export specialization index. It is, in fact, an import specialization index. The formula is :

$$Ijk = \frac{Mjk}{Mjt} : \frac{Mnk}{Mnt}$$

where : M = imports

(3) A market share index : which measures a country's share in OECD exports or imports of a particular category of product. The formula is :

$$\frac{Xjk}{Xnk} \text{ for exports or } \frac{Mjk}{Mnk} \text{ for imports}$$

Annex 2 : Measuring the skilled-labour and capital content of foreign trade products

Classification of the products in question according to the two crieria of capital intensity and skilled-labour intensity produced eight major product categories (cf. Table 11.1).

An initial estimation of these intensities was made on the basis of data compiled by B. Balassa ("A 'Stages Approach' to Comparative Advantage" - paper presented to the IEA symposium in Tokyo in 1976). Balassa uses two measures of capital intensity and skilled-labour intensity, but only the stock measure has been employed here since it seems to be better suited to the purposes of this study. The intensities are calculated for the sectors of activity in which the products are manufactured. The capital intensity P_k of sector k is the capital stock per person employed. For the purposes of combining skilled-labour intensity with capital intensity, a degree of skill (h_k) has been estimated to represent the notional stock of "human capital" per person employed,using the following formula :

$$h_k = \frac{\bar{w}_k - w_k^u}{r^h}$$

where : k = the sector

$\bar{w}_k$ = average wage in sector k

w_k^u = average wage of unskilled workers in sector k

r^h = the notional return on "human capital", estimated here at 10 %.

Total intensity for the two variables is thus :

$$Ik = P_k + h_k$$

The indicators used do not claim to give an exact measure of the stock of capital and skilled labour employed in the production process; they give an order of magnitude and make it possible, above all, to establish the relative position of one product category in terms of the others.

Using Balassa's calculations, the products were then dassified according to the respective degree of capital or skilled-labour intensity. However, in view of the imperfect nature of the indicators chosen, corrections were made to this classification :

- either through comparison with other indicators used in studies employing a broadly similar nomenclature : data compiled by J. De Bandt ("Analyse comparative des structures industrielles", IREP, Documentation française, 1975), with capital per person employed being estimated on the basis of gross fixed assets related to the number of workers and skilled-labour intensity on the basis of the ratio

$\frac{\text{executive staff + supervisory staff}}{\text{total workforce}}$ for 1970 in the United States, relying on data from the Bureau of the Census in Washington;

- or in line with opinions of industry specialists on the relative position of certain activities.

With the help of these data, the products were grouped into major categories and a second classification established by combining the two criteria. Such an analysis, which is necessary for interpreting the results, is of course difficult to make and any decision to allocate a given product to a given group involves some element of arbitrariness. So as to reduce this element, a two-fold approach was adopted.

- Firstly, the distribution of the activities according to the criterion of capital intensity produced a number of groups that made it easier to determine thresholds and proved accurate by combined application of the criteria.

- Secondly, by taking into account the importance of each product for general economic activity it was possible to find the nucleus around which the different product groups could be built up and to drop the groups that were of litte relevance because of their small size.

In all, eight groups were established each comprising products that have quite different production characteristics from those in the other groups and that play an important role in economic activity.