

ECONOMIC PAPERS

COMMISSION OF THE EUROPEAN COMMUNITIES • DIRECTORATE-GENERAL FOR ECONOMIC AND FINANCIAL AFFAIRS

No. 60

October 1987

The two-handed growth strategy for Europe :
Autonomy through flexible cooperation

by Jacques Drèze, Charles Wyplosz, Charles Bean,
Francesco Giavazzi and Herbert Giersch

Internal paper



"Economic Papers" are written by the Staff of the Directorate-General for Economic and Financial Affairs, or by experts working in association with them. The "Papers" are intended to increase awareness of the technical work being done by the staff and to seek comments and suggestions for further analyses. They may not be quoted without authorisation. Views expressed represent exclusively the positions of the author and do not necessarily correspond with those of the Commission of the European Communities. Comments and enquiries should be addressed to

The Directorate-General for Economic and Financial Affairs,
Commission of the European Communities,
200, rue de la Loi
1049 Brussels, Belgium

ECONOMIC PAPERS

No. 60

October 1987

The two-handed growth strategy for Europe :
Autonomy through flexible cooperation

by Jacques Drèze, Charles Wyplosz, Charles Bean,
Francesco Giavazzi and Herbert Giersch

Internal paper

The authors thank Jürgen Kröger for help with the data and Sara del Favero for diligent research assistance.

II/194/87-EN

This paper only exists in English

TABLE OF CONTENTS

PART I: THE TWO-HANDED STRATEGY	1
1. The present state of affairs	1
2. Three growth alternatives	2
3. The two-handed approach	9
4. The bottom line	22
PART II: AUTONOMY THROUGH FLEXIBLE COOPERATION	23
5. Openness and the Case for Cooperation	23
6. Europe and the rest of the world	30
7. Policy coordination within Europe	38
8. Conclusion	48
APPENDIX 1: A SUGGESTIVE FIVE-FINGERED EXERCISE	52
APPENDIX 2 : HOW TO MEASURE OPENNESS	54
REFERENCES	57

PART I: THE TWO-HANDED STRATEGY

1. The present state of affairs

Over the last three years there is little doubt that economic conditions in Europe have improved. Inflation has fallen to more comfortable levels. Most current account deficits have been reduced, with some countries achieving significant surpluses. Public finances are now sounder in many countries, with the primary budget (i.e. net of interest payments) more often in surplus than in deficit. After a period when the strength of the Dollar made European currencies look weak, the much awaited correction has taken place, now raising fears of a hard landing of the US currency. Most importantly, the resumption of growth is widespread in contrast to the experience of the early eighties.

Yet there is no room for complacency for at least two reasons. The first one is the unemployment situation. Double digit unemployment rates are the rule rather than the exception, and no relief seems in sight, in the near future. As of May 1987, there were 16.1 million unemployed (seasonally adjusted) in the 12 countries of the European Community, that is 11.4 % of the labour force. Total unemployment has not changed over the last 12 months. Significant decreases in the UK and Portugal have been matched by increases in most other countries. In Germany, while total unemployment has come down by 40 thousand, GDP growth has been negative for the last two quarters. Short-run prospects therefore look bleak, with a genuine danger that unemployment may rise again. Mass unemployment represents a waste of human resources, as well as a major social problem with unpredictable long-run political and economic implications.

The second cause of concern is the disappointingly low rate of private investment, now around 19 percent of GNP as compared to 22 percent in the sixties. Although this may be of limited immediate consequence, it bears the seeds of a long-term economic stagnation. For some reason Europe is not using and accumulating factors of production as in the past; this is bound to affect future living standards.

This report takes as its premise that Europe still very much needs to enact growth enhancing policies. We first recall why the present level of utilisation and rate of accumulation of resources is not optimal.¹ We then consider what corrective actions might be taken. Of course the major reason why these have not yet been carried out is that a certain number of apparent constraints on policy makers stand in the way. It is important to assess the true seriousness of these constraints.

Among these constraints the question of external balance stands out. Although we regard this concern as largely misdirected we will consider it in some detail. We stress that the openness of an economy reduces the domestic benefits which a country derives from expanding demand, and conclude that cooperation is a way out of this dilemma. Accordingly, this report's main contribution is to consider how best the EC countries could exploit their differences in size and initial conditions to jointly adopt appropriate policies. In particular, the report highlights the crucial position of Germany, France and the UK in pursuing a set of policies that will enhance growth. It also recognizes that differences in objectives may affect a country's willingness to play the role warranted by the general macroeconomic situation. The result will be a collective loss in overall effectiveness. We believe, however, that the EMS can serve as a focal point for mutually beneficial growth-enhancing policies.

2. Three growth alternatives

One way of understanding why and how Europe fails to adequately exploit its resources is to contrast current forecasts and desirable outcomes. We first review the probable outlook until the end of the decade under existing policies and then consider two alternatives : the EC Commission Cooperative Growth Scenario and the type of performance achieved by Europe in better times during the sixties.

1. All previous reports of the CEPS Macroeconomic Policy Group have presented similar analyses.

2.1. The baseline

The baseline projection of the EC Commission as presented in its 1986 Annual Report (which is very much in line with forecasts produced by other institutions) is a natural point of departure and is shown in Table 1. Its main features are slow growth, moderate inflation, sluggish investment and an unacceptably high level of unemployment.

Table 1. EC Commission Simulations for EC10
Annual average growth rates, 1986-1990, %

	Baseline	Cooperative Scenario
1. GDP volume	2.7	3.5
2. GDP deflator	3.3	2.7
3. Employment	0.7	1.2
4. Investment	3.7	6.8
5. Unemployment ^a	10.3	7.1
6. Real unit labour costs	-0.3	-1.3
7. Real wages per heads	1.9	1.1
8. Productivity	2.0	2.3
9. Residual ^b	-0.2	-0.1
10. Current account, % of GDP	0.6	0.1
11. Budget deficit, % of GDP ^a	3.4	3.9

Source: European Economy N°30, November 1986, p. 44.

Notes:

(a) 1990 levels.

(b) residual is (6) - (7) + (8) and is a measure of changes in labour taxes.

Interestingly, given the situation in the rest of the world, such growth rates allow a slight surplus on Europe's overall current account. ²

2. This is quite important given the assumptions made for the rest of the world: rising oil prices, stable ECU/Dollar and ECU/Yen exchange rates, and a reduction of the US budget deficit to 1 percent of GNP by 1990. These assumptions are not favorable from the point of view of the European current account which may exceed the reported forecasts.

However, in many ways the baseline projection must be considered as rather optimistic. The 1987 figures, which define its starting line, have been revised downwards in February 1987, relative to the October 1986 forecasts. In every respect, the aggregate revisions exhibited in Table 2 are for the worse. Detailed member country figures (not shown) indicate that in 6 countries out of 12 (Belgium, Denmark, Greece, France, Ireland and Italy) unemployment is expected to increase during 1987. Furthermore these revised forecasts do not even incorporate the latest disquieting trends reported on p. 1 above.

Table 2. 1987 Forecasts for EC12
(% change p.a. unless otherwise stated)

	October 1986 Forecast	February 1987 Forecast
GDP in volume	2,8	2,3
Domestic demand	3,5	3,2
Exports of goods and services	3,7	2,8
Imports of goods and services	6,2	5,9
Nominal unit labour costs ^a	2,8	3,7
Real unit labour costs ^a	- 0,7	- 0,2
Unemployment rate (% of labour force)	11,7	11,8

^a Relative development of labour costs per head and macroeconomic labour productivity (real: deflated by GDP deflator).

Source: E. C. Commission COM(87)77, Table 1.

2.2. The Cooperative Growth Scenario

In the Cooperative Growth Strategy proposed by the EC Commission the overall growth rate is raised to above 3 percent, which permits a decline in the unemployment rate to 7 percent by 1990. This scenario shares many of the characteristics of the two-handed approach proposed by the CEPS Macroeconomic Policy Group. It rightly emphasizes the benefits of policy coordination which are at the heart of the present report. Its key elements

are a decline in real labour costs achieved through wage moderation and decreased labour taxes, a reduction in income taxes and an increase in public investment. According to the Commission's estimates (see Table 1) this would produce faster growth and lower inflation, at the expense of a worsening of the current account. But even this rather optimistic scenario fails to bring unemployment down to those rates which prevailed in Europe up to the mid seventies.

The Cooperative Growth Strategy, as designed by the Commission, calls for a cumulative fiscal expansion through additional public expenditures and tax reductions adding up, over the four years 1987-1990, to 3.2 % of EC 10 GDP. By concentrating the effort in the three largest countries (Germany, France and the UK), which account for 70 % of EC 10 GDP, this scenario actually calls for a cumulative fiscal expansion in these three adding up (over the 4 years) to 4.6 % of their own GDP. Such an effort is of an order of magnitude altogether different from the programmes currently under consideration in several countries. The fiscal measures decided in Germany for 1988-90 only amount to about 1 % of its GDP; similarly, those enacted in the UK for the fiscal year 1987-88 and projected for 1988-89 constitute a cumulative fiscal stimulus of about 1.5 % of its GDP. Jointly, these measures amount to 0.5 % of EC10 GDP, to which should be added a further 0.2 % increase due to various fiscal changes in other countries. So far then, current fiscal plans envisage a stimulus worth only 0.7 % of EC10 GDP, thus falling substantially short of the Commission's proposed Cooperative Strategy 3.2 % target.

2.3. The golden sixties

The last scenario that we wish to explore is a return to the kind of economic performance achieved by Europe during much of its post-war experience. Its characteristics are well-known : an average growth rate close to 5 percent per year and unemployment between 2 and 3 percent. Such a GDP growth rate does not necessarily translate into employment growth. One benchmark is provided by the Cooperative Growth Scenario. Its policies imply a short-run marginal employment coefficient of one third, so that a 5 percent annual GDP growth rate would lead to an annual average growth rate of employment of 1,7 %, bringing unemployment down to some 5 % in 1990 - an

attractive prospect! Another benchmark is the experience of the sixties during which employment growth in Europe was a mere 0.3 % per annum. These numbers essentially tell us that growth will have to be more labour intensive than in the sixties if we wish to reduce unemployment.

Are there real obstacles standing in the way of such a growth pattern? Looking at aggregate unemployment figures it does not seem to make sense worrying about labour shortages. But aggregate figures are often misleading. Current unemployment is concentrated amongst the unskilled and in particular geographical areas. Youth unemployment is particularly high in all countries except Germany. A reduction in the cost of employing unskilled workers may be necessary to erase such inequalities (see Box 1). We return to this issue below.

BOX 1

One difficult question raised by our hypothetical scenario - or by any scenario embodying significant employment growth - concerns the level of skills within the labour force. Unemployment today is largely concentrated amongst the unskilled. There are two ways in which such a situation could have come about. Consider a given decline in aggregate employment - say 8 % for illustration's sake - which is accompanied by an increase in unemployment concentrated entirely amongst the unskilled. This could reflect an 8 % decline in employment at every skill level, accompanied by a reallocation of some workers to less skilled jobs so that all except the lowest skill groups enjoy full employment, but with a fraction of each group (corresponding to a growing number of people as we move down the skill ladder) accepting employment in less skilled jobs. Thus all the unemployment will eventually be concentrated amongst the least skilled workers. Alternatively, the same aggregate picture could emerge if a restructuring of the demand for workers of different skills (possibly induced by inappropriate wage differentials) resulted in a loss of employment at the lowest skill level alone, with no reduction in employment at higher levels. The concentration of unemployment amongst the unskilled results from the adaptation of labour supply in the first case, but from the restructuring of labour demand in the second case.

Our illustration is extreme; both labour supply adaptation and labour demand restructuring may take place simultaneously - the relative importance of the two processes is unknown. The supply adaptation (or "staircase") story is accepted by many as the primary explanation. Recently, our attention has been drawn by

Danthine and Lambelet (1987) to the Swiss experience, and in particular to the fact that unskilled migrant workers, numbering some 8% of the Swiss labour force, were repatriated, without this being accompanied by any restructuring of the qualification mix among Swiss workers. That experience lends prima facie support to the demand restructuring story. If this is the case throughout Europe a majority of the unemployed in the EC are simply unemployable - unless either their skills are upgraded, or else a reverse restructuring of labour demand is induced, for example by a change in relative prices (i.e. a reduction in the cost of employing unskilled workers).

(It matters little whether "unskilled" is understood in terms of acquired technical skills, or in terms of stable working habits. And it should be clear that putting the long term unemployed back to work will entail a substantial retraining cost in either case).

Can capital be the binding constraint? It was not in the sixties. But the capital-output ratio has increased in the meantime. With a capital-output ratio as high as 4.5, a growth rate of output at 5 % would require a net investment share of 22.5 %. With a depreciation rate of 3 % this is equivalent to a gross investment share of 36 %, which would somehow have to be financed. To fix ideas, the highest gross investment share reached since 1960 for EC10 stood just below 29 %. If the capital-output ratio were to drop to 4 (its lowest level was 4.1 in 1973), the required gross investment share would be 32 % instead.³ A traditional savings rate would seem to imply that a 5 % growth rate requires either a significant decrease in capital intensity - the kind of decrease which is precisely required for a more labour intensive growth - or significant borrowing abroad, i.e. current account deficits. It might seem improbable that the trend towards increased

3. These calculations are based on data in Mortensen (1984), p. 62-65. With $K/Y = 4.5$ and $\dot{Y}/Y = \dot{K}/K = 5\%$, the net investment rate is $\dot{K}/Y = (\dot{K}/K)(K/Y)$. With a depreciation rate $d = 3\%$, the gross investment rate is $I/Y = (\dot{K} + d.K)/Y$. The value of d is inferred from the 1984 values as: $d = (I/Y - \dot{K}/Y)/(K/Y) = (22.5 - 9.5)/4.6 = 2.82\%$.

capital intensity should be reversed. Such a possibility should not be dismissed outright as fanciful, however. The growth pattern of the sixties was shaped by the short supply of domestic labour (as evidenced by low unemployment rates and the recurrent recourse to immigration). Hopefully, a more balanced growth pattern might emerge naturally in a period of severe unemployment. It would need to be based on capital-widening rather than on capital-deepening investment - hence on relative factor prices more favorable to the adoption of labour-intensive methods of production than in the sixties, and particularly to those methods employing the categories of workers in the greatest excess supply.

Some reliance on capital imports to finance increased investment would also be justified, despite the implications for the current account. Provided the investment is profitable it will generate sufficient revenues to finance the increased foreign debt burden. This issue is explored in more detail in Section 3.3.3. below.

2.4. Assessment

We consider the baseline as a realistic, yet unacceptably pessimistic, forecast. Indeed this report is dedicated to the search for acceptable solutions to avoid its very realisation. The Cooperative Growth Strategy provides a solution which looks satisfactory only when compared to the baseline. Its results are a clear improvement on the current forecast, yet they are quite modest given the size of the unemployment problem. The "golden sixties" scenario, on the other hand, looks too good to be true. We fully realize that it may be politically unrealistic. What concerns us, however, is whether it is feasible from an economic point of view; obviously it requires a different type of growth, but it is not obvious that it is altogether beyond reach. Much depends upon how it is sought. The two-handed approach offers a framework within which policies capable of achieving more ambitious results than the baseline can be developed. It rests on the same logic as the Cooperative Growth Strategy, and may be put to work to pull Europe more forcefully out of its slow-growth, high-unemployment, trap.

3. The two-handed approach

3.1. The logical foundation

The two-handed approach, advocated in the previous reports of the CEPS Macroeconomic Policy Group, stresses the need for a simultaneous expansion of supply and demand so as to create additional productive capacity hand-in-hand with the demand for its services.

The logic of the two-handed approach rests on an assessment of the nature of European unemployment and on a parallel assessment of the conditions necessary for job creation. In order for a job to be created, two broad sets of conditions must be satisfied. First there must exist a demand for the output generated by that additional worker. Because dismissing a worker is costly, that demand should be sustained long enough to ensure that the additional worker will be required in the foreseeable future. Second, satisfying that demand must be both profitable and physically possible: there must exist spare capacity and the cost of labour (and other inputs) must not be excessive. Keynesian macrotheory stresses the first condition; when that condition fails unemployment is said to be "Keynesian". Classical macrotheory stresses the second condition; when that condition fails, unemployment is said to be "Classical". The current European situation requires due attention to both requirements, and the two-handed approach does just that.

The mix of Classical and Keynesian unemployment prevailing at a particular time is of crucial relevance to policy decisions. If unemployment is mostly Classical, then demand policies are useless in the short run, with the stimulus likely to evaporate in price inflation and/or imports. What is called for is an expansion of supply, through increased efficiency and investment. Policy should be "supply-friendly". If unemployment is mostly Keynesian, then demand stimulation is the required policy, and entails little risk of inflationary pressures. It is thus important to diagnose the relative importance of the two types of unemployment.

Such a classification is always difficult, because it cannot be based on direct indicators, such as the unemployment rate itself, or on national accounts data. Keynesian unemployment is predicated upon the existence of simultaneously unused labour and capital capacity. Classical unemployment would follow either from the absence of physical equipment to be manned by new hires or from excessive labour costs. Although systematic quantitative analysis along these lines is relatively recent and still fragmentary, the available evidence is entirely consistent in suggesting that European unemployment exhibits both Classical and Keynesian features.⁴

We interpret this evidence as indicating that unemployment is Keynesian at the margin, and Classical beyond: a demand expansion would quickly eliminate the Keynesian unemployment component and trigger inflationary pressures as bottlenecks are reached. An indication of the seriousness of the situation is provided by business surveys in industry. Table 3 indicates that current use of capacity is slightly below the 1979-80 peak level. The extent to which capacity is reported excessive in relation to demand expectations is much higher (10 %) than the 1979 peak level, however confirming that we currently face a conjunction of low demand and fully used capacity.

This high level of capacity utilisation, despite the low level of demand, is the result of both extensive scrapping and the low rate of new investment which prevailed in Europe over the last decade. Capacity has adjusted to a slow growth environment, transforming a slow growth trap into a capacity trap. Indeed, during a prolonged period of weak demand, it is rational for producers to adjust downward their capacity to this demand. This constant adaptation of the capital stock to the level of demand is illustrated in Figure 1: despite continuously growing slack in the use of labour, the degree of capacity utilisation oscillates within relatively narrow margins.

4. That evidence arises from a variety of studies based on widely different methodologies: see the special issue of Economica (1986, Supplement), World Economic Outlook (April 1987), Lambert, Lubrano and Sneessens (1984), Bruno and Sachs (1985), Sachs and Wyplosz (1986). It matters a lot that these studies generally lead to the same conclusion.

Table 3. Capacity utilization and expected capacity constraints in manufacturing industry

	Degree of capacity utilization					Expected capacity constraints (a)										
	1973 peak trough	1975 79/80 peak trough	1984 82/83 peak trough	1985 1986 April	1987 April	1973 peak trough	1975 79/80 peak trough	82/83 1985 April	1986 1987 April							
Belgium	85.4	70.4	79.1	74.4	76.0	78.8	79.4	78.2	1987 April	-12	+58	+35	+53	+29	+26	+27
Denmark												+10	+38	+3+	+8	+20
Germany	88.1	74.8	86.0	75.3	80.2	83.7	84.7	83.8		-3	+56	+12	+49	+17	+13	+20
Greece				74.4		75.5	77.0	76.8								
France	87.8	76.6	85.3	81.1	81.9	82.8	83.3	83.2		-24	+45	+11	+48	+37	+31	+26
Ireland			68.1	56.8	61.5	67.3	73.0	80.8			+34	+2	+40	+25	+18	+19
Italy	78.8	68.0	77.3	69.1	72.0	74.0	75.2	77.2		+1	+63	+17	+58	+37	+37	+24
Netherlands	86.0	76.0	83.0	75.8	82.3	83.8	83.4	83.0		-3	+60	+14	+51	+4	+4	+8
U.K.	90.6	75.5	87.6	73.0	82.5	85.8	85.1	87.0				+63	+23	+28	+17	
EC	86.4	75.0	83.9	76.4	79.1	81.6	82.2	82.7		-7	+54	+14	+50	+26	+24	+21

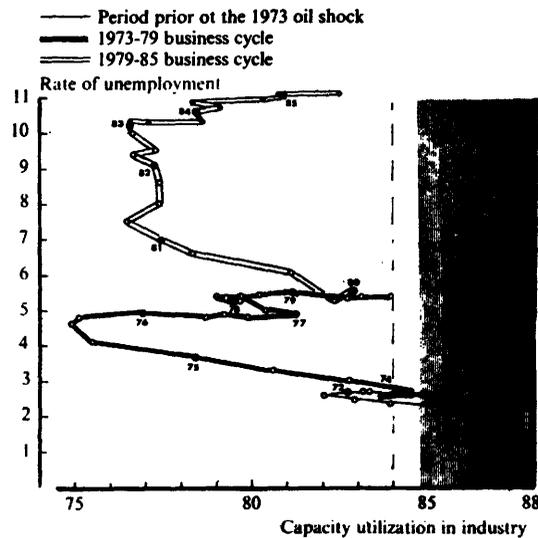
Source: European Economy, Sup.B., N°5, May 1987.

Notes: (a) : balance of respondents expecting capacity to be more than sufficient (+) or less than sufficient (-) in relation to production expectations. Thus (+) indicates excess capacity, (-) capacity too small.

(b) : weighted average of available country data

Figure 1

Rate of unemployment and capacity utilization
in industry in the Community



Quarterly observations are shown, with the years marked against the first quarter.

Source: European Economy, n° 26, November 1985

The result is a frustrating situation where no demand stimulus is implemented because of the absence of spare capacity, while there does not exist spare capacity because demand has been, is, and is expected to be weak. This is the rationale for the two-handed approach: capacity constraints must be eliminated via appropriate supply-side policies while demand must expand to trigger an upward adjustment of productive capacity.

3.2. The agenda

If Europe is to break out of the capacity-trap and grow faster, more efficient use must be made of available production possibilities and these possibilities extended through capacity-widening investment. The profitability of investment and hirings requires a conjunction of adequate profit margins and adequate demand expectations. The policy challenge is to

bring about these two conditions simultaneously: either of them in isolation would be ineffective.

Ideally, one would like to see capacity expand first, in anticipation of a growing demand, that could then be satisfied without resistance. It is unlikely that business investors would harbor such confident expectations, however, leaving governments with the option of implementing policies that remove inefficiencies and raise profit margins whilst at the same time raising effective demand in anticipation of the prospective growth of supply⁵. The policy mix is thus bound to be comprehensive. Success is predicated upon determination in using the two hands, and can be further enhanced by selecting measures which have beneficial effects on both supply and demand.

Starting with policies aimed at raising productive efficiency and the profitability of investment, they should consist of the following:

- (1) medium-run labour cost reductions achieved through a combination of continued wage moderation and cuts in labour taxes;
- (2) wage differentiation, i.e. a more pronounced reduction in overall wage costs for unskilled workers and for workers in depressed areas;
- (3) infrastructure public investments likely to raise productive efficiency, especially in regions with high unemployment and a correspondingly high growth potential;
- (4) elimination of wasteful subsidies and the introduction of measures to speed up the creation of an internal Common Market (deregulation, liberalisation, etc⁶);
- (5) measures to enhance the efficient use of capital and labour through more flexible working schedules, hopefully including some uncoupling of

5. The rationale for a demand stimulation that leads the expansion of supply (but not the measures designed to bring it about) has been expounded by Giersch (1987b) under the label of the "Schumpeter Case".

6. See Giersch (1987a).

worker time and company time.⁷

The first point is essential to generate the medium-run profitability expectations underpinning new investment and hirings. Visible progress has been accomplished recently on the front of wage moderation: in every country, except the UK, real unit labour costs have declined - the average decrease in the Community being 2.5 % over the past two years (see Table 4). Continuing wage moderation is essential and, in particular, adverse terms of trade movements should not lead to compensating changes in wages. In some countries this would require altering formal or informal indexation clauses: we do not underestimate the far reaching implications of this measure, yet we wish to stress its importance for the medium-run evolution of labour costs.

Table 4. Growth in real unit labour costs^(a) (% p.a.)

	1974-1981	1982-1986	1987
Belgium	1.4	- 1.5	- 0.8
Denmark	0.2	- 1.6	2.4
Germany	0.0	- 1.3	0.4
Greece	2.6	- 0.6	- 1.7
Spain	- 0.2	- 2.5	0.2
France	1.1	- 1.0	- 1.4
Ireland	0.7	- 2.1	- 0.2
Italy	0.6	- 0.9	- 1.2
Netherlands	- 0.2	- 1.6	1.6
Portugal	1.5	- 4.8	- 1.0
UK	- 0.1	- 0.1	0.3
EC 12	0.4	- 1.2	- 0.3
U.S.A.	0.0	0.0	0.2
Japan	0.8	- 0.5	0.0

Source: EC Commission

Note: (a) wage bill divided by value added.

7. See Dreze (1986).

However, only so much can be achieved through wage moderation. Fortunately, labour cost reductions can also be achieved through lower labour taxes. The scope for labour tax reductions is best shown by considering the costs incurred when an unemployed worker is hired. The employer will face the full cost, which includes wages and all labour taxes (social security, income). For society as a whole, though, not only do taxes no longer appear as a cost, but in addition there is the extra saving of the unemployment benefits which need not be paid. The size of this divergence between privately incurred costs and their public, i.e. budgetary, equivalent is documented in Table 5, which gives some numbers based on average labour taxes and social security contributions (i.e. we look at the marginal cost of moving an average worker from the situation of being unemployed to the situation of being employed). Ideally we would like to have comparable figures for unemployment benefits. In the absence of such data for most countries, we have assumed for all countries a replacement ratio (the ratio of average unemployment benefits to average earned income) of 50 % based on estimates provided by Layard and Nickell (1986) for the UK.⁸ Of course a better measure would use the figures applicable to a marginal worker. Because of such imperfections, Table 5 should be interpreted with due caution. From Table 5, we learn that the various taxes which contribute to raise the cost of labour, although somewhat different from country to country, are sufficiently large to offer a sizeable room for manoeuvre.

The significance of the wedge between the private and public cost of labour can be expressed alternatively in terms of the wedge between the private and public marginal efficiency of capital, for a capacity widening investment. In the private calculations, the additional labour employed to operate the new facilities enters at its private cost. From a public viewpoint, part of that cost washes out - namely all labour taxes, plus the unemployment benefits no longer accruing to the newly hired workers. Thus, from a public viewpoint, the marginal efficiency of capital is higher and the private

8. Limited evidence for other countries presented in OECD, Employment Outlook (1984) confirms that this ratio is a reasonable number.

level of investment is too low. Put more simply, the additional investment draws into use previously unemployed labour resources, thereby generating a

Table 5. Costs of reducing unemployment
1985 - % of GDP

	Net wages and salaries (1)	Social contributions (2)	Income tax paid by labour (3)	Total labour taxes (d) (4)	Total cost faced by employer (e) (5)	Ratio: ----- x 10 Private cost (6)	Private-Budgetary cost (f)
Belgium	41.9	13.5	11.0	24.5	66.4		68.5
Denmark	51.9	1.9	24.2	26.1	78.0		66.7
Germany	29.1	16.9	7.9	24.8	53.9		73.0
Greece	32.8	10.3	2.8	11.1	43.9	(c)	64.3
Spain	34.1	12.1	-	-	46.2	(c)	63.1
France	32.9	21.3	3.4	24.7	57.6		71.4
Ireland	48.9	5.8	10.2	16.0	64.9		62.3
Italy	43.0	12.6	5.1	17.7	60.7		64.6
Netherlands	25.9	25.4	7.2	32.6	58.5		77.9
Portugal	37.8	10.8	2.4	13.2	51.0		62.9
U.K.	44.9	10.7	8.9	19.6	64.5		65.2
U.S.A. (a)	46.0	9.0	10.5 (b)	19.5	65.5		64.9
Japan	48.4	15.2	6.5	21.7	70.1		65.5

Source: EC Commission

Notes: (a) 1984; (b) income tax; (c) excluding income taxes; (d) total labour taxes include social contributions and labour income taxes (4) = (2) + (3); (e) the private cost faced by an employer is the sum of net wages and salaries and of total labour costs (5) = (1) + (4); (f) the budgetary cost is the private cost less labour taxes and less the reduction in unemployment benefits (assumed to be 50 % of net wages): hence, (6) = [(4) + 1/2 (1)] / (5)

positive externality for the government budget.⁹ The full externality is the difference between the private and social cost of the labour drawn into use by the additional investment.

Turning to policies aimed at raising effective demand, they should consist of fiscal measures (as detailed below) resulting for Europe as a whole in temporarily larger public deficits. (However this does not mean higher deficits in every country; we discuss at length in section 7 the country specific aspects of this general policy.) These temporary deficits are to be financed primarily by borrowing and to be offset by future surpluses with a clear commitment not to resort to inflationary finance. Money growth should only accommodate any anticipated growth in potential output. In what follows, the fiscal expansion is assumed to take this form. We explain in section 3.3.2. why such a policy of substituting taxes tomorrow for taxes today will indeed be effective in raising demand.

As for the fiscal measures themselves, cuts in labour taxes are probably the most efficient means to reduce the wedge between the private and budgetary cost of labour and to discourage capital deepening, hence our recommendation to focus on them. Although this is not the place to discuss in detail alternative schemes of labour tax cuts, we would favour maximising their employment impact by concentrating their effects on segments of the labour force where the underutilisation of labour is greatest, e.g. the long term unemployed, the young, the unskilled, and the depressed areas.¹⁰ The immediate effect of a cut in labour taxes is to raise profits. This affects both consumption and investment. The effect on consumption is indirect via higher dividend income and stock market wealth. The effect on investment is more direct. Both channels however involve substantial lags. This suggests

9. Our reasoning assumes that the added capacity will be used. Otherwise, the investment would not take place. We are thus led back to our previous point that investment and employment require both sufficient profitability and adequate demand expectations.

10. For instance, the objective of giving priority to the unskilled may be satisfied through an exemption level below which social security contributions are waived or reduced; see Blanchard et al. (1985, p. 32) or Dreze (1987, p. 30).

complementing labour tax cuts with reductions in income taxes. Lower income taxes would, of course, help significantly to promote wage moderation. It is thus comforting to note that both the UK and Germany have recently announced income tax reductions. In addition to these tax cuts, there is scope for increased investment in public services and in the infrastructure, both at the national and European levels. This is an area which has been excessively squeezed in recent years. Any project which yields an adequate social rate of return fits naturally into the proposed fiscal measures. We advocate measures which simultaneously have desirable effects on both supply and demand. We will henceforth refer to this set of measures as a supply-friendly fiscal expansion.

3.3. The risks

In one form or another, the two-handed approach has now been advocated for some time, e.g. the Cooperative Growth Strategy. We cannot avoid therefore asking why progress is so slow. Of course it may be simply that the logic of the two-handed approach is not (yet ?) readily apparent, but it is likely that other concerns prevent its adoption. The current emphasis on patience is most likely explained by governments' fears of three possible consequences of any fiscal expansion, no matter how supply-friendly: (i) a resurgence of inflation; (ii) escalating budget deficits; (iii) a deteriorating current account. We believe that these fears are largely unfounded. Let us briefly sketch our arguments.

3.3.1. Inflation

It is perfectly understandable that governments which have invested so much effort and reputation into the battle against inflation now wish to solidify their success. Emphatically, we share this view. It is important to note that the policies that we advocate rely on supply-expanding and cost-reducing measures, so that by their very design they are unlikely to present major inflationary risks. Quite to the contrary, they have a built-in anti-inflationary bias. This is why we believe that the inflationary risks of a supply-friendly fiscal expansion are limited, especially in comparison to the costs of remaining caught in the present slow-growth trap.

3.3.2. Budget deficits

The budgetary picture shares many features with inflation. The process of financial consolidation is still under way in most European countries, so that the time might seem ill-chosen to contemplate measures which will result in heightened deficits. Budget deficits are a natural source of concern, in particular because they result in higher public debts. In the long run, the main issue is the public debt and the ability to meet the required interest payments. To the extent that the proposed strategy generates faster growth and more employment, it will not only generate welfare gains by releasing unused resources, but also additional receipts for servicing the burden of the additional debt.

This is not the place to review the literature on the burden of the public debt. We shall only consider a point which has received limited attention so far.¹¹ It concerns the question whether raising the debt today serves a useful purpose, given that fiscal policy will have to be eventually tightened in order to honour the debt. This will be the case if aggregate output is currently insufficient so that the deficit serves the useful purpose of inducing an intertemporal substitution in the demand for labour, away from a (future) period of full employment towards a (current) period of unemployment. The net gain is measured by the difference between the private and public costs of labour at a time of underemployment. This argument assumes that when the deficit is later eliminated, the reduction in labour market distortions will have achieved "full" employment.¹²

Of course the argument just presented rests upon two important premises. First the fiscal expansion must not be undercut by the crowding-out effect of an interest rate increase or an exchange rate appreciation. Second, it must be credible that the debt will be repaid through a future budget

11. Barro (1979), Lucas and Stokey (1983), Persson, Persson and Svensson (1986) discuss the optimal intertemporal pattern of taxes and public debt.

12. The case under consideration is also one where Barro's (1974) argument, that a fiscal expansion is fully offset by a reduction in private demand, does not apply.

surplus, rather than through the inflation tax. The second condition is not likely to be met in countries where the debt-GNP ratio has already reached very substantial levels. This is why the Cooperative Growth Strategy is right in advocating a fiscal expansion only in those countries where the debt-GNP ratio is lowest - Germany, the UK and France. The relevant data are given in Section 7 below.

3.3.3. External constraints

The last fear concerns the external balance. As in the case of a budget deficit, the current account feeds into the external debt which is the main external constraint. And upon considering an increase in the external debt the same criterion should apply, namely whether the resources borrowed abroad will generate the proper returns. A fiscal expansion accompanied by monetary accommodation is bound to lead to a "deterioration" of the current account (reduction of an export surplus) so that net foreign indebtedness will increase (capital outflows reduced). To the extent that the current account deficit corresponds to additional investment, the additional foreign debt simply means that the country is relying on the international capital markets to finance its expansion.

A useful benchmark case is one where the government budget remains balanced, but the supply of private domestic savings fall short of domestic private borrowing needs. Then the current account deficit arises because of an increase in private investment as the government budget remains balanced. Rational firms will borrow only if the return on their investment is at least equal to the cost of capital. Much the same applies when investment is carried out by the government, provided that it abides by the same rentability criterion. As long as this condition is satisfied, borrowing abroad actually increases national wealth, and the additional net foreign debt is more than offset by the present discounted value of the stream of future earnings. Because the latter is not measurable, a country's net foreign asset position, which only values its financial assets and liabilities, may be almost as unreliable an indicator as its current account.

Does this imply that if the current account deterioration reflects increased current consumption the country is "living beyond its means"? The correct answer is that the country is facing a solvency constraint. There is an important case when there is actually no such constraint: this occurs when the country's growth rate exceeds the real interest cost of the debt so that any fraction of income earmarked for debt repayment, no matter how small, will be sufficient.¹³ Otherwise solvency requires that current deficits be matched by future surpluses. If the country's ability to generate sufficient surpluses is in doubt the main outcome will be a pressure towards exchange rate depreciation, which in some instances may take the form of a speculative crisis. But, whatever the mechanism to establish solvency, what is ultimately required is a reduction in aggregate spending relative to income, and this represents the true external cost of the fiscal expansion.

A simple calculation can illustrate the point. Up to the mid-seventies most European countries were running current account surpluses more often than deficits so that it is natural to assume that they then started with little or no net external indebtedness. Assuming a real interest rate of 5 % and a growth rate of 2 %, a current account deficit representing 2 % of GNP over ten years amounts to a foreign debt of the size of 23 % of GNP. This is the worst situation that we envision for most countries. To consider an extreme case, with deficits as high as 5 % for ten years, the debt would represent 58 % of GNP. (Only Denmark and Ireland may be in a worse situation). What is the current account surplus needed to stabilize the debt at such levels? For the lower level of 23 %, a surplus of 0.7 % is sufficient, and this figure rises to 1.8 % when the debt level represents 58 % of GNP. While these numbers are purely illustrative, they suggest that the eventual sacrifice imposed by continuous deficits of the size mostly observed in Europe is quite moderate.

Several of the arguments of this section are illustrated with a stylised numerical allegory presented in Appendix 1.

13. The point is made in Cohen (1985).

3.3.4. Deficits or debts?

While for both the public budget and the external account, the appropriate constraint is the corresponding debt level (a stock), policy makers typically express concerns about deficits (a flow).¹⁴ What is the proper criterion? In terms of constraints, solvency is the correct criterion and the debt level is one way to measure it.¹⁵ But in terms of policy making the deficit may also be relevant criterion. The debt is a "first-order" burden as resources will eventually have to be committed to its service and possible repayment. The deficit is a "second-order" burden because of the associated macroeconomic adjustment costs of shifting from deficit to balance or surplus. For any target debt level, the wider the present deficit, the larger will the needed adjustment be, and the worse its welfare implications. The deficit is also a more immediate concern and thus attracts the policy makers attention more forcefully than the debt which cannot be dealt with in anything but the long run.

4. The bottom line

The policy challenge for Europe today boils down to Europe being caught in a low growth, high unemployment trap, characterised by: (i) substantial unused labour resources and a correspondingly high growth potential; and (ii) production facilities which have adjusted downwards to low levels of effective demand. A return to faster growth requires both an acceleration of growth in supply and a revival of demand expectations. The prevailing uncertainty surrounding the supply responsiveness generates fears in some official quarters that demand stimulation would evaporate in inflation and imports, without any lasting effects on output and employment. These fears breed inaction - and hence low investment.

To break the vicious circle, a two-handed strategy, of the kind outlined above, is needed. Unwillingness to follow such a two-handed strategy may reflect a lack of confidence in the prospective effectiveness of the action

14. See Vinals (1986).

15. Buiters (1985) discusses these issues in great detail.

of either hand. It is inescapable, that confidence in the effectiveness of both the supply-side and the demand-side components is needed today.

The ultimate fear is perhaps that the supply-side measures will be too timid, or the response of supply too slow, to avoid inflationary and exchange rate pressures as the fiscal expansion proceeds. We can only repeat that such pressures will be the less likely, and the less severe, the more vigorous and productive the supply-side measures.

We do not claim that risks of inflationary or exchange rate pressures are totally absent. We can only repeat that they will depend upon the mix to be chosen and that some of them are worth taking, given the current underutilisation of resources and the danger of a further extension of unemployment in the near future. Each government has to balance its fear of inflation and deficits against its commitment to fight unemployment. As we explain in Section 7, the differences in initial conditions and policy objectives of the European countries will influence both their choice of policy mix and their willingness to expand.

But there is an important additional dimension to the policy challenge, to which we now turn. Due to the high degree of openness of European economies, cooperation in pursuing the two-handed strategy is important to overcome specific constraints on national policies and in internalising some important non-priced externalities.

PART II: AUTONOMY THROUGH FLEXIBLE COOPERATION

5. Openness and the Case for Cooperation

5.1 Effects of openness on fiscal policy effectiveness

The analysis of Part I presented the basis for, and content of, the proposed two-handed growth strategy. This analysis has largely overlooked the fact that some European economies are quite open. Openness plays a crucial role as it may affect profoundly the cost-effectiveness of the proposed

policies. This part considers the role of openness and demonstrates the crucial importance of cooperation for policies designed to enhance demand.¹⁶

In an economy with unemployment and with a sizeable wedge between the private and public costs of labour, the effectiveness of a fiscal expansion is measured by the additional output and employment resulting from it. Its cost is indicated by the associated increase in the public and current account deficits. The very fact that an economy is open reduces the (domestic) effectiveness and raises the (domestic) costs of the fiscal expansion. Further, this effect is the more pronounced, the more open is the economy.

5.1.1. Reduced policy effectiveness

The reduced effectiveness results directly from the dampening effect of additional imports, as measured by the marginal propensity to import. A given initial stimulus to demand will produce fewer jobs at home because some of the demand leaks abroad. Although foreigners in turn may spend some of their increased income on domestically produced goods, the feedback will

16. One member of the group (H.G.), while fully supporting the two-handed strategy described in Part I, wants to take exception to Part II to the extent that it deviates from the following position: coordination is not a necessary condition of the strategy. Instead of waiting for others, individual countries can start on their own, e.g. Germany. This country should take the lead, with or without prior coordination, by adopting measures to improve the competitiveness of its domestic locations in the worldwide market for capital and direct investment in order to transform its current account surplus into an additional stock of capital for more permanently productive jobs within its area: in given circumstances, the social returns of investment in Germany would far exceed the rate of interest earned from exporting capital. Even smaller countries could move ahead without time consuming prior coordination. Going alone, however, requires that the measures taken promise as much positive effects on the supply side as they increase demand. The supply side effects are to improve the competitiveness of domestic producers so that the expanding country captures more of total world demand at the time when part of the domestic demand stimulus leaks out to raise imports. What matters is the balance of demand and supply effects. Coordination takes only care of the demand side. Stressing the coordination issue involves neglect of the supply effects and their importance. It thus runs into the danger of creating a moral hazard problem: a demand expansion may too easily be considered sufficient.

be staggered over time, and will be less than complete if a fraction of the income generated abroad is hoarded. Of course, the import leaks are not lost at the world level - they benefit the suppliers of imports as an externality, if they experience a similar discrepancy between the private and budgetary costs of labour; we return to that point below.

The fact that the feedback is staggered matters when the whole purpose of the fiscal stimulus is to induce an intertemporal substitution in demand, from the future to the present. How staggered the feedback will be, depends on the origin of the imports: Belgian imports from France, which in turn addresses 10 % of its own import demand to Belgium, will induce a quicker feedback than Belgian imports from Spain, which addresses less than 2 % of its own imports to Belgium. Detailed linked econometric models would be needed to estimate the length of the lags, but the argument that the feedback is less than complete, if part of the income generated abroad is hoarded, is standard. One aspect of that argument is not commonly spelled out, however, and that aspect is important for our purposes. In Europe, average rates of gross taxation (ratios of public receipts to GDP) are close to 50 % in many countries. For a country engaged in fiscal stabilisation, this implies an automatic hoarding of about half of export-led increases in income. For the partner country which contemplates a fiscal expansion, it means that some 50 % of the hoped-for feedbacks would be sterilised - at least temporarily. Again, detailed econometric models would be needed to assess the precise magnitude of this effect, but the numbers are bound to be large. Given the current stress in Europe on fiscal consolidation, fears of foreign sterilisation are quite natural probably go a fair way towards sustaining the expectation that the feedback will be slow and incomplete, substantially reducing the effectiveness of fiscal policy in any single open economy.

5.1.2. Increased costs

The increased cost of the fiscal stimulus derives from the externality corresponding to a private cost of labour in excess of its budgetary cost: the cost of domestic labour to the country is its budgetary cost, while the cost of foreign labour is the full private cost. The difference between the two accrues to the foreign country (with only limited feedback to be

expected). To illustrate, if the Belgian government hires formerly unemployed Belgian workers to tend the public parks of Antwerp, the net cost to the Belgian taxpayers is the difference between the net earnings of the workers and the unemployment benefits that they used to receive (labelled budgetary costs in Table 5). If instead Dutch gardeners are hired the net cost to the Belgian taxpayers is the full gross cost (labelled private costs in Table 5). Obviously this increase in cost will be greater the more the increase in demand, and the associated increase in employment, leaks abroad, i.e. the higher is the marginal propensity to import.

5.1.3. Openness

Thus, as the marginal propensity to import rises, the domestic cost-effectiveness of the expansion is affected, reducing the country's incentive to carry it out on its own. The importance of this point has been illustrated vividly by the "early-Mitterrand" French expansion of 1981-82, the associated current account deterioration quickly leading to a reversal of policy (see Sachs and Wyplosz (1986)). However, if several countries together form a relatively closed area, they can reap the full benefits of an expansion just like a closed economy. We shall argue that this is the case today in Europe, and particularly that it is more reasonable to advocate a simultaneous expansion by France, the U.K. and Germany than to ask Germany alone to play again the locomotive role while France and the U.K. postpone action until the German expansion takes momentum.

In Appendix 2, we explain why import shares, corrected for the import content of exports, provide an operational measure of the degree of openness of an economy, which is well-suited for a discussion of the cost effectiveness of fiscal policy. Some figures on import shares, net import shares (imports less import content of exports), and marginal propensities to import are collected in Table 6. It is clear that openness is inversely related to country size, and directly related to the extent of economic integration with neighbouring countries. EC10 as a whole is about half as open as the least open of its members. In spite of its larger size, measured by GDP or population, EC10 is still more open than either the US or Japan. In part this reflects a more limited endowment of natural resources

(relative to the US), in part closer links to former colonies or other non-community European economies. But the degree of openness of Europe as an entity is much closer to that of the US or Japan than to that of a typical member country.

Table 6. Measures of openness (1985)

	Import Share	Net Import Share	Marginal propensity to import ^(a)
Belgium	76.1	44.2	53.0
Denmark	36.7	19.8	23.8
W. Germany	28.7	19.8	23.8
Spain	20.2	15.7	18.8
France	24.9	15.6	18.6
Ireland	58.5	40.0	48.0
Italy	28.6	18.9	22.7
Luxembourg	94.4	-	-
Netherlands	59.4	25.0	30.0
Portugal	41.9	25.5	30.6
UK	28.2	18.7	22.4
Greece	32.5	26.0	31.2
EC 10	13.4	-	-
USA	10.1	-	-
Japan	11.4	-	-

Source: EC Commission. From country desks, based on national sources. Adjustment for import content of exports based on input-output tables when possible.

Note: (a) (1.2) (net import share)

The figures in Table 6 prompt us to the conclusion in the third part of this report that Europe as a whole is sufficiently closed to pursue autonomous fiscal and monetary policies, provided it can define and implement these policies on a cooperative basis. The need for cooperation among European countries derives from their high degree of individual openness, which imposes severe constraints on autonomous policy actions by individual countries.

We thus see openness as a major explanation for the reluctance of European Governments to implement the two-handed strategy.

5.2. The case for cooperation

The case for policy cooperation is quite simple and well-known.¹⁷ A sufficient condition is that the private and budgetary costs of any factor or commodity (labour for example) diverge at home and abroad. Then, if governments make their policy decisions based only on the effects on domestic welfare, they will ignore any effect on the allocation of resources abroad. In the absence of any wedge between the private and social costs, this does not matter since the allocation of resources is efficient. However, when for example unemployed labour abroad is brought into use by a domestic fiscal expansion, the home country ignores this beneficial effect in deciding how large an expansion to make. The essential point is that there exists an externality which is not properly "priced". Hence, we find a strong temptation for each country to act as a caboose in the hope that the other ones will play the role of the locomotive. Thus in assessing the success of the German-led expansion following the Bonn summit of 1978 - the "locomotive" experiment - one should take into account the effect of Germany's action on its trading partners. While Germany experienced a deterioration in its current account and some acceleration in inflation, it also raised the level of activity abroad.¹⁸ It should be noted that coordination of policies is emphatically not the same as their synchronisation. Thus the worldwide inflation of 1973 was engendered by the simultaneous but uncoordinated fiscal and monetary expansion pursued by the industrialised economies. The result was chronic overheating.¹⁹

17. Hamada (1976), Cooper (1984), Sachs (1983).

18. Unfortunately the second oil shock and the contractionary fiscal and monetary policies it engendered prevent any firm conclusion about the overall success of the experiment; see Bean (1985).

19. Indeed, it is not generally the case that the lack of coordination leads to over-contractionary policies. It can also result in over-expansionary policies, particularly under a fixed exchange rate regime.

One natural domain of cooperation concerns the fears of sterilisation through attempts at budget consolidation by trading partners, as explained in Section 5.1. If two countries are both inhibited in their implementation of a desirable fiscal expansion by such fears, it would be natural for them to reach mutual assurance that each country's expansion will not be partly offset by the other country's fiscal stance. Cooperation is then conducive to more successful policies in both countries.

The logic of the case is elementary and widely recognised at different levels. It is the same logic of "coordination failure" which plays an important role in microeconomic reasoning, to explain why individual firms operating below capacity do not find it advantageous to expand output and employment individually, in anticipation of the demand that would materialize if all firms expanded simultaneously.

The case for cooperation is intimately linked to the two-handed approach. One hand, that directing the supply side, by and large does not require cooperation.²⁰ The need for cooperation follows from the determination to use the second hand, that of the demand side. Indeed, most of the supply-side measures under consideration can be implemented at national levels by individual countries acting on their own. Not only the measures, but also their effects, are of a primarily domestic nature. The incentives to adopt them are there, whether or not other countries do likewise. Further, these supply-side measures work towards improving competitiveness, so that external considerations reinforce the domestic motivation. (The same cannot be said of measures encouraging market integration or trade liberalisation. These are appropriately approached at the supranational level.)

The fact that macro-economic policy cooperation is bound to stress the demand element in the policy mix has a disadvantage. It leads to a rhetoric that neglects the supply side, where a lot of hard work is to be done. That

20. There exist some supply-side measures which would still benefit from cooperation (e.g. when they affect the internal terms of trade, or market liberalization which spills over abroad), but the magnitude of the gains from cooperation in these cases is likely to be small.

disadvantage is particularly obvious in Part III of the present report, which of necessity is devoted almost entirely to demand side policies. Hopefully, our insistence on the complementarity of the two sides should be clear to the reader from Part I. For some of us, the anticipatory demand expansion is even viewed primarily as a means of facilitating the removal of supply rigidities, the completion of the internal market and the liberalisation of world trade. However, even though the emphasis placed on the two sides may differ, there is no doubt in our minds that only a two-handed strategy can restore acceptable rates of growth in Europe. There lies the most important message.

6. Europe and the rest of the world

6.1. Little promise for policy cooperation

The income flow measures presented in section 5.1. capture reasonably adequately the size of the externalities which make the case for cooperation. They reveal clearly that large countries, or country groups, are relatively closed. Trade among them does not weigh heavily in their national incomes. Table 7 summarises the relevant data. As might be expected, the cross-country income multipliers between such areas are quite small. Table 8 reports the multipliers from the COMPACT Model - a model yielding results for the European Community as a whole (EC 10).²¹ The only sizeable entry (.4) concerns the impact of the US on Japan. Those for Europe are uniformly small (.1 or .2).

As a consequence, the need for policy cooperation between such large but closed entities is not great. That conclusion is confirmed by the welfare computations performed by Oudiz and Sachs (1984) reported in Box 2.

21. Where comparable, results from other models (for instance those of the Interlink model used at OECD, or the MCM model used at the Federal Reserve Board, or of the EPA in Tokyo) are not markedly different. See, e.g. Oudiz and Sachs (1984) pp. 20-21.

Table 7. Trade flows between major countries or groups

	US	EC 10	Japan
Import as % of GDP	10.1	13.4	11.4
Exports as % of GDP	7.0	12.8	15.1
Exports to EC 10 as % of GDP	1.6	14.4 ^a	1.5
Imports from EC 12 as % EC 12 GDP	3.3	14.3 ^a	.4

Source: European Economy, July 1986, N° 29, Tables 35 and 36.

Note: (a) is intra-EC trade.

Table 8. Cross-country income multipliers
(1 % of GDP increase in public expenditures (non-wages))
(with non-accomodating monetary policy)
(% discrepancy w.r.t. baseline simulation)

Country taking action	IMPACT ON GDP								
	EC 10			US			Japan		
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
EC 10	1.1	1.3	0.9	0.1	0.2	0.2	0.1	0.1	0.1
US	0.15	0.2	0.2	1.3	1.2	1.0	0.3	0.4	0.4
Japan	0.05	0.1	0.1	0.1	0.1	0.1	1.1	1.2	1.4

Source: Compact model

BOX 2: WELFARE GAINS FROM COOPERATION

The welfare calculations by Oudiz and Sachs (1984) were based on two large models which measure the links between the US, Japan and Germany (the MCM model of the Federal Reserve Board and the Japanese EPA model). Given contemporary forecasts for the three years 1984-86 they looked for the policy actions which would improve the welfare of all three countries, without hurting any of them; welfare is measured in units (percent) of GNP and corresponds to the perceived costs of falling below potential GNP, inflation, and current account imbalances. The striking feature of their results, reported in Table 9, is how little is achieved through optimal coordination: the 0.33 number obtained for Germany means that, compared to uncoordinated policy making, full coordination would only improve that country's welfare by an equivalent of 1/3 of one percent higher GNP over the three years period. Clearly, if the best that can be achieved is of this order of magnitude, there is little incentive in undertaking the kind of elaborate negotiations that full coordination requires.

Table 9. Welfare gains from coordinations

	U.S.	Germany	Japan
MCM	0.17	0.33	0.99
EPA Model	0.03	0.03	0.32
MCM Modified	0.54	0.56	2.96

Unit of welfare gain equivalent to a percentage of GNP averaged over three years. Target values are: inflation, zero; current account-GDP ratio: zero for the US, 2% for Germany and Japan. The last line is based on a modification of the MCM with Germany enlarged three fold and called "Europe".

Source: Oudiz and Sachs (1984).

The scope for coordination is best approached as an exercise in cost-benefit analysis. Small gains may indeed be worth reaping if the cost in obtaining them is minimal, whereas larger gains may sometimes fail to cover their cost. Pending such a quantitative analysis, we feel safe in concluding that the (political?) difficulties of coordinating policies at a world level are such that the effort may scarcely be worth the candle.²²

6.2. A careful exchange rate policy

Another important channel of transmission of policy impacts across countries is the terms of trade. Unfortunately, the effects of fluctuations in the terms of trade are more difficult to capture through econometric models than income effects. Still, we report in Table 10 cross-country exchange rate multipliers as estimated by the COMPACT Model. The picture emerging from that table confirms our general intuition: the impact of a depreciation of the US dollar against all other currencies exerts less influence at home, and more influence overseas, than a comparable depreciation of the ECU, or even more so of the yen. Presumably, the same conclusion would hold for an appreciation.

Looking at Tables 8 and 10, we note that a 10 % change in the value of the dollar has roughly the same medium term impact on the GDP of EC 10 as a 2.5 % change in US national income. But exchange rates are much more volatile than national incomes, so that Europeans are justifiably concerned by the real consequences of the dollar instability. The current situation is dominated by a considerable amount of uncertainty. The sharp appreciation of the dollar from 1980 to 1985 has been mostly undone by its equally sharp depreciation since then. While the full impact of this depreciation remains

22. This does not mean that Europe does not stand to benefit from some policy actions in the US. Given the strong linkages between financial markets, a reduction of the US budget deficit would be welcome in Europe. The exchange rate aspect of these linkages is taken up in the following section.

to be felt, a further sizeable depreciation is seen by some (see Dornbusch and Frankel, 1987) as a distinct possibility. The effects on the exchange rate of an acceleration of growth in Europe must be considered in such a context. If existing macroeconomic models provide any guide to the future (and doubts are legitimate...), then faster growth in Europe would put downward pressure on its currencies. If current parities are close to their sustainable equilibrium levels (and here too there is ample room for doubt), then it would be desirable to accompany the fiscal expansion with a monetary policy which would avoid significant short and medium term swings.

Table 10. Cross-country exchange rate multipliers
(10 % depreciation against all currencies)

Country taking action	IMPACT ON GDP								
	EC 10			USA			Japan		
	1 year	2 years	3 years	1 year	2 years	3 years	1 year	2 years	3 years
EC 10	0.15	0.5	0.8	-0.1	-0.15	-0.2	-0.1	-0.1	-0.2
USA	-0.1	-0.3	-0.5	0.2	0.3	0.35	-0.3	-0.6	-0.8
Japan	-0.05	-0.1	-0.1	-0.05	-0.1	-0.1	0.4	0.7	1.1

Source: Compact model

On the other side the experience of the present decade is one where currency movements have been dominated by the dollar and policy initiatives in the US. Under such conditions it is dangerous for Europe to try to stabilise its exchange rates vis-a-vis the dollar as it would mean a severe loss of monetary policy independence, an undesirable outcome given the limited gains from transatlantic coordination shown above. Europe should therefore use monetary policy to offset exchange rate pressures caused by its own fiscal actions (this prescription concerns Europe as a whole vis a vis the rest of the world; within European exchange rate policies are discussed in some detail in section 7.2). Our proposed fiscal-monetary mix has precisely that property.

Offsetting exchange rate pressures may not be appropriate, however, in the presence of other shocks. Unfortunately, given the amount of existing uncertainty, we cannot provide succinctly a comprehensive analysis of the appropriate monetary policy responses to the many disturbances which may occur.

6.3. Policy implications: Europe's autonomy

The implications of the discussion so far are clear. It would be futile to aim at finely tuned coordination of economic policies between Europe, the US and Japan. Our simple, clear conclusion cuts through an issue which the interplay of economics and politics has turned into a complex (confused?) debate. We believe that Europe should assume responsibility for its own economic policies and regard itself as an autonomous economic entity.²³

This conclusion is somewhat at variance with the spirit of efforts initiated at Summit Meetings of the Group of Seven, and endorsed in particular in Section 4.7 of the EC Annual Report 1986-87 - a point to which we return in Section 7.1. below.

23. To avoid ambiguities: we are not arguing that Europe is more efficient in achieving coordination, rather the gains from coordination with Europe are that much greater due to the more open and interrelated nature of its constituent economies.

Being autonomous does not mean disregarding the actions of others, of course. What other countries do is relevant to European policy choices, and must be taken into account. And we refer in Box 3 to common responsibilities which Europe shares with others at the world level. Rather autonomy requires accepting one's responsibilities without blaming others for one's difficulties. That is exactly how Europe should approach its severe unemployment problem. The recent experience of a large US trade deficit and an overvalued dollar with its negligible impact on European employment,²⁴ confirms that we should not expect miracles from increased exports to the US which presently account for only 4 % of Europe's GDP.

While world macroeconomic policy coordination does not seem to pass the cost-benefit test, there are nevertheless other areas of cooperation that we wish to mention briefly. One is the international monetary system, a second is trade liberalisation, and the third concerns the LDCs. They are discussed in Box 3.

BOX 3: THREE ITEMS FOR WORLD COOPERATION

The prominent issue is the macroeconomic adjustment required by the LDC debt problem and the U.S. current account deficit. The more developed countries should cooperate actively in improving the growth potential and living standards of the LDC's. Beyond the technical steps needed to organize more realistic terms for the debt and more efficient risk sharing between rich and poor countries, the main long run concern should be to promote stable growth of LDC exports. This calls for sustained demand for these exports from the main industrialized areas. As the US are attempting to reduce their own external deficit, it is important that the European surplus be reduced and reversed to make room for a surplus by the LDC's, without which their debt situation can only worsen. In this respect the policy-mix advocated in this paper - which implies a reduction in the Europe-wide current account surplus, possibly turning it into a deficit - is consistent with Europe's responsibilities in the world economy.

24. Of course, that impact could have been increased, had the supply responsiveness in Europe been greater. That lack of responsiveness in turn was probably influenced by the conviction that the US deficit and overvalued dollar were temporary.

A second area for cooperation is a significant reduction of the role played by the dollar on the international scene. As noted by Oudiz and Sachs (1984, p. 7, Table 2 reproduced here in Table 11): "The US dollar remains the linchpin of the world monetary system. As shown in Table 11, the currency of denomination of international reserves, Euro-dollar loans, new issues of Eurobonds, and OPEC portfolio wealth remains to a far higher extent in US dollars than the US share of world GNP would suggest. The special role of the dollar leads to important asymmetries between the effects of US policies on Europe and Japan, and the effects of European and Japanese policies on the United States. Shifts in the value of the dollar can have significant income redistribution effects throughout the world that may also have important demand consequences; changes in the value of the European currencies or the Japanese yen do not have such effects". With all the prudence called for in this difficult area, we feel that the primary need remains that of developing better alternatives to the US dollar as international instrument of reserves, transactions and liquidity.

Table 11. The role of the US Dollar
in internal finance

	Percent of US dollars		
	1975	1978	1981
Official reserves	79.4	76.9	70.6
Eurodollar loans	73.7	67.6	70.6
Eurobond issues	47.2	48.2	80.2
US share of world GNP	24.3	25.0	n.a.

Source: reproduced from Oudiz and Sachs (1984),
Table 2

The third issue, trade liberalisation, was discussed extensively in the latest report prepared for the CEPS Macroeconomic Policy Group (H. Giersch (1987a)). It would of course be partly self-defeating to work towards smoother trade flows through stabilisation of the dollar, while at the same time accepting other impediments and distortions through tariffs, import restrictions and other barriers. Trade liberalisation can contribute to supply expansion and output growth in all parts of the world. It should be promoted now, and Europe should exercise leadership in that respect. This issue cannot be overemphasized at a time when protectionist pressures are rising on both sides of the Atlantic.

7. Policy coordination within Europe

7.1. Cooperation and the EMS

So far, the EMS has brought about some cooperation in monetary, and to a lesser extent fiscal, policies, but this is not by itself a guarantee that the required policies will emerge naturally. In this section we briefly review the benefits that member countries have reaped from participation in the EMS, its role in encouraging cooperative behaviour, and the requisite conditions for cooperation in the two-handed strategy.

The primary objective of the EMS is to deliver bilateral exchange rate stability. Trade flows between European countries will be more stable if they are not subject to volatile exchange rate movements. Given the large share of exports in value added, greater stability in trade carries over to greater stability in output and employment. Thus, exchange rate stability helps to insulate the real economy from monetary shocks²⁵. In addition, the EMS has been instrumental in enhancing the effectiveness of anti-inflationary policies in the early eighties when all European countries were sharing the common objective of reducing their excessive rates of inflation. The EMS constraint of maintaining stable exchange rates proved helpful to that end in two ways:

- (i) It eliminated the temptation for individual countries, especially the more open ones, to export their inflation through currency appreciation - a policy that obviously could not succeed if pursued by all.²⁶

25. There is some debate whether these objectives have been met. Rogoff (1985) finds that the EMS has made bilateral exchange rates more predictable, not necessarily more stable. DeGrauwe (1987) compares exchange rate variability before and after 1979 and concludes that there is no obvious evidence that the variability of bilateral exchange rates has decreased more inside than outside the EMS.

26. Giavazzi and Giovannini (1986) show, however, that the EMS has introduced long-run trends in intra-European competitiveness, and suggest that the system has not prevented some European countries - at least Italy - from using currency appreciation to export inflation.

(ii) It also enabled member countries to borrow the anti-inflationary reputation of the Bundesbank to help reduce domestic inflationary expectations.²⁷

It was thus important for all concerned to adhere as strictly as possible to the agreed exchange rates. The automatic success of the EMS as an implicit tool of policy coordination resulted from the fact that the tool was ideally suited to the main priority of the day - the elimination of inflation - an objective which was shared by all countries.

To the extent that the system functions as it should (and has done so far), it reduces substantially the leeway for independent interest rate policies in the member states. Participation in the EMS amounts to a surrender, by all but one country, of domestic interest rates as an unrestricted policy instrument. It also implies the surrender of the exchange rate as an instrument for equilibrating the current account. Rather, it entails an implicit commitment to achieve long-run external solvency by price adjustment alone. At the same time, the EMS countries retain the option of floating together vis-a-vis the rest of the world, thereby achieving external balance in a manner which individual member countries have forfeited by joining the EMS.

The EMS, however, does not enforce automatic cooperation of fiscal policies. It may provide a useful framework for cooperation, but does not substitute for the sort of negotiation required to enact mutually beneficial policies.²⁸ An important feature of the environment in which cooperation must take place is the fact that the various European countries start from different initial conditions. With different initial conditions, there is still room for cooperation, but it may lead to varied policy actions in the different countries. We call this "flexible" cooperation. We address this

27. See Giavazzi and Pagano (1986).

28. The EMS merely reduces the possible policy choices of its member countries but does not restrict them completely, leaving room for coordination, or the absence of it. See Begg and Wyplosz (1987).

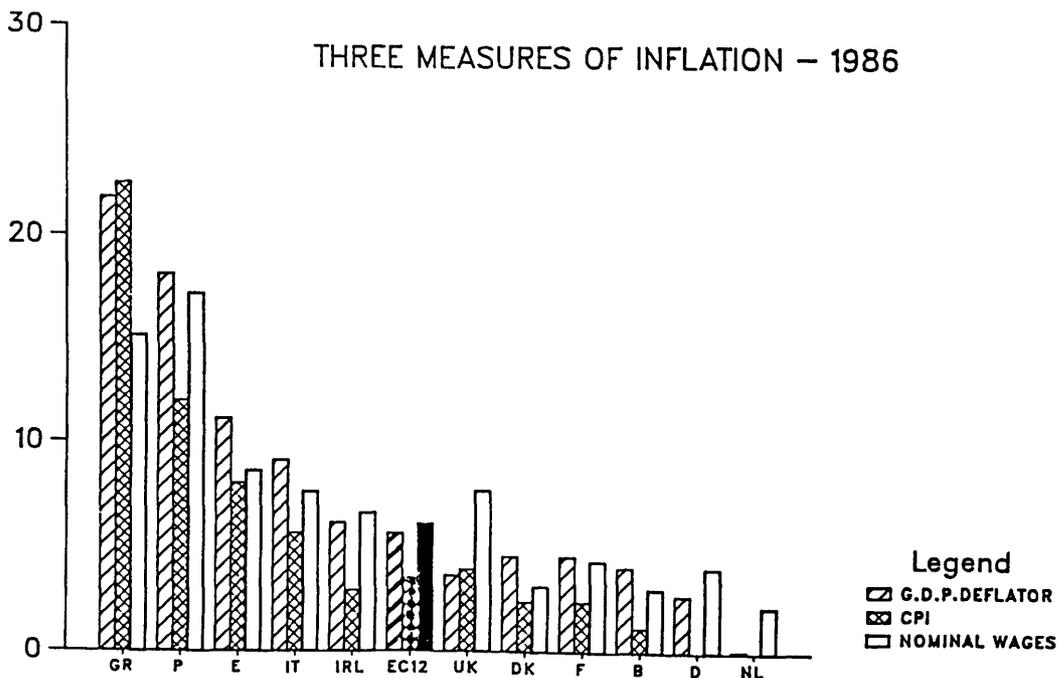
issue in the next section. We shall then consider another aspect which also complicates the matter: the possibility that policy objectives may differ among the various countries.

7.2. Cooperative growth with differentiated initial conditions

7.2.1. The setting

Differences in initial conditions matter because they alter the constraints on policy choices. In the present context, we have identified three such constraints (section 3.3): inflation, the public debt, and the external debt. We have already stressed that inflation need not be a threat because the two-handed approach incorporates significant contributions to cost and price stability. Looking at the current situation we note that, for the first time in twenty years, Europe's average inflation rate (as measured by the CPI) has receded to its level of the mid-sixties. Yet differences between countries remain substantial, with the four Mediterranean countries well above the European average, the UK close to it, and the remaining countries below it. The inflationary position of the southern countries should thus be kept in mind, while the respite in trend inflation is put to good use. The relevant data are displayed in Figure 2.

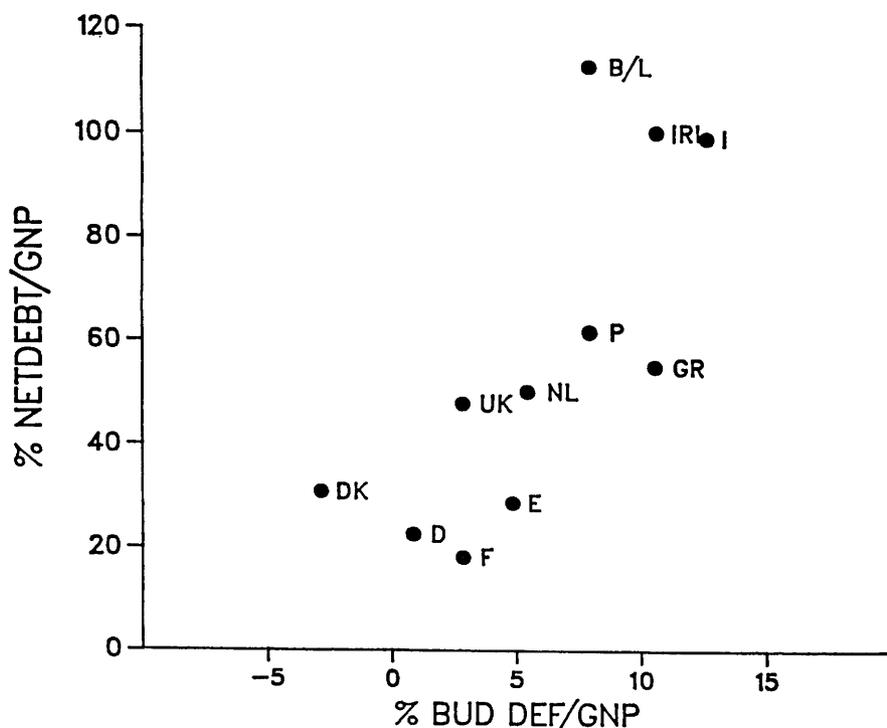
Figure 2



UNEMP.	9.3	7.6	19.8	12.7	17.8	11.4	12.0	7.4	10.6	13	7.8	12.4
GROWTH 86	-0.4	3.9	2.7	2.7	3.2	2.5	2.6	2.5	2.3	2.0	3.5	1.7

Differences in the state of the public finances amongst the European nations are clearly recognised in the Annual Report of the EC Commission. In particular the Report stresses that budget deficits in several member countries are already so high that they must be reduced rather than increased further - for otherwise the burden of public debt would soon grow beyond control. (Figure 3 brings out clearly the association between public debts and deficits). Hence the Commission's recommendation that fiscal expansion should start in Germany, with France and the UK following.

Figure 3



This internal constraint has now to be connected to the other important one, namely the external constraint. The two-handed growth strategy should be viewed against the background of Figure 4, where the twelve EC countries (Belgium and Luxembourg combined) are located in terms of their net

government debt/GNP ratio (horizontally) and of their current account deficit/GNP ratio (vertically²⁹). Each country is represented by a circle with area proportional to the country's GNP. Two solid lines are drawn at the (weighted) averages of the ratios for EC 12.

7.2.2. The principles

A supply-friendly fiscal expansion, with monetary accommodation, should lead to a temporary increase of the net debt/GNP ratio and to a temporary deterioration of the current account/GNP ratio. This implies that the EC averages in Figure 4 should move north-east.

The movement of the averages does not, however, require that each individual country moves north-east. Actually, the position of some countries in Figure 4 is such that they would prefer to move in a different direction. In particular, Italy, Ireland and Belgium are trying to move westward, so as to reduce the weight of their public debt. (The Annual Report of the EC Commission recommends indeed that these countries continue their efforts at budget consolidation.) Similarly, Denmark and Greece would like to move southward, to reduce their external deficit. (We return to these specific country tendencies below.)

Flexible cooperation, as distinct from policy synchronisation, does not require all countries to move in the same direction. Instead, it tries to define country-specific policies that tend to the common goal, while duly taking into account the differences in initial conditions. What does that mean, in present circumstances?

29. In principle, we would prefer to measure the external constraint through the net external debt rather than through the current account. However, official figures for net external debt are often lacking, and therefore seldom used, so we use the more familiar figures. On the basis of cumulative current account data since 1960, we have constructed net external debt estimates and used them in Figure 5. The picture does not differ much from that of Figure 4 and may be used interchangeably. We have already discussed this issue in section 3.3.4. and will return to it below.

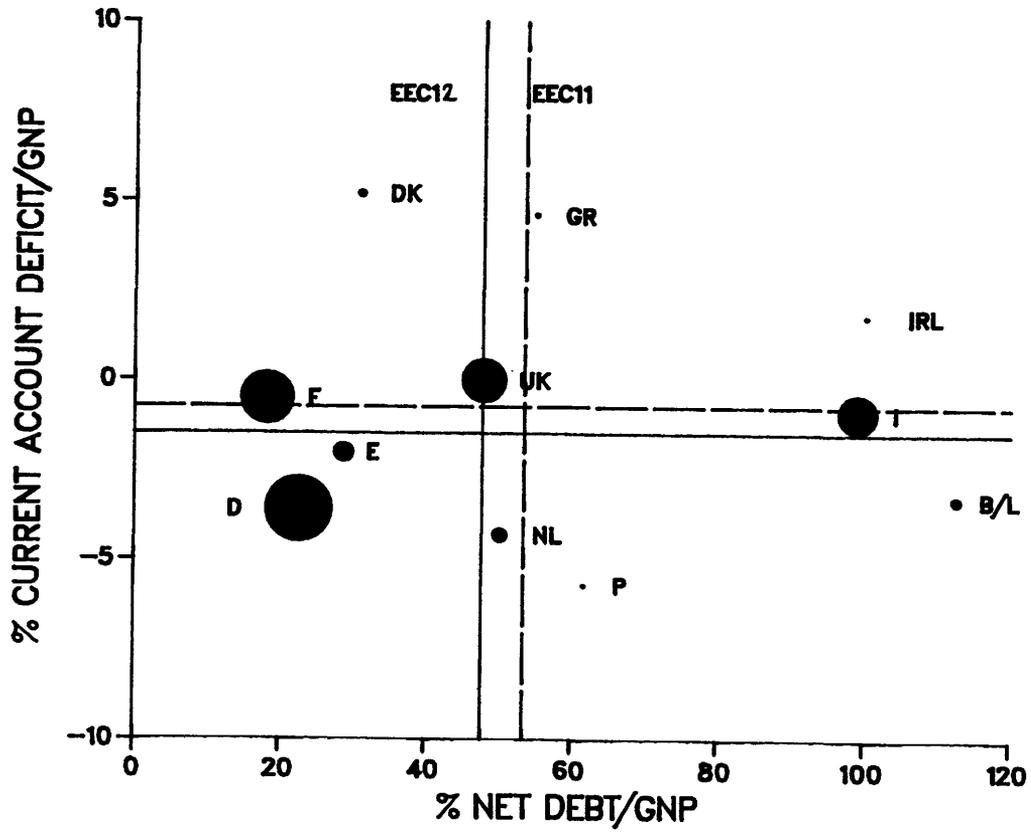


Figure 4.

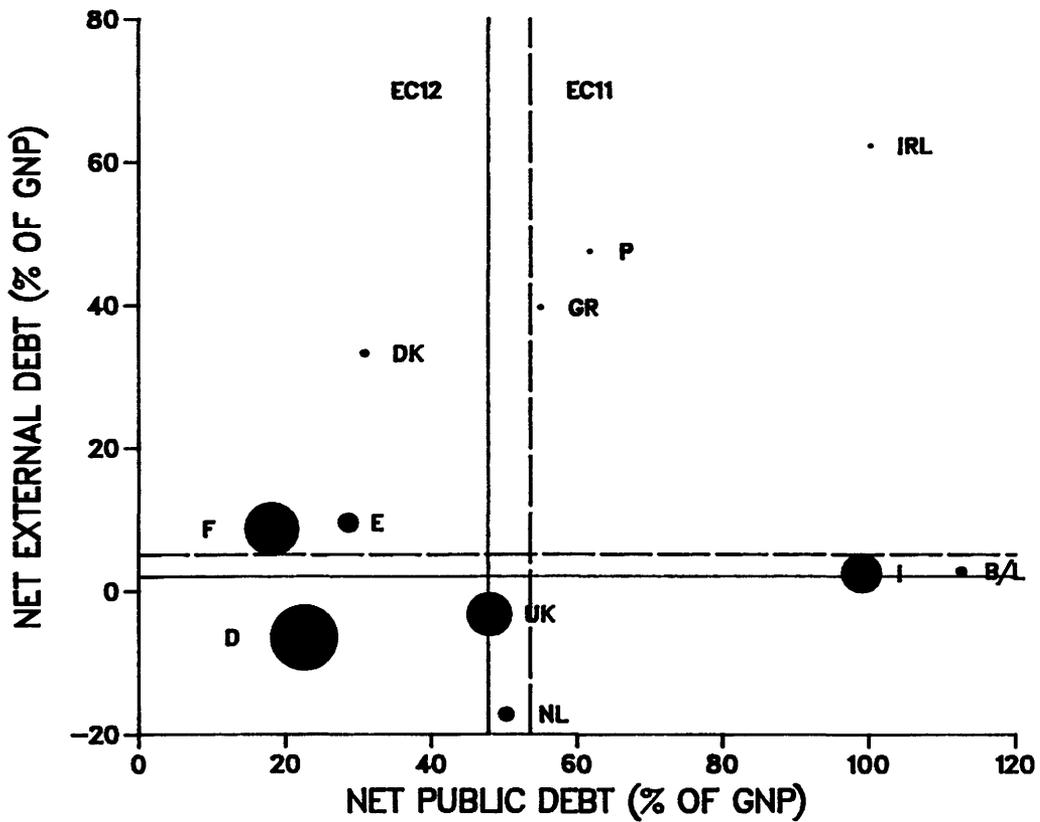


Figure 5.

7.2.3. Flexible cooperation

Countries located in the south-west quadrant need not worry about their debt or external position (Germany is the obvious and well-known instance). It can adopt the two-handed strategy wholeheartedly. As a consequence, Germany moves north-east and pushes the EC average (aggregate) in that direction. As that happens, the remaining countries benefit from an externality (the additional imports of Germany) which would tend to push them in a south-westerly direction if they remained passive, i.e. if they kept their public spending and tax rates unchanged. Indeed, they export more, which improves their current accounts, raises their GNP (by a smaller percentage) and reduces their public deficits. The net effect for EC 12 aggregates is still a displacement north-east, but by less than the initial impulse which is dampened by the externalities.

In order to avoid the dampening, it is desirable that the countries located near the boundary of the south-west quadrant should also follow the two-handed strategy and move north-east of their own initiative. Looking at Figure 4, we see that France, the UK and the Netherlands fall in that category. Spain is in the same quadrant as Germany and on the surface shares the same degrees of freedom; due account should, however, be given to the fact that Spain (as well as Portugal and Greece) are in a difficult transition phase as they gradually integrate their economies to the Community. Together, France, the UK, the Netherlands and Spain account for some 51 % of EC 12 GNP. Adding Germany, we now have 77 % of the community engaged in the supply-friendly fiscal expansion and unambiguously pushing the aggregate north-east, in spite of some residual dampening from the remaining smaller countries. The two-handed growth strategy for Europe is then definitely under way. It seems clear to us that such cooperative action is far more effective than a repeat of the "German locomotive experiment". The bulk of the impact comes from the joint initiatives of Germany, France and the UK which together account for 65 % of EC 12 GNP.

What about the remaining countries? If they remain passive, they move south-west. Although their dampening effect on the aggregates is now reduced, it is still there. Could it be avoided? It could indeed, because their antisymmetrical positions relative to the new averages allows for offsetting

movements which eliminate the dampening. More specifically, if Denmark and Greece moved south-east, whereas Belgium and Italy moved north-west, the aggregate of these four countries could remain roughly unchanged, allowing the expansion initiated in the other countries to work out its full effects without dampening. Let us look at the implied policies.

The clearest case is that of Belgium. That country is currently engaged in an effort to reduce its budget deficit. Although that effort will be facilitated by the faster growth of neighbouring countries, it should still be pursued. The current account will then display an even larger surplus, whereas the country should move north-west. The surplus will naturally be reduced in due time by a currency appreciation. The same policy conclusion holds for Italy, although the implied appreciation would be less marked (both because the initial position involves a smaller surplus and because the smaller degree of openness leads to less pronounced externalities). Conversely, Denmark would see its current account improve under the export pull. That country should adopt a more expansionary fiscal stance, in order to move eastward (contrary to the westward tendency associated with a passive fiscal stance). If the fiscal expansion did more than offset the current account improvement, then a slight currency depreciation would follow. The same thing applies to Greece, although to a lesser extent. We thus see how Belgium, Italy, Denmark and Greece could play their role by ensuring that no dampening of the initial impulses occurs. The implication of the required policies is some ancillary currency realignments, involving mainly the Belgian frank and the Danish crown. Finally, Ireland could remain "passive" and move against the tide - but that country accounts for less than 1 % of EC 12 GNP or trade.

What remains to be spelled out are the accompanying monetary policies. Given that in each country fiscal policy is set as suggested above, choosing a particular monetary policy is equivalent to the choice of an exchange rate policy, which leads to a consideration of the role of the EMS (assuming that the UK, although not part of the EMS, stabilises the ECU value of the Pound). As discussed above, one of the main merits of the EMS is the fact that it provides a credible nominal anchor for price levels across Europe. The system has proven flexible enough to periodically accommodate divergent

trends, but it has also penalized (through loss of competitiveness) the more inflation-prone countries in Europe. It has thus provided a credible incentive not to resort to inflationary policies.

All this is crucial for the policies we advocate. A strong commitment to the EMS lends credibility to the announcement that a temporary budget deficit will not be paid for through inflationary finance: it thus reduces the pressures towards exchange rate depreciation that arise whenever the government's ability to generate future budget surpluses is in doubt. Of course the enhanced credibility provided by the EMS cannot eliminate the possibility of speculative attacks: these should be jointly resisted by the central banks of the member countries.

In the longer run we cannot rule out the possibility that the fiscal actions necessary to implement the two-handed-strategy may require an adjustment of relative prices among European countries. However, the size and even the sign, of these adjustments are difficult to anticipate, as they depend on a number of (often counteracting) factors: the degree of substitutability among debt issued by different governments and denominated in different currencies is, for example, an important one, and one on which we know very little. The flexibility built in the EMS will prove valuable in making these relative price adjustment possible - if and when the time comes.³⁰

The foregoing analysis suggests unambiguously that the cooperative growth strategy is feasible, in spite of substantial differences in initial conditions. It also illustrates vividly that cooperation should not be confused with synchronisation.

30. For an analysis of these effects see Sachs and Wyplosz (1984) for further analysis of these issues. Needless to say we fully recognize the merits of the relative stability of exchange rates within EMS. The formulation in the text assumes that our policy recommendations become implemented from a starting situation characterized by sustainable exchange rates. If that were not to be the case, one should distinguish carefully the consequences of the starting situation from those of the policy actions.

7.3 Differences in policy objectives

The strategy outlined in the previous section assumes common policy objectives among all countries, namely a high priority given to the fight against unemployment. Yet Denmark has recently gone through a period of drastic budget consolidation, and might be reluctant to go into deficit again. More significantly, Germany has a deep-rooted aversion to inflation, and might be reluctant to participate in a strategy where the fiscal expansion anticipates the acceleration of growth in supply. Even though we believe that hesitation is ill-advised, it is nevertheless instructive to discuss its implications. If Germany did not participate in the cooperative growth strategy, the remaining countries would have to choose between giving up that strategy altogether, or carrying it out on their own. What would the latter alternative look like?

The bulk of the expansion would now come from France, the UK, Spain and the Netherlands. As noted above, these four countries account for 51 % of EC 12 GNP, as opposed to 77 % with Germany. A rough calculation suggests the extent of the collective loss incurred by carrying out the strategy without active German participation. Using the ratio to GDP of extra-community imports of goods as a rough measure of openness, we get a figure of 13.4 % for EC 10. Leaving out Germany, the corresponding figure for the remaining 9 countries jumps to 18.6 %, up by a full 5 %. In relative terms, the degree of openness of EC 10 goes up by nearly 40 % if Germany is left out! The cost to the remaining 9 countries of Germany's failure to participate in the concerted expansion is thus serious, in terms of import leakages and terms of trade deterioration.

Now France and the UK are in the frontline (the dotted lines on Figures 4 and 5 show the EC averages when Germany is left out) and are quite vulnerable with respect to their external position. Furthermore, a fiscal expansion without Germany may well entail some loss of credibility for the monetary authorities and put additional pressure on the exchange rates of the expanding countries. In practice, this amounts to an effective appreciation of the DM. In fact, what is required, is an agreement with Germany to disagree, namely a revaluation of the DM within the EMS; in a

sense this would be the German contribution to cooperation. If of a proper magnitude, and if accompanied in the devaluing countries by wage and price moderation - the overriding condition of success in any case - such a realignment would ensure that the collective current account of the expanding countries does not become a source of major concern. Besides this general change, the rest of the recommendations of the previous section apply, except that the fiscal expansion is stronger (even though less effective) wherever it is enacted, and the overall expansion is dampened by Germany's passive fiscal stance.

In addition to being less effective overall, that alternative entails the additional cost of more pronounced currency realignments. And it entails Germany losing competitiveness through appreciation and ending up with increased unemployment. Through that channel, an inflation/unemployment tradeoff seems inescapable, even in a country to which the Phillips curve analysis is sometimes hold inapplicable.³¹ Thus, not only the expanding countries suffer from the lack of German cooperation, but Germany ends up with more unemployment (and less inflation) than in the alternative scenario of the previous section. This confirms the advantages of cooperation, but also suggests that cooperation may arise indirectly: faced with a one-sided expansion elsewhere in Europe, it would still be to Germany's advantage to adopt the two-handed strategy.

8. Conclusion

We have restated the reasons why Europe needs policy actions to extricate itself from its slow growth, high unemployment, trap. Because of the complex reasons lying behind the underutilisation of productive resources, and the continuing failure to speed up the accumulation of resources, the required policies must work on both the supply and the demand sides. The two-handed strategy aims at making the economy more efficient in mobilizing its

31. Phillips curve equations for Germany appear to have been successfully estimated, among others, by Franz (1985), Koenig and Franz (1986), and Bean, Layard and Nickell (1986).

existing resources and readier to increase them. It works on the supply-side through a mix of competition-enhancing measures as well as cost-cutting fiscal action. It simultaneously works on the demand side through labour tax cuts. Demand feeds into supply by providing the producers with the necessary long term demand incentives to hire labour and increase productive equipment. Simultaneously, all available opportunities for productive public investment should be seized, both by the EC itself and by member countries. Productive public investments may without reservation be financed by capital inflows. We regard the inflationary risk of this strategy as moderate and well worth taking.

In reviewing the reasons behind the past reluctance to adopt the two-handed strategy, we have emphasized the role of openness, and found it useful to separate out the situation of individual countries from the position of the European Community as a whole.

As a whole, the EC is quite closed. The current account constraint, while not to be overlooked, is therefore relatively unimportant. The implication is that the EC should not make the adoption of the two-handed strategy contingent on reaching a cooperative agreement with the US and Japan. Europe should assert its autonomy and adopt the policies that suit it best. This, of course, does not mean that Europe should completely ignore the external effects of these policies, nor that she should renege on her obligations towards the rest of the world. Two important issues emerge in this connection. First, the financial links are important, fast and powerful. This implies that exchange rate management requires considerable caution. However, this is not a one-sided issue and avoiding disruption will require some cooperation with the US and Japan. In particular, a better functioning international monetary system remains a desirable objective. The second important issue concerns the LDC debt problem. At a time when the US must close its external deficit, current account surpluses in the indebted LDCs will require deficits elsewhere, particularly in Europe. The two-handed strategy would bring this about.

Cooperation within the EC is an altogether different matter. An important implication of openness - and all EC countries are very open - is that a

fiscal expansion is both less effective and more costly, the more open is the economy. Supply-side policies, on the other hand, tend to become more desirable as the degree of openness rises. The inescapable conclusion is that the external constraint is likely to play havoc with the two-handed strategy: it favors only one hand, supply-side policies. A full commitment to the strategy therefore requires that the external constraint be loosened and that requires fiscal cooperation.

Cooperation is not synonymous with synchronisation. Because economic conditions (chiefly inflation, the public and external debts) differ across countries, policies too will have to differ. Flexible cooperation recognizes this fact and calls for a clear understanding of the role of different initial conditions. Rather than repeating the Bonn Summit approach of staging a fiscal expansion with Germany taking the lead and France and the UK following suit, we think that it would be more effective for the three countries to move simultaneously. The other countries may move less, or not move at all, or use their exchange rates in accordance with their particular initial conditions.

A particularly difficult situation arises when there is disagreement on the policy objectives, especially if a large country is concerned. This would be the case should Germany put a higher weight, relative to other countries, on stabilizing its public finances and pursuing disinflation, and a lower weight on resuming growth and reducing unemployment. This would leave much of the burden on the two remaining large countries which can afford to adopt fiscal measures. We think that Europe can resume faster growth even without fiscal expansion in Germany, but the inevitable cost would be a significant appreciation of the mark within the EMS would entail a less favourable outcome on inflation and unemployment in France and the UK, and a serious threat of rising unemployment in Germany.

As is often the case, black and white conclusions are deceptive. The choice is not necessarily between a fully coordinated two-handed strategy or the continuation of the statu-quo. Each country stands to benefit from the strategy. The more each country expands, the more favourable is the outlook in the remaining countries. The larger is the number of expanding countries,

the larger are the gains to each of them individually. Thus, all that it is needed is that all, or some of, those countries which can afford it, and fortunately the larger countries can, adopt the two-handed strategy. The others will then either follow, when they can, or simply share in the benefits. How far each country travels the proposed route in the end will depend on its starting position.

APPENDIX 1: A SUGGESTIVE FIVE-FINGERED EXERCISE

In the Island of Flexco, there is an output potential of one mumm per period, controlled by a multinational company and produced with labour alone. The island has two inhabitants, Richard and Mason, and a combined treasury-central bank, the Bank of Flexco (BOF). The local currency, called uce, exchanges for yens one to one. At time 1 Richard holds 100 uces and the central bank's reserves amount to 100 yens. Richard has decided to buy one mumm, which costs 100 uces, in period 2. Accordingly he deposits his 100 uces at the central bank for one period and will receive an interest of 50 %. In what follows his situation will remain unchanged: in period 2 he will own one mumm and 50 uces. The BOF also earns a 50 % interest per period on its yen holdings.

Mason would like to buy one mumm as soon as possible but has no money. He has offered his labour services to the company but is not hired in period 1 due to lack of demand. He will be hired in period 2 to produce the mumm ordered by Richard, for which he will get a salary of 100 uces and will then be able to purchase a mumm for himself, but is upset to have to wait. He could borrow from Richard, but they do not know each other. The result is that Mason will order his mumm in period 2 and receive it in period 3. Are there possibilities of improving the island's welfare relatively to the baseline situation just described?

One possibility is for the BOF to give to Mason the 100 uces deposited by Richard as a pure transfer, and announce a tax of 60 % on labour income. Mason will then order one mumm at once and will be hired by the company to produce it. Practically, he will pay the mumm upon ordering, will receive his salary at time of hiring, immediately pay a tax of 60 uces and deposit the remaining 40 uces at the BOF. All this happens simultaneously at the beginning of period 1, with interest of 50 % accruing at the beginning of period 2. The situation of Mason has now improved. In period 2 he owns a mumm since period 2 plus 100 in cash (his period 1 net earnings of 40 augmented of 20 in interest and his period 2 net earnings of 40). As for the BOF, it has used the 50 yens it earned on its reserve holdings in period 2

to back the creation of 50 uces required to pay back Richard 150 uces in capital and interest, as it only received from Mason 60 in taxes and 40 in deposit. (In period 3 it will use the 60 uces levied as taxes from Mason to pay back his deposit of 40 plus interest of 20.) Relative to the baseline situation the net addition to the island's assets is the locally produced mumm of Mason. The tax-subsidy mix has raised demand during the period of slack, with a balanced inter-temporal budget, and has boosted real income to the same extent.

Suppose however that Mason uses his subsidy to buy yens from the BOF and import a Japanese mumm. The BOF loses its reserves and the associated interest income, which forces it to raise income taxes to 100 %. This of course allows Mason to order immediately a Japanese mumm which, we assume, he will receive in period 2 (given the remoteness of Japan from the island of Flexco). On the other side Mason is not hired in period 1 to produce his mumm which is imported from Japan, so he foregoes period 1 income and all his period 2 income is taxed away. The BOF ends up with no assets and a liability of 50 uces to serve Richard's interest. One could argue that these uces (the monetisation of the deficit) are worthless - or equivalently that a tax of 100 % of interest income would be needed to avoid the liability. The change reeatively to the baseline is the one-period-ahead mumm of Mason at the loss of the BOF's foreign reserves - i.e. no net gain.

While endless variations of this allegory are possible, it illustrates two important points about a fiscal expansion in an open economy. First, that demand failures offer a prospect for welfare gains. Two, that openness, more precisely the marginal propensity to import, works towards cancelling that prospect.

APPENDIX 2 : HOW TO MEASURE OPENNESS

An economy is open if international trade and financial movements are important for its functioning, and thereby for the welfare of its members. Financial movements affect the interest and exchange rates and may have real effects as well as impose a constraint on policy making. This is an issue that we will consider later on. The importance of trade can take several forms. One of them is the dependence on imports for essential procurements like food or energy. Another is the dependence on exports for marketing domestic resources, like natural resources or labour. An absolute measure of that importance would call for a comparison of welfare levels with and without trade. Such a measure is difficult to construct and its practical significance is limited by the very nature of the question raised - a rhetorical question in most cases since autarky is hardly a realistic option.

Rather, we are concerned with the macroeconomic policy implications of openness. That is a very different, and quite specific question. As shown in the previous section it arises only in the presence of some disequilibrium which requires, and justifies, the use of macroeconomic policies. In that case, the degree of openness affects the cost and effectiveness of macroeconomic policies through two channels: income flows and the terms of trade. For these specific purposes a rough measure of the degree of openness of an economy is the ratio of imports or exports to national income. That measure is too rough, though, when exports themselves have a significant import content. A corrected measure, the ratio to national income of imports net of import content of exports, coincides with the share of value added which is exported when the trade account is in balance.

To understand how these ratios represent income flows it helps to consider first the extreme case where exports have a negligible import content, and consist basically of value added. When domestic demand expands, the increment is distributed between imports and domestic output in proportions corresponding to the marginal propensity to import. The average propensity to import is only relevant in this context because of the empirical

observation that elasticities of imports with respect to national income are much more similar across countries than marginal propensities to import.³² Although measures of import elasticities tend to be biased upwards away from unity because of the growing structural independence over the sample period, with the size of the bias likely to vary from country to country, measured elasticities seem to be clustered remarkably around 1.3, implying corrected elasticities around a value of 1.1 or 1.2. Marginal propensities to import dM/dY are then well approximated by a stable (across countries) multiple of import shares M/Y , say 1.2 M/Y . The degree of import leakage is thus proportional to the import share.

Turning now to terms of trade effects, and still neglecting the import content of exports, consider a depreciation which leaves unchanged the value added deflator. The welfare cost is measured to the first order by the volume of imports times the rate of depreciation. As a percentage of national income that cost is equal to the import share M/Y times the rate of depreciation. It is thus proportional to the import share for a given rate of depreciation.

This argument would be deceptive if the rate of depreciation needed to correct a given imbalance were itself inversely proportional to M/Y , leaving the product independent of the degree of openness. It is difficult to rule out that possibility generally, in particular without reference to the imbalance to be corrected. An interesting case, of direct relevance to our discussion in the report, arises when the imbalance is a trade deficit generated by an expansion of domestic demand. In such a case, the required rate of depreciation is proportional to the rate of demand expansion, with the factor of proportionality depending upon trade elasticities and being thus to a first approximation independent of the degree of openness. Write both exports X and imports M , evaluated in foreign currencies, as functions

32. The estimated elasticities of imports with respect to final domestic demand range from 1.2 to 1.8 in the COMETE model, and from 1.1 to 1.6 in the DESMOS model, both of which include all major European countries. The COMPACT elasticity for EC 10 as a whole 1.3. Scattered import equations for individual European countries, that we came across more recently, give similar figures.

of (among other things) a "relative price" variable p , which might be world prices P_W divided by the product of home prices (or costs) P_H times the exchange rate e . The trade account A is $X - M$, so that, writing η for elasticities,

$$\frac{dA}{de} = -\frac{X}{e} \eta_{Xp} + \frac{M}{e} \eta_{Mp}, \quad \frac{de}{e} = \frac{dA}{M\eta_{Mp} - X\eta_{Xp}}$$

Expansion of domestic final demand D by a given percentage α will affect the current account in an amount $\alpha \cdot D \cdot (\partial M / \partial D)$. The adjustment in the exchange rate needed to restore the current account balance is thus given by

$$\frac{de}{e} = \frac{\alpha D \frac{\partial M}{\partial D}}{M\eta_{Mp} - X\eta_{Xp}} = \alpha \frac{\eta_{MD}}{\eta_{Mp} - \frac{X}{M}\eta_{Xp}} \sim \alpha \frac{\eta_{MD}}{\eta_{Mp} - \eta_{Xp}}$$

Of course we need to correct for the import content of exports. The simplest way is to net them out so as to consider net imports. Indeed an increase in domestic demand will not by itself influence the volume of exports, at least if we neglect the feedback effects. (To take into account the feedback effects would require more complex calculations involving matrices of bilateral flows). Neglecting the feedback effects leads us to understate openness but the bias is not important in the short run, and only marginally related to the degree of openness itself. Neglecting the import content of exports would introduce a severe bias more or less proportional to the degree of openness itself because exports are nearly equal to imports. (Actually the import content of exports is likely to rise with openness, making the bias an increasing function of openness.)

REFERENCES

- Barro R. (1974) "Are Government Bonds Net Wealth?", Journal of Political Economy, 82, p. 1095-1117.
- Barro R. (1979), "On the Determination of the Public Debt", Journal of Political Economy, 87, p. 940-971.
- Bean C. (1985), "Macroeconomic Policy Coordination: Theory and Evidence", Recherches Economiques de Louvain, vol. 51, p. 267-283.
- Bean C., R. Layard and S. Nickell (1986), "The Rise in Unemployment: A Multi-Country Study", Economica, 53, (supplement), p. S1-S22.
- Begg D. and C. Wyplosz (1987), "Why the EMS? Dynamic Games and the Equilibrium Exchange Rate Regime", in: R. Bryant and R. Portes (eds.), Global Macroeconomics, Policy Conflicts and Cooperation, MacMillan, forthcoming.
- Blanchard O., R. Dornbusch, J. Dreze, H. Giersch, R. Layard and M. Monti (1985), "Employment and Growth in Europe: A Two-Handed Approach", CEPS Paper N° 21.
- Bruno M. and J. Sachs (1985), Economics of Worldwide Stagflation, Basil Blackwell.
- Buiter W. (1985), "A Guide to Public Sector Debts and Deficits", Economic Policy, 1, p. 13-79.
- Cohen D. (1985), "How to Evaluate the Solvency of an Indebted Nation", Economic Policy, 1, p. 139-167.
- Cooper R. (1984), "Economic Interdependence and Coordination of Economic Policies" in: R. Jones and P. Kenen (eds.), Handbook of International Economics, North-Holland.
- Danthine J.P. and J.C. Lambelet (1987), "The Swiss Case", Economic Policy, 5, forthcoming.
- De Grauwe P. and G. Verfaillie (1987), "Exchange Rate Variability, Misalignment, and the European Monetary System", unpublished, University of Leuven.
- Dornbusch R. and J. Frankel (1987), "Macroeconomics and Protection" in: R.M. Stern (ed.) US Trade Policies in a Changing World Economy, Cambridge: MIT Press.
- Dreze J. (1986), "Work Sharing: Some Theory and Recent European Experience", Economic Policy, 3, p. 561-619.
- Dreze J. (1987), "Underemployment Equilibria: From Theory to Econometrics and Policy", European Economic Review Papers and Proceedings, p. 9-34.

- Franz W. (1985), "The Past Decade's Natural Rate and the Dynamics of German Unemployment: A Case Against Demand Policy?", European Economic Review, 21, p. 51-76.
- Franz W. and H. Konig (1986), "The Nature and Causes of Unemployment in the Federal Republic of Germany since the 1970s: An Empirical Investigation", Economica, 53, (supplement), p. S219-S244.
- Giavazzi F. and A. Giovannini (1986), "The EMS and the Dollar", Economic Policy, 2, p. 456-485.
- Giavazzi F. and M. Pagano (1988), "The Advantage of Tying One's Hands: EMS Discipline and Central Bank Credibility", European Economic Review, forthcoming.
- Giersch H. (1987a), "Internal and External Liberalisation for Faster Growth", Commission of the European Communities, Directorate-General for Economic and Financial Affairs (ed.), Economic Papers N° 54, Brussels.
- Giersch H. (1987b), "Economic Policies in the Age of Schumpeter", European Economic Review Papers and Proceedings, p. 35-52.
- Hamada K. (1976), "A Strategic Analysis of Monetary Interdependence", Journal of Political Economy, vol. 84, August, p. 677-700.
- Lambert J.P., M. Lubrano and H. Sneessens (1984), "Emploi et chômage en France de 1955 à 1982: un modele macroeconomique annuel avec rationnement", Annales de l'INSEE, 55-56.
- Lucas R. and N. Stokey (1983), "Optimal Fiscal and Monetary Policy in an Economy Without Capital", Journal of Monetary Economics, 12, p. 55-93.
- Mortensen, J. (1984), "Profitability, Relative Factor Prices and Capital/Labour Substitution in the Community, the United States and Japan, 1960-1983", European Economy, N° 20, p. 33-67.
- Oudiz G. and J. Sachs (1984), "Macroeconomic Policy Coordination Among the Industrial Economies", Brookings Papers on Economic Activity, 1, p. 1-75.
- Persson M., T. Persson and L. Svensson (1986), "Time Consistency of Fiscal and Monetary Policy", IIEP Seminar Paper N° 331, Stockholm.
- Rogoff K. (1985), "Can Exchange Rate Predictability Be Achieved Without Monetary Convergence? - Evidence from the EMS", International Finance discussion Paper N° 245.
- Sachs J. (1983), "International Policy Coordination in a Dynamic Macroeconomic Model", NBER Working Paper N° 1166.
- Sachs J. and C. Wyplosz (1984), "Real Exchange Rate Effects of Fiscal Policy", NBER Working Paper N° 1255.
- Sachs J. and C. Wyplosz (1986), "The Economic Consequences of President Mitterrand", Economic Policy, 2, p. 261-321.

Viñals J. (1986), "Fiscal Policy and the Current Account", Economic Policy,
3, p. 711-744.

Economic Papers

The following papers have been issued. Copies may be obtained by applying to the address mentioned on the inside front cover.

- No. 1 EEC-DG II inflationary expectations. Survey based inflationary expectations for the EEC countries, by F. Papadia and V. Basano (May 1981).
- No. 3 A review of the informal economy in the European Community, by Adrian Smith (July 1981).
- No. 4 Problems of interdependence in a multipolar world, by Tommaso Padoa-Schioppa (August 1981).
- No. 5 European Dimensions in the Adjustment Problems, by Michael Emerson (August 1981).
- No. 6 The bilateral trade linkages of the Eurolink Model : An analysis of foreign trade and competitiveness, by P. Ranuzzi (January 1982).
- No. 7 United Kingdom, Medium term economic trends and problems, by D. Adams, S. Gillespie, M. Green and H. Wortmann (February 1982).
- No. 8 Où en est la théorie macroéconomique, par E. Malinvaud (juin 1982).
- No. 9 Marginal Employment Subsidies : An Effective Policy to Generate Employment, by Carl Chiarella and Alfred Steinherr (November 1982).
- No. 10 The Great Depression : A Repeat in the 1980s ?, by Alfred Steinherr (November 1982).
- No. 11 Evolution et problèmes structurels de l'économie néerlandaise, par D.C. Breedveld, C. Depoortere, A. Finetti, Dr. J.M.G. Pieters et C. Vanbelle (mars 1983).
- No. 12 Macroeconomic prospects and policies for the European Community, by Giorgio Basevi, Olivier Blanchard, Willem Buiter, Rudiger Dornbusch, and Richard Layard (April 1983).
- No. 13 The supply of output equations in the EC-countries and the use of the survey-based inflationary expectations, by Paul De Grauwe and Mustapha Nabli (May 1983).
- No. 14 Structural trends of financial systems and capital accumulation : France, Germany, Italy, by G. Nardozzi (May 1983).
- No. 15 Monetary assets and inflation induced distortions of the national accounts - conceptual issues and correction of sectoral income flows in 5 EEC countries, by Alex Cukierman and Jørgen Mortensen (May 1983).

- No. 16 Federal Republic of Germany. Medium-term economic trends and problems, by F. Allgayer, S. Gillespie, M. Green and H. Wortmann (June 1983).
- No. 17 The employment miracle in the US and stagnation employment in the EC, by M. Wegner (July 1983).
- No. 18 Productive Performance in West German Manufacturing Industry 1970-1980; A Farrell Frontier Characterisation, by D. Todd (August 1983).
- No. 19 Central-Bank Policy and the Financing of Government Budget Deficits : A Cross-Country Comparison, by G. Demopoulos, G. Katsimbris and S. Miller (September 1983).
- No. 20 Monetary assets and inflation induced distortions of the national accounts. The case of Belgium, by Ken Lennan (October 1983).
- No. 21 Actifs financiers et distorsions des flux sectoriels dues à l'inflation : le cas de la France, par J.-P. Baché (octobre 1983).
- No. 22 Approche pragmatique pour une politique de plein emploi : les subventions à la création d'emplois, par A. Steinherr et B. Van Haeperen (octobre 1983).
- No. 23 Income Distribution and Employment in the European Communities 1960-1982, by A. Steinherr (December 1983).
- No. 24 U.S. Deficits, the dollar and Europe, by O. Blanchard and R. Dornbusch (December 1983).
- No. 25 Monetary Assets and inflation induced distortions of the national accounts. The case of the Federal Republic of Germany, by H. Wittelsberger (January 1984).
- No. 26 Actifs financiers et distorsions des flux sectoriels dues à l'inflation : le cas de l'Italie, par A. Reati (janvier 1984).
- No. 27 Evolution et problèmes structurels de l'économie italienne, par Q. Ciardelli, F. Colasanti et X. Lannes (janvier 1984).
- No. 28 International Co-operation in Macro-economic Policies, by J.E. Meade (February 1984).
- No. 29 The Growth of Public Expenditure in the EEC Countries 1960-1981 : Some Reflections, by Douglas Todd (December 1983).
- No. 30 The integration of EEC qualitative consumer survey results in econometric modelling : an application to the consumption function, by Peter Praet (February 1984).

- No. 31 Report of the CEPS Macroeconomic Policy Group. EUROPE : The case for unsustainable growth, by R. Layard, G. Basevi, O. Blanchard, W. Buiter and R. Dornbusch (April 1984).
- No. 32 Total Factor Productivity Growth and the Productivity Slowdown in the West German Industrial Sector, 1970-1981, by Douglas Todd (April 1984).
- No. 33 An analytical Formulation and Evaluation of the Existing Structure of Legal Reserve Requirements of the Greek Economy : An Uncommon Case, by G. Demopoulos (June 1984).
- No. 34 Factor Productivity Growth in Four EEC Countries, 1960-1981, by Douglas Todd (October 1984).
- No. 35 Rate of profit, business cycles and capital accumulation in U.K. industry, 1959-1981, by Angelo Reati (November 1984).
- No. 36 Report of the CEPS Macroeconomic Policy Group. Employment and Growth in Europe : A Two-Handed Approach by P. Blanchard, R. Dornbusch, J. Drèze, H. Giersch, R. Layard and M. Monti (June 1985).
- No. 37 Schemas for the construction of an "auxiliary econometric model" for the social security system, by A. Coppini and G. Laina (June 1985).
- No. 38 Seasonal and Cyclical Variations in Relationship among Expectations, Plans and Realizations in Business Test Surveys , by H. König and M. Nerlove (July 1985).
- No. 39 Analysis of the stabilisation mechanisms of macroeconomic models : a comparison of the Eurolink models by A. Bucher and V. Rossi (July 1985).
- No. 40 Rate of profit, business cycles and capital accumulation in West German industry, 1960-1981, by A. Reati (July 1985).
- No. 41 Inflation induced redistributions via monetary assets in five European countries : 1974-1982, by A. Cukierman, K. Lennan and F. Papadia (September 1985).
- No. 42 Work Sharing : Why ? How ? How not ... , by Jacques H. Drèze (December 1985).
- No. 43 Toward Understanding Major Fluctuations of the Dollar by P. Armington (January 1986).
- No. 44 Predictive value of firms' manpower expectations and policy implications, by G. Nerb (March 1986).

- No. 45 Le taux de profit et ses composantes dans l'industrie française de 1959 à 1981, par Angelo Reati (Mars 1986).
- No. 46 Forecasting aggregate demand components with opinions surveys in the four main EC-Countries - Experience with the BUSY model , by M. Biart and P. Praet (May 1986).
- No. 47 Report of CEPS Macroeconomic Policy Group : Reducing Unemployment in Europe : The Role of Capital Formation, by F. Modigliani, M. Monti, J. Drèze, H. Giersch and R. Layard (July 1986).
- No. 48 Evolution et problèmes structurels de l'économie française, par X. Lannes, B. Philippe et P. Lenain (août 1986).
- No. 49 Long run implications of the increase in taxation and public debt for employment and economic growth in Europe by G. Tullio (August 1986).
- No. 50 Consumers Expectations and Aggregate Personal Savings by Daniel Weiserbs and Peter Simmons (November 1986).
- No. 51 Do after tax interest affect private consumption and savings ? Empirical evidence for 8 industrial countries : 1970-1983 by G. Tullio and Fr. Contesso (December 1986).
- No. 52 Validity and limits of applied exchange rate models : a brief survey of some recent contributions by G. Tullio (December 1986).
- No. 53 Monetary and Exchange Rate Policies for International Financial Stability : a Proposal by Ronald I. McKinnon (November 1986).
- No. 54 Internal and External Liberalisation for Faster Growth by Herbert Giersch (February 1987).
- No. 55 Regulation or Deregulation of the Labour Market : Policy Regimes for the Recruitment and Dismissal of Employees in the Industrialised Countries by Michael Emerson (June 1987).
- No. 56 Causes of the development of the private ECU and the behaviour of its interest rates : October 1982 - September 1985 by G. Tullio and Fr. Contesso (July 1987).
- No. 57 Capital/Labour substitution and its impact on employment by Fabienne Ilzkovitz (September 1987).
- No. 58 The Determinants of the German Official Discount Rate and of Liquidity Ratios during the classical gold standard : 1876-1913 by Andrea Sommariva and Giuseppe Tullio (September 1987).
- No. 59 Profitability, real interest rates and fiscal crowding out in the OECD area 1960-1985 (An examination of the crowding out hypothesis within a portfolio model) by Jørgen Mortensen (October 1987).

No. 60 The two-handed growth strategy for Europe : Autonomy through flexible cooperation by J. Drèze, Ch. Wyplosz, Ch. Bean, Fr. Giavazzi and H. Giersch (October 1987).