

# The Contribution of the European Community to Economic Growth

An Assessment of the First 25 Years\*

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## INTRODUCTION

It might be expected that the principal criterion for a decision on forming or joining an integration process would be the anticipated impact on the real per capita income of each Member State. However, almost all the literature has relied on Customs Union Theory which can only be expected to provide a valid evaluation of the effect of integration if it is also accepted that integration can be equated with the formation of such a Union. This is obviously not so in the case of the European Community. Furthermore, a fundamental problem with this theory arises from the fact that while attempting to illuminate the gains to be made from forming a customs union, the theory appears to provide a basis for empirical assessment but certain of the concepts employed cannot necessarily be measured operationally.

Following the Vinerian tradition, empirical applications of the theory have concentrated on measuring the trade creation and diversion effects which, once calculated, are converted into welfare benefits and costs by estimating the welfare 'triangles'. But, these welfare estimates cannot properly be seen as equivalent to changes in real income; nor do they cover all of the important effects of integration [see Mendes, 1985]. It is, therefore, not surprising that a considerable amount of effort has been devoted to overcoming some of their limitations and to accounting for other effects. [See: Krauss, 1972; Verdoorn-Bochove, 1972; Mayes, 1978; and Jones and El-Agraa, 1981 for surveys].

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In particular, attention has been given to the so-called 'dynamic effects'. Although these are not precisely defined, this term has been taken to account for induced investment; increased efficiency arising from economies of scale, x-efficiency, learning-by-doing and reduced transport costs; balance of payments impact; wage-price effects; and even terms of trade effects. However, the few attempts to quantify these effects all suffer from severe limitations because of the crude nature of the calculations and assumptions and because of the partial nature of these studies. In fact, they do not come to terms, in any substantial way, with the inadequacy of estimates of trade creation and trade diversion based on customs union theory.

Our point of departure here is that the trade creation and trade diversion concepts cannot appropriately be used to measure growth effects. Not only are such static concepts ill-suited to dynamic measurement, but (i) the balance of payments does not automatically adjust; (ii) there are some cases where trade creation and trade diversion cannot be empirically measured; and (iii) in the case of the EC such estimates would be grossly incomplete due to the existence of Common Market policies.

In this article we shall briefly present a new methodology to measure the effects of integration. In so doing we will adopt the view that "a primary economic incentive for states to enter into arrangements for integration is the prospect of economic gain, in the shape of an increase in the level or rate of growth of output" (Robson, 1984) and we will try to measure the effects of integration on the growth-rate of Gross Domestic Product of each EC Member State. We take the view that, for this purpose, the total trade effects must be considered in evaluating integration, regardless of whether these come about through trade creation/diversion, external trade creation, trade reorientation or trade suppression. If it is accepted that integration effects are mainly derived from trade, then the most fruitful procedure for measurement is to use the foreign trade multiplier, with export growth as the major component of autonomous demand. The methodology, which we call a balance of payments constrained growth model framework, derives from Thirlwall's (1979; 1982) contention that the balance of payments position sets the limit to the growth of demand to which supply can adapt, and that therefore the long-run growth-rate can be approximately gauged by the so-called dynamic version of the foreign trade multiplier. After a brief presentation of this methodology<sup>1</sup> we set out a long-span evaluation of the impact of integration on growth within the European Community, and we conclude with some comments on policy implications.

<sup>1</sup>A full description of the methodology can be obtained from the author together with details of the estimation of the trade flow impacts which rest on an improved version of the weighted share technique. It should be borne in mind that the estimation of trade flow impacts remains crucial since these are the basic 'input' for using this new methodology.

*The Balance of Payments Constrained Growth Model Framework*

We start from the basic national accounts ex-post identity:

$$P_d Y = P_d A + P_f X - P_f E M \quad (1)$$

where  $P_d$  is the index of domestic prices;  $Y$  is national income;  $A$  is domestic absorption;  $P_f$  is the index of foreign prices;  $E$  is the exchange rate measured as the domestic price of foreign currencies;  $M$  is the volume of imports, and  $X$  is the volume of exports.

In real terms:

$$Y = A + X - \frac{P_f E}{P_d} M \quad (2)$$

thus any excess of real expenditure over real income will have to be met by real capital inflows ( $C$ ); that is, the overall balance of payments identity becomes:

$$X - \frac{P_f E}{P_d} M + C = 0 \quad (3)$$

Now let  $M = KY$  where  $K$  is the average propensity to import so that:

$$Y = \left\{ \frac{X+C}{K} \right\} \left\{ \frac{P_d}{P_f E} \right\} \quad (4)$$

Denoting the terms of trade ( $\frac{P_f E}{P_d}$ ) by  $G$  and rewriting the balance of payments identity as  $X + C = GM$ , which, after substitution in 4) and taking growth rates, gives:

$$y = m - k \quad (5)$$

and similarly to measure the effects of integration,

$$\Delta y = \Delta m - \Delta k \quad (6)$$

that is, the change in the growth rate induced by integration will equal the change in the growth rate of the imports minus the change in the growth of the average propensity to import.

Now, given estimates of the effects of integration upon imports, the corresponding change in the growth rate of imports is easily estimated as:

$$\Delta m = \frac{I}{M - I} (i - m) \quad (7)$$

where  $I$  is the import volume generated by integration. Given that  $K = (1 - 1/\pi)m$  the change in the propensity to import can be estimated as:

$$\Delta k = \Delta m + \frac{m\Delta\pi - \pi\Delta m}{\pi(\pi - \Delta\pi)} \quad (8)$$

where  $\pi$  is the income elasticity of demand for imports.

Finally, the estimate of an overall effect of integration upon the growth



rate can be obtained as:

$$\Delta y = \frac{\pi \Delta m - m \Delta \pi}{\pi(\pi - \Delta \pi)} \quad 9)$$

It is clear from this expression that the ultimate effect of integration upon growth depends both on changes in import volumes and on the changes in the income elasticity of demand for imports.

Furthermore, if we substitute  $\Delta m$  in expression 9) by expression 7) we can derive an important result concerning the conventional customs union approach; that is, the occurrence of net trade creation is neither a necessary nor a sufficient condition for a positive contribution to growth. In fact, there are several possibilities of obtaining a positive contribution depending on the values of  $i$  and  $\Delta \pi$ . For instance, if we adopt the conventional simplification of identifying an increase in imports ( $I > 0$ ) as being trade creation<sup>2</sup> and take the hypothesis of 'once-for-all' effects (i.e.  $i = 0$ ), then a positive contribution to growth would require a reduction of the income elasticity of demand for imports [ $\Delta \pi < -\pi(\frac{I}{M-I})$ ].

However, perhaps more important than the total effect is the possibility that the effect on the growth rate can be further split up into its component parts. This will be done in the following way:

First, the effect on the change in the terms of trade ( $\Delta g$ ) can be obtained from the balance of payments identity, as:

$$\Delta g = \Delta(X + C) - \Delta m \quad 10)$$

in which case we need to split up into their components the volume of exports and the capital flows; that is,  $X = X' + E$  and  $C = C' + F_1 + F_2 + \dots + F_n$  where  $X'$  and  $C'$  stand for export and capital flows without integration and  $E$  is exports induced by integration and  $F$  is capital flows induced by integration (budget, labour remittances, private investment, etc.). However, an interdependence problem arises since capital flows induced by integration ( $F$ ) are not exempt from terms of trade effects. In fact, it can be seen (Mendes, 1985) that capital flows induced by integration are:

$$F = I(G - \Delta G) + M\Delta G - E \quad 11)$$

where  $F = F_1 + F_2 + \dots + F_n$  stands for the various capital effects which, in the EC case, we restrict to the change in current balance due to trade flows

<sup>2</sup>Here we use the change in total imports ( $I$ ) due to integration as the closest measure of the true trade creation effects, because it also includes external trade creation. This seems reasonable on the assumption that trade reorientation and trade suppression effects are nil or that they cancel out. The alternative of using changes in imports from the partner countries as an indicator of trade creation that is followed by most empirical studies requires a stricter version of this same assumption while disregarding external trade creation. Furthermore, the alternative approach also needs to presume that trade diversion effects can be measured empirically or that they are negligible, which is very doubtful.

( $F_1$ ); labour remittances ( $F_2$ ); direct foreign investment ( $F_3$ ); net budget payments ( $F_4$ ); and a residual ( $R = F_5 + \dots + F_n$ ) accounting for errors and omissions.

Now, given that  $F_2$ ,  $F_3$  and  $F_4$  can be independently estimated and assumed not to be influenced by changes in the terms of trade, and if we further take the change in the current balance as  $F_1 = I - E$ , we then end up with an interdependence and error term, which is:

$$\Delta G (I-M) + R = I (G-1) - (F_2+F_3+F_4) \quad (12)$$

Finally, given these estimates, we can assess their contribution to the growth rate of capital and exports [ $\Delta(X + C)$ ] from the following expression:<sup>3</sup>

$$\Delta(X+C) = \frac{(Ee+F_2f+\dots+F_nk) - (Xx+Cc) \left[ \frac{E+F_1+\dots+F_n}{X+C} \right]}{(X+C) - (E+F_1+\dots+F_n)} \quad (13)$$

by successive adding up of estimated capital flows attributable to integration.

In conclusion, from expressions 13), 10) and 8) we can estimate most of the previously identified effects of economic integration, which make up the total effect on the growth rate of individual member economies; that is, growth of export volume; change in the trade balance position; change in the propensity to import; terms of trade changes; labour remittances; foreign investment; and net budget payments. We can summarize the main features of this new balance of payments framework as follows:

Firstly, since no country can grow at a faster rate than that consistent with balance of payments equilibrium on current account, unless it can finance deficits, and as every country will have a growth rate consistent with overall balance, the new framework relies on using the foreign trade multiplier in its dynamic version which is better suited than the static approach used by customs union theory.

Secondly, instead of relying on the trade creation/diversion and welfare measures, the new framework uses total trade effects to estimate changes in output which are both simpler to estimate and more appropriate to use.

Thirdly, the new framework also takes into account the import side through changes in the income elasticity of demand for imports. This is particularly important because we cannot expect an automatic adjustment of the balance of payments.

Fourthly, it also shows that the occurrence of net positive trade creation effects ( $I > 0$ ) is neither a necessary nor a sufficient condition to obtain an increase in output.

<sup>3</sup>The derivation of this expression can be found in Mendes (1986).



Finally, the new framework accounts in an integrated way for the most important effects of integration, namely: trade effects, terms of trade changes and factor mobility.

We have estimated (see Mendes, 1986) the various integration induced effects required to use the balance of payments approach presented. We now proceed to the presentation of the results relating to the performance of the EC, following which we will draw some policy conclusions.

*Integration in the 1960s — The EC, 1961–72*

In Table 1 we see that the most important finding is the large effect that integration has had on growth. Even if the overestimation was 100 per cent we are still left with values slightly higher than 1 percentage point. These values are much higher than suggested by previous studies [eg. Balassa, 1975], and for the most favoured countries (Netherlands and Belgium-Luxembourg), integration accounts for around 55 per cent of the actual growth rate experienced by these economies.

Table 1  
*Integration effects on the % trend growth rate of member countries  
EC5 1961–72*

Contributions to growth	Germany	France	Italy	Netherlands	Belgium-Lux.
Actual growth rate	4.39	5.40	4.97	5.17	4.56
1—Growth rate due to EC [1 = -2-3+4+5+6+7+8]	-0.02	-2.71	1.04	2.94	2.45
Which was made up of					
2—Terms of trade changes	0.02	0.57	0.94	0.19	-0.17
3—Change in propensity to import	2.25	2.90	1.12	0.44	1.16
4—Growth of export volume	3.52	1.25	4.74	4.09	4.56
5—Change in the trade balance position	-0.45	-2.00	0.05	-0.06	-0.71
6—Net EC budget payments	-0.14	0.01	-0.28	0.12	0.09
7—Foreign investment	-1.02	-0.05	-1.13	-0.15	-0.07
8—Residual + errors [8 = (1+2+3) - (4+5+6+7)]	0.34	1.64	-0.28	-0.43	-0.43

Notes: As defined in the model a negative sign of the terms of trade means an improvement; — The total effect may differ from the sum of its components due to rounding.

Furthermore, although during this period other important tariff reductions were agreed within the GATT arrangements [the Kennedy 1964 and Dillon 1968 rounds of tariff reduction] there is no doubt that the bulk of

the growth achievement must be attributed to the formation of the European Community.

The second most striking result is that those countries which did not benefit from integration were the two major economies. Germany suffered a very slight loss and France apparently suffered a major loss (although this might be overestimated).

This result contrasts (particularly in the case of Germany) with a large trade creation effect (see footnote 2), which most countries experienced in spite of some relative trade diversion to the United States.

However, as one would expect from the opening of individual markets, there was also an offsetting increase in the propensity to import<sup>4</sup> which reduced the growth resulting from increased export growth. These two non-benefiting countries were the ones with the largest increase in the propensity to import. They were the only ones to experience a significant positive shift of their income elasticity of demand for imports which was large enough to meet the case in which a country will experience a loss in spite of having benefited from trade creation. These results clearly confirm the claim that it may be misleading to rely on estimates of trade creation alone to assess who gains from integration when the question is looked at in a growth framework.

It must also be emphasized that during this period the most important contributions to the growth rate came from the growth of exports. Other mechanisms such as the budget or foreign investment played a relatively small part in the process. The only country to be significantly affected by budgetary transactions (but negatively) was Italy, in spite of its being the poorest member.

As far as the terms of trade are concerned, Belgium-Luxembourg was the only country to experience a significant positive contribution resulting from an improvement in the terms of trade. In all of the other countries there was a negative effect. It should be noted that this effect is measured against a background of a generalized improvement in the terms of trade over the period. This result contrasts with the suggestions given by Petith (1977) that improved terms of trade could be the single most important gain of integration in the EC context. However, his other suggestion, that under his assumptions<sup>5</sup> the smaller the country the larger the terms of trade gains, seems to be confirmed during this period. Finally, it may be noted that the poorest/weakest economy (Italy) was the one which experienced the largest loss.

As to the effects resulting from the increased mobility of factors, here grossly called foreign investment, we see that all countries were negatively affected, although this was only significant in the cases of Germany and

<sup>4</sup>To a large extent, this reflects the occurrence of trade creation effects, given that they determine the change in the growth rate of imports and have an important effect on the changes in the income elasticity of demand for imports (see expressions 7 and 8 above).

<sup>5</sup>That is, assuming the same pre-union tariff and that price elasticities and cross elasticities are not sensitive to price changes which, as he recognizes, are awkward assumptions.

Italy. But, given that there was only a large outflow of capital in the case of Germany, it is logical to admit that the Italian position might be largely due to the interdependence effects between the terms of trade and imports.

*The EC after enlargement — 1974–81*

For this period, a larger and more disaggregated set of data were used which increases the reliability of the estimates. The only exception is that of the Netherlands where the problems relating to the estimation of the home market may have introduced a substantial bias. There is, however, a qualification that must be made before proceeding to the presentation of the results. It concerns the option of using all trade effects, and not just those referring to trade between new and older members. Apart from minor arguments, such as those concerning the possibility of trade reorientation, the central reason for so doing is that during the period of analysis there was a general upsurge in protectionism. This had two main consequences: one concerning the increase in the EC's own level of protection, mainly through non-tariff mechanisms (that could be transformed into their tariff equivalent), which can be interpreted as a rise in the common external tariff; and the other (probably the most important) concerning the increase in protectionism elsewhere in the world, particularly by other OECD countries.

This last phenomenon, which can be compared to a case where the 'rest of the world' is retaliating against the customs union, either by increasing its own level of protection or by forming its own customs union, has not been dealt with in the theory, and its consequences in terms of global trade creation and diversion are not clearly identifiable. However, it is plausible to accept that, faced with increased competition outside the union, the EC countries were likely to react by increasing the share of intra-union trade. In fact, the estimates presented in Mendes (1986) confirm that the increased intra-trade between the older members was quite substantial, which gives support to this hypothesis. It therefore follows that integration effects in the period 1974–81 are a consequence both of the enlargement of the EC and of increased protection on a worldwide scale.

Turning now to the results presented in Table 2 we can observe that the effects of integration continue to be quite substantial and mostly positive. Denmark, one of the new members, is the only country that has apparently lost from integration, mainly because it did not have a significant amount of trade creation, which denoted a small increase in total imports and even showed a declining trend. France, in contrast to the earlier period, was the country which fared best in both absolute and relative terms, with over half its actual growth rate accounted for by integration effects. Comparing the performance of the new members with that of the older members, the new benefited least in absolute terms, although relative to its actual growth rate



Table 2  
*Integration effects on the growth rate of member countries*  
*EC8 1971-81*

<i>Contributions to growth</i>	<i>Germany</i>	<i>France</i>	<i>Italy</i>	<i>Nethl.</i>	<i>Belg.-Lux.</i>	<i>UK</i>	<i>Ireland</i>	<i>Denmark</i>
<i>Actual growth rate</i>	2.65	2.66	2.71	1.99	2.03	1.24	3.84	1.98
1- <i>Growth due to EC</i> [1 = -2-3+3+5-11+...+16]	0.91	1.57	0.42	0.53	0.71	0.37	0.31	-0.64
Made up of								
2-Terms of trade changes	-0.01	-0.39	0.05	0.07	-0.22	-0.31	0.32	-1.51 <sup>1)</sup>
3-Change in propensity to import	0.88	0.79	0.40	0.29	0.57	0.32	3.28	0.21
4-Growth of exports of manufactures	0.02	0.30	0.07	2.33	0.27	0.79	2.38	-0.08
5-Change in the trade balance of manufactures	0.74	0.66	-0.83	-2.66	0.74	0.50	-1.72	-2.86
6-Growth of exports of food products and beverages	0.50	1.35	0.14	1.28	0.42	0.65	1.12	0.78
7-Change in the trade balance of food and beverages	-0.44	-1.20	-0.35	-0.17	0.01	-1.98	-0.50	-0.46
8-Export gains due to increased prices of food	0.02	-0.07	-0.10	-0.63	-0.13	-0.03	-0.38	-0.17
9-Change in the balance of price effects of total imports on agricultural goods	-0.24	0.08	0.09	0.07	-0.12	-0.04	0.36	0.12
10-Net CAP— budget payments	-0.05	0.08	0.06	0.26	0.06	-0.32	0.86	0.19
11- total CAP effects [11 = 6+7+8+9+10]	-0.21	0.23	-0.15	0.51	0.24	-1.72	1.47	0.45
12- Net non-CAP budget payments	0.06	0.02	0.20	0.03	0.09	0.08	0.54	-0.04
13-Labour remittances	..	..	.08	..	..	..	..	..
14-Direct foreign investment	0.35	0.03	-0.04	-2.53	-0.02	0.09	0.20	0.89
15-Interdependence effect	-0.25	0.01	0.17	1.71	0.19	-0.18	1.37	-0.73
16-Residual + errors [16 = (1+2+3) - (4+5+11+...+15)]	1.06	0.72	1.06	1.19	-0.45	1.14	-0.32	0 <sup>1)</sup>

Source: Mendes (1986)

Notes: — As defined in the model a negative sign of the terms of trade means an improvement. The total may differ from the sum of its components due to rounding. Appropriately the CAP total should also include effects on the terms of trade and propensity to import. The total CAP effects are therefore likely to be upward/downward biased. Trade estimates for the Netherlands are upward biased due to entrepot trade.

1) — Estimated jointly and without considering total capital flows.

the UK apparently experienced a larger benefit from integration than the Netherlands and Italy. This performance deserves special mention since large sectors of public opinion in the UK believe that integration has worsened the rate of growth through adverse balance of payments effects. But in spite of the adverse effects of the CAP, the results show that integration accounts for about 30 per cent of growth during this period.

The breakdown of integration effects shows that the most important driving force was still the growth of exports, although in this period it was less dominant. Furthermore, an important part of this effect was the growth of exports in the food and beverages sector. In this period, as expected, the offsetting effect of an increase in the propensity to import was much smaller, with the exception of Ireland. In this regard, Ireland contrasts with the former EFTA members (UK and Denmark) which had a much smaller change in their propensities to import. The explanation lies in their existing membership of EFTA and the associated links between these two European groupings.

The terms of trade effects, as in the previous period, were small, although the trend is now generally reversed. Only Italy, the Netherlands and Ireland suffered a loss in this respect while all the others experienced a positive gain. Moreover, in contrast with the 1960s, this occurred during a period when the global terms of trade were deteriorating. On this account, there is some evidence (albeit weak) to suggest that an economic union may be more likely to secure gains through terms of trade improvement during a cyclical downturn than during an expansion. On the other hand, the view that the weaker members (Italy and Ireland) are the ones more likely to suffer from adverse terms of trade effects is further reinforced. This time, the result for Ireland seems to reject Petith's conjecture about the gains to smaller economies, except that Ireland had a much higher initial level of protection which could make the result consistent with his prediction. Finally, the large benefit to Denmark probably reflects the measurement problems.<sup>6</sup>

Turning to factor movements (one of the keystones of the Rome treaty), the results do not suggest that they have had any significant impact on the growth rate. First, labour remittances, which were only estimated for Italy, had a very negligible effect. Likewise, the effects on growth of the changes in direct foreign investment were also negligible. The only exception is the Netherlands, but here the effect is most likely due to substantial disinvestment abroad and to North Sea oil-related investment rather than to integration effects. However, an important difference relative to the 1960s is that during this period foreign investment generally had a positive effect on growth.

Let us now consider the Common Agricultural Policy, the only common policy which can be identified separately and treated at a very disaggregated

<sup>6</sup>Its value should then be seen jointly with the error term and the interdependence term.

level. The first point under consideration is whether the CAP has been inefficient to the extent of causing a reduction in the growth rate of member economies. The answer cannot be entirely conclusive because it depends on the assumptions made. Assuming that it has not significantly affected the propensity to import and the terms of trade, the conclusion is that, with the exception of the United Kingdom and Germany (and to a lesser extent Italy), all the remaining countries benefited from the CAP. Nevertheless, this conclusion depends largely on the hypothesis that, contrary to previous suggestions, the CAP also had substantial effects on the external trade of foodstuffs. If we had taken the traditional hypothesis and assumed that all the other CAP effects remained the same, then we would be left with only (i) the increased price effects, which, although negative, were rather small; and (ii) the net contributions to the CAP budget. The net outcome would then depend mainly upon the budgetary transfers, and only Ireland, Denmark and Italy would have gained from the CAP. It is interesting to note that in this case, where only the budgetary and price effects are considered, Italy shows a positive effect while the UK (the big loser from the CAP) sees its negative effect substantially reduced to  $-0.39$ . The assumption we make regarding the effects of the CAP on the pattern of trade is thus crucial for any assessment of its total impact on growth.

Finally, we must consider which countries have their integration outcome significantly affected by the net effect of the CAP. Were it not for the CAP, the UK would obviously have had a large increase in its integration-induced growth rate, but several other countries (France, Netherlands, Belgium-Luxembourg, Ireland and Denmark) would have had their growth rates substantially reduced. However, only Ireland would have changed its net outcome to a negative overall effect. Thus if it were not for the CAP, integration would have affected Ireland negatively.

We turn now to the effect of other common policies on growth. If the assumption is made that they can be reasonably assessed through their budgetary effects, then they had no significant impact on growth in most countries, with the exception of Ireland and Italy. However, it should also be stressed that, with the exception of Denmark (with a very small value anyway), no country seems to be losing on this account. This of course contrasts with the CAP. Common policies other than the CAP (namely the regional policy) would therefore seem to be more efficient in promoting redistribution without hampering growth and, in some cases, even fostering it.

Finally, an important question is whether the integration effects have been exhausted. We have seen that factor movements had a small, and sometimes even negative, effect on growth and that increased budgetary expenditure is dependent upon a stronger political commitment to European unification; we are, therefore, left with the fostering of exports which, in any case, were the main transmission mechanism of growth. That being the case, and given



that the promotion of further trade through CAP mechanisms and protectionism in general are not desirable, then the options left are the arrangements for successive enlargements and the setting up of export promotion policies at a Community level. These will be examined in the final section.

#### *Main conclusions and policy issues*

In brief, we can summarize by saying that the main conclusion to be drawn from the analysis is that for the past quarter of a century the EC integration scheme has played a major role in the economic growth achieved by Europe. If the estimates are accepted, we can say that in 1972 the GDP of the EC was 2.2 per cent higher<sup>7</sup> than it would have been without integration, and after enlargement, in 1981, the GDP was 5.9 per cent higher. Given our rejection of the 'once for all' hypothesis, this value was obviously compounded over the time horizon that we used but, nevertheless, it clearly exceeds the previously widely-accepted guess (eg. Lipsey, 1960 and Balassa, 1975) that integration gains would barely exceed 1 per cent of the GNP. Finally, it is important to note that our framework has confirmed export growth as the driving element behind this process; in the 1960s it was largely supported by the process of trade liberalization through tariff reductions, while during the 1970s it was mostly generated by the enlargement process itself, in conjunction with the association treaties with EFTA and the upsurge of a worldwide protectionist trend. The role of protectionism in this process calls for further research but it can be seen that the analysis provides no support for the widespread simplistic views based on a clear-cut choice between liberalization and protection, and shows that the EC has a fundamental need to develop an export promotion policy — a view reflected in the following discussion. The large gain estimated, however, was not shared equally between all the participating countries. This is not a straightforward claim that the EC has increased inequality in Europe, because the outcome in this respect varies between the two periods considered, with the later period showing a halt in integration-induced equality (see Mendes, 1986).

In considering other contributory factors to this growth effect, we shall start with the Common Market policies. With the exception of the Common Agricultural Policy, the straightforward conclusion is that their impact in terms of growth was almost nil. However, they presented the interesting feature that almost everybody benefited from them. This underlines the view that the European Community should reinforce its role and increase its scope.

Regarding the effects of the CAP, the examination of its effects was more

<sup>7</sup>The formal estimates for France have been adjusted on an *ad hoc* basis, as described in Mendes (1986), to take account of changes in trade which were mostly due to the effects of trade with her former colonies.

detailed and complex. First of all, there is no clear-cut answer because the gains from the CAP were not shared by all countries. In fact, the losses suffered by the UK, Germany and Italy meant that the EC as a whole had a loss in 1981 of 1.7 per cent of her GDP, due to the operation of the CAP. This being the case, the efficiency of the CAP at a Community level must be questioned. The working of the CAP has been at the heart of most of the EC internal quarrelling, although these quarrels have mainly been limited to budget disputes and not to other issues that our results have shown to be more important. In the light of our results, and using the assumption that everything else will remain constant, we shall examine the main policy issues that have been present in recent debates.

We begin with the drastic policy option of dismantling the CAP. If this were to happen, and assuming that if the member economies were left to evolve their own policies they would not achieve a superior (global) Community result, the UK, Germany and Italy would increase their gain from integration but, conversely, Ireland would face a severe loss; Denmark would see her loss increased, and the Netherlands would be in a break-even position. Therefore, unless the UK, Germany and Italy were prepared to compensate those who would lose if the CAP were dismantled, this step would be unacceptable. However, the supporters of this option can add to their battery of arguments the fact that the CAP has been responsible for an increase in inequality between Member States, in spite of favouring the poorest economy, Ireland.

A second policy option, which has already been adopted to some extent with the budget rebates given to the UK, would be to maintain the same basic policies but to change the financing of the scheme towards a more equitable system. One approach could be a move towards a greater (or exclusive) financing of the CAP through Value Added Tax contributions, differentiated according to the expected benefits and to the level of income of the participating countries. This is an interesting possibility because it would reduce the losses for the UK by almost 20 per cent (less for Germany) but this should be seen against a 40 per cent increase in Italian losses and a reduction of gains for all the other members, which, in the cases of Ireland and Denmark would be over 50 per cent. Furthermore, this would not be sufficient<sup>8</sup> to eliminate the British loss.

Another policy option (also being implemented in part) involves the implementation of more protection for Mediterranean products which would eliminate the Italian loss. The major problem here lies in the budgetary constraint which, under the present circumstances, would result in an increased burden on the UK unless there were a compensatory reduction in subsidies paid on the most favoured northern products.

An alternative to the wholesale dismantling of the CAP, and one which is

<sup>8</sup>Even admitting that the trade balance loss was overestimated due to difficulties in estimating the trend growth rate of this variable.

already gathering some support, would be the reduction of the actual levels of protection for individual commodities in order to bring their prices into line with those prevailing in the world market. This option, although attractive, faces the problem of uncertainty concerning its effect on the trade in foodstuffs. The export of food products was shown in our results to be the major source of benefit from the CAP and, moreover, it was almost exclusively of an intra-union nature. This being the case, it seems that the risks of damaging exports are very much reduced and might even be over-compensated for by consumption effects. However, successful implementation of this scheme would require that production and supply were not seriously affected; this could be assured to some extent by protection against import penetration from outside the union. An intermediate option, which includes the reduction of protected prices designed to favour those crops where Europe has a comparative advantage, while at the same time considering the need for a more equal sharing of the benefits, seems to be the most promising substitute for the radical option of a complete scrapping of the scheme.

Turning to factor mobility, the results have been very meagre given that this was one of the main objectives of the Treaty of Rome. We have seen that labour mobility was almost insignificant and, in the case of Italy, the only country where it was possible to estimate its effects on growth, there was only a very small gain on this account.

The effects of direct foreign investment are more visible although without a clear net outcome. During the 1960s its impact in terms of growth was negative but in the following period this result was generally reversed. As the estimates for this period are more reliable, it can be conceded that, in general, integration was beneficial on this account, although only in the cases of Denmark, Germany and Ireland were the gains significant. Furthermore, we can confirm the so-called tariff discrimination hypothesis and that some community countries have attracted substantial American investment (namely the UK, Germany, Ireland, Denmark and Italy) which, nevertheless, has been counterbalanced by an opposite flow across the Atlantic, mostly by British firms.

Another expected outcome of economic integration derives from the possibility of improving the terms of trade. In this regard, and following Petith's (1977) work, the belief has been widespread [see Jones and El-Agraa, 1981, Mayes 1983 and Robson, 1984] that these gains could be the most important source of benefit from integration within the EC —doubtless because until now<sup>9</sup> there have been no other empirical investigations of this question. However, our results do not confirm this optimism. In fact, these effects have not been the single most important source of gain and for the 1960s there was a generalized loss on this account. Nevertheless, given the

<sup>9</sup>Apart from some results of general equilibrium models, namely by Miller and Spencer (1977) and Viaene (1982).



theoretical and empirical difficulties involved in this issue, we have some reservations concerning our own results. We would prefer to consider this issue an 'in dubio' situation, which reinforces the need for a much deeper investigation in this area covering both the theoretical and empirical sides of the question. However, we did confirm some of the theoretical predictions about relative gains, in particular those (eg. Robson, 1984) which state that the larger the economic area the greater is likely to be the improvement in its terms of trade.

Finally, it is now obvious that the terms of trade issue within the EC will not be determined exclusively by tariff considerations. In fact, it is likely that the operation of the European Monetary System will affect the terms of trade more significantly than tariff considerations. Although we have not been able to consider the EMS because it has been in operation only during the last three years of the period covered by our study, we are aware that the incorporation of foreign currency considerations in our model is likely to be the most needed and fruitful approach for any future developments of the balance of payments alternative framework to customs union theory that we have been presenting.

We now outline some broad strategic considerations and policy issues that, in our view, confront the European Community today.

The major challenge that the EC will have to face if it wants to continue to reap benefits from integration is the renewal of old, and the discovery of new, ways to expand foreign trade, which has been shown both to be the major source of growth and to be facing possible exhaustion. This can be achieved through the simultaneous use of two basic policies, one targeted to further enlargements to include other European countries and the other related to the implementation of an active policy of export promotion at the Community level.

The two policies are closely interrelated as is well illustrated in the current process of Mediterranean enlargement. If we rely on the past experience of other members (principally Italy and Ireland), it can be foreseen that the new members might be strongly and negatively affected by a deterioration of their terms of trade and by an increased propensity to import. On the other hand, and contrary to what has happened in the case of Ireland, it is not to be expected that either Spain or Portugal can significantly expand their exports to the EC given that both already had Association Treaties that guaranteed them relatively easy access to the Community market. In the case of Portugal, its prospects might be still further aggravated by the fact that, under the present system of financing the CAP, it is likely that after the transition period Portugal would become a net contributor to the European budget.

If the EC is to prevent the further divergence of an already divergent Community and to provide the gains from integration in Europe which new members will undoubtedly anticipate, it will be faced with an ever growing

demand for increased help through the common policies. However, in this regard we saw that the CAP is perverse in the sense that it increases inequality between countries, and the other common policies lack sufficient scope to have a major counteracting impact on growth. Furthermore, if these common policies were to be extended in order to achieve this goal, the Community would, very likely, face an unbearable expansion of its present budgetary problems.

We would, therefore, advocate an alternative policy to promote exports (mostly of industrial products) from the peripheral countries as the main instrument to prevent divergence within the Community. Several mechanisms could be created to this end and we would favour as the core of the scheme the establishment of a special fund to finance imports into the Community which originate in the peripheral Member States, and the working of a dual exchange rate system (say a 'blue rate' to have a parallel with the green rates) also targeted to that objective. Further, other short range policies such as an immediate lifting of all quantitative restrictions that the peripheral countries still face and some promotion of foreign investment in the south, could also be very helpful.

Regarding further enlargements, the EFTA members should be the next to join the Community, in particular the Scandinavian countries; these countries have carried a severe burden resulting from their integration within EFTA and could possibly benefit from full membership of the EC. This strategy for trade expansion should also include the implementation of special trade agreements with the New Industrialized Countries. In particular it should be remembered that Portugal and Spain already have special links with those in Latin America (i.e., Brazil, Mexico, Argentina and Venezuela) which would facilitate any future developments in this direction.

Last, but not least, there is the need for a global EC strategy aimed at increasing exports of commodities and services with a high income elasticity of demand. In this respect the fundamental issues of bilateral economic relations with Japan and the USA and the race for the new technologies must be considered. This last question should in fact be at the centre of new and reformulated common policies, but the Community should avoid the risk of embarking upon a blind race for new technologies. The objective here should clearly be the enhancement of the content of European exports.

In relation to bilateral trade with Japan and the USA, although there was some trade diversion in relation to the United States, the Japanese have achieved an enormous import penetration in European markets in the past twenty-five years, a fact which justifies the use of transitional protective measures by the Community. As far as the USA is concerned, the main problems are centred upon the capital and foreign exchange markets which, under the present circumstances, should not be separated from any trade arrangements.

## REFERENCES

- Balassa, B. (1975), *European Economic Integration*, (North Holland Publishing Company).
- Jones, A. J., and El-Agraa, A. M. (1981), *The theory of customs union*, (Oxford: Philip Allan).
- Krauss, M. B. (1972), 'Recent developments in customs union theory: An interpretive survey', *Journal of Economic Literature*, June, pp. 413-436.
- Lipsey, R. G. (1960), 'The theory of customs union: A general survey', *Economic Journal* 60, pp. 496-513.
- Mayes, D. G. (1978), 'The effects of Economic Integration on Trade', *Journal of Common Market Studies* 17 (1), pp. 1-25.
- Mayes, D. G. (1983), 'EC trade effects and factor mobility' — in: El-Agraa (ed) (1983) — *Britain within the European Community — The way forward*, (London: MacMillan).
- Mendes, A. J., Marques (1986), *Economic Integration and Growth in Europe*, (London: Croom Helm).
- Miller, M. H. and Spencer, J. E. (1977), 'The Static Economic Effects of the UK joining the EEC: A General Equilibrium Approach', *Review of Economic Studies* 44, pp. 71-93.
- Petith, Howard (1977), 'European Integration and the terms of trade', *Economic Journal* 346, pp. 262-272.
- Robson, Peter (1984), *The economics of international integration*, Studies in Economics: 17 — 2nd ed., (London: George Allen and Unwin).
- Thirlwall, A. P. (1979), 'The balance of payments constraint as an explanation of international growth rate differences', *Banca Nazionale del Lavoro Quarterly Review*, pp. 45-53.
- Thirlwall, A. P. (1982), 'The Harrod trade multiplier and the importance of export-led growth', *Pakistan Journal of Applied Economics* I (1) Summer.
- Verdoorn, P. J. and Van Bochove, V. A. (1972), 'Measuring integration effects: a survey', *European Economic Review* 3, pp. 337-349.
- Viaene, J. M. (1982), 'Quantification of the long-term effects in a general equilibrium framework', *European Economic Review* 18 (3), pp. 345-368.



