### Some implications of the developments in Eastern Europe for the European Economic and Monetary Union

by

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#### 1. Introduction.

In this paper I shall try to sketch what could be some important consequences of recent developments in Eastern Europe, for the present fabric of the European Community (EC) and its

evolution into a European Economic and Monetary Union (EEMU).

The main issue I shall discuss is the possibility that the recent developments in Eastern Europe could make more attractive, for the countries that are at the core of the EC, to widen the geographical scope of the Community as a common market for goods, while at the same time making less attractive to further proceed towards integration of the old Community within a full monetary union. Thus, the issue is whether the attempt to enlarge the EC in order to help reshaping the economies of Eastern Europe, may widen the "economic" side of the EEMU (let us call it the EEU)) at the cost of shrinking its "monetary" side (let us call it the EMU). The first side of this issue --widening the EC-- is mainly discussed in section 2; the second side --deepening the EC-- is mainly discussed in section 3. Interrelations between the two sides are intrinsic to the issue, so that such programmatic separation is somewhat artificial. Thus, in section 4, I shall try to pull together the two arguments and attempt some conclusion.

In analyzing this issue I shall limit myself to economic reasoning, even though I am aware that, because of this limitation, the conclusions may very well be different from those that would follow if political elements were also considered. In fact the very distinction between economic and political points of view is artificial in the context of structural changes such as those that

have affected Europe in the last few years.

### 2. Widening the European Community.

# 2.1. The economic dimensions of a wider EC.

Because the political geography of Europe could experience additional changes --following those that, for the time being, have culminated in the reunification of the two Germanies -- it may be useful to start with some basic statistical data on the dimensions of the European countries and their possible new aggregations, relative to the U.S.A. and Japan. This is done in Tab.1.

The successive enlargements of the EC considered in the aggregations of Tab.1 are hypothetical, except the first one, which has already taken place with the political unification of Germany. Their character frames the analysis of this paper within a long run point of view, as it is difficult to expect that the necessary political developments -- assuming that they will take place-- would proceed as fast as in the case of Germany.

These hypothetical widenings of the EC are based on: (i) the inclusion of East Germany, already realized; (ii) the additional enlargement to the EFTA countries; (iii) the additional enlargement to the three countries of Eastern Europe that seem more likely to meet the criteria for admission in the EC at some future date, namely Czechoslovakia, Hungary and Poland.1

Comparing the situation before German unification, with the one that would result if 1988 population data were to apply to the largest new EC here considered (i.e. the NNEC), the EC would move up from being (before German unification) 1.3 times the US and 2.6 times Japan, to becoming 1.8 times the US and 3.5 times Japan. In terms of GDP, the EC would move from being about equal to the US and 1.7 times Japan, to becoming 1.3 times the US and 3.5 times Japan.

By enlarging its domain, the EC would also be larger in terms of its export trade. Net of intra-area trade, the EC would increase its export trade from being 1.3 times that of the US and 1.6 times that of Japan, to becoming, in its wider hypothetical enlargement, 1.6 times that of the

US and twice that of Japan.

However, its impressively larger economic size will clearly not give to the EC a comparable political weight, until the process of economic and political integration of the Community is completed.

### 2.2. Advantages and problems from widening the EC.

Because much trade is already taking place between the present EC and the EFTA countries, and, even more importantly, because more trade could develop from enlarging the EC to the East European countries (including the already realized enlargement to East Germany), it is arguable that --particularly for the core countries of Europe, with Germany at the centre-- the new challenges and opportunities offered by economic restructuring of Eastern Europe will overshadow the momentum already triggered by the incoming enactement of the integrated "internal" market at the end of 1992.

In fact, it is probable that the economic (and political) centre of the EC will drift eastward, possibly at the expense of the EC Mediterranean members. This may explain, quite aside from

political reasons, the different and partly new attitudes that are developing in Germany and her closest neighbours, on one side, and in France, Italy, Spain and their minor neighbours, on the other side, also with respect to transforming the EC into a full EEMU; with the United Kingdom being able, for once, to present its originally odd position as a compromise rather than as a

dilatory one.

While these different attitudes will be interpreted in section 3 as reflections of other elements, they can also be justified by the preferential position in which the central countries of Europe are placed, relative to the peripheral ones, with respect to their capacity to exploit the new opportunities for trade with the East and with the EFTA countries, if these were all to join the EC. Table 2 shows (columnwise) that, while export trade directed towards EFTA and towards the Eastern countries (East Germany, Czechoslovakia, Hungary, Poland) by the EC group composed of West Germany, Benelux, and Denmark, is larger than by the two other EC groups, one composed of France, Italy, Spain and the rest of the EC, and the other composed just of the UK, yet it is relatively much larger towards the Eastern European group than towards EFTA (72.89/64.69 is the highest of the three ratios). On the other hand, considering the total across rows, while all three EC groups are more interested by EFTA, this is comparatively more so for the UK, while the comparative importance of the Eastern countries is larger for the EC group centered around West Germany (11.96/88.04 is the largest of the three ratios, and 7.81/92.19 is the smallest).

The preferential position of the central countries of Europe with respect to the prospective East European members may also result from the larger financial exposure that the latter have vis-à-vis the central European countries than vis-à-vis the peripheral ones. It seems natural to assume that, on the one hand, such larger exposure will continue to generate larger concentration of East European imports from their main European creditor countries, and, on the other hand, that the latter, in order to reduce such exposure, will try to redirect their imports from their

traditional suppliers to their main debtors in Eastern Europe.

Another set of challenges from widening the EC concerns the consequences for the European Common Agricultural Policy (CAP). These consequences may result in a a net advantage for the Community; however the distribution of advantages and disadvantages is ambiguous. The current, although gradual, application of CAP to the whole of Germany, and prospectively to other members from the East or from EFTA, provides a healthy opportunity for reconsidering it radically. Its reconsideration may however take both positive and negative tracks. On the positive side:

(i) the greater industrial development that will result, at least in central Europe, from integration with the Eastern markets, should, for given specialization, reduce the economic and political importance of the agricultural sector in the core countries of the EC, and thus make it easier to reduce its protection, which weighs heavily on the industrial sector (not dissimilarly

from the situation of Britain at the time of the Corn Laws).

(ii) the need to search a liberalized structure of comparative advantage vis-à-vis the EFTA countries, with whom trade is mainly of the intra-industry type, and the different agricultural policies of these countries, should in any case require redesigning CAP, possibly in a more rational way.

(iii) the need to re-establish a more traditional basis of comparative advantage, mainly characterized by inter-industry (rather than intra-industry) trade, with the East European countries, should also require leaving to them a larger share of agricultural production, where

they will probably enjoy in the long run a sounder comparative advantage than the artificial one

created in the EC by CAP.

On the negative side, those members of the EC that will reap smaller benefits from the new industrial development of an enlarged EC, may object to reconsidering that part of CAP that protects their agricultural products. However, positive forces could play against this negative effect, such as the need to help in a different way (i.e., with more trade, rather than with aid) the African countries that are associated with the EC and that shall suffer from the eastward redirection of EC investments and general economic interest. This would mean reducing protection of Mediterranean agricultural products --which is requested by the Southern members of the EC-- and compensating them with a larger share of the gain that the whole EC economy would get from a less protectionist CAP and higher industrial growth.

The eastward drift of the economic centre of the EC and the new opportunities for trade that this will involve, cast some shadows on the relative importance of the new "internal" market to be enacted at the beginning of 1993. In preparation to that event --which implies a full European economic union, EEU-- some estimates have been provided of its economic importance.2 Similarly, a study is currently under way at the Commission to measure the advantages that would result from extending the EEU to full economic and monetary union (EEMU). While aspects of EMU will be mainly discussed in section 3, it could be argued that the economic advantages of 1993 (EEU) may be either overestimated or made uncertain as a

consequence of the new developments in Eastern Europe.

Overestimated, because the new challenges and opportunities of enlarging the EC eastward, may reduce the economic interest of the core EC countries in further integrating with their traditional EC partners, redirecting instead their investment of resources --human and capital-- towards the newly opening markets and the huge needs of their reconstruction.

Made uncertain, because the widening of the Community's scope eastward -- and in particular the monetary unification of Germany -- already seem to have started slowing down the process of completing EEU with EMU (and thus moving to full EEMU), witness the recent difficulties in setting a date for the beginning of phase 2 that was programmed in the Delors Report, or for determing its lenght before the final inception of phase 3. This slowing down --even though denied politically or attributed to prexisting economic factors or failures by some EC members -- such as Italy, Spain, or the UK-- is an already observable fact, and contains the risks that even the old structure that interconnects the present members of the EC may suffer some dangerous clivages.

# 3. Deepening the European Community.

# 3.1. Widening the EC at the expense of its deepening.

I have argued in section 2 that the developments in Eastern Europe have released economic forces that may lead to a widening of the EC (beyond the already achieved reunification of Germany), by inclusion of some or all of the EFTA countries and some of the East European countries. The issue has been raised whether such widening may not be gained at the cost of less

deepening of the economic integration of the traditional EC. This danger is further analyzed in this section, particularly with respect to integrating the EC as a market not only for goods but also for factors of production (thus moving towards the EEU component of EEMU), and with respect to the process leading to European monetary unification (thus also moving towards the EMU component of EEMU). In this respect, the triggering element has been less the developments in the rest of Eastern Europe, than the monetary, and now also political, unification of Germany, which is fast proceeding to its full economic integration. This has raised

a number of questions.

The first set of questions may be reduced to asking whether German unification will slow down or accelerate the *process* towards EEMU. Usually the answer is based on political arguments, by suggesting that, at least with respect to Germany's partners, unification would strengthen their desire to unify Western Europe, in order to check within it the overwhelming power of the new Germany. A subsidiary form of these questions is whether the fast monetary unification of the two Germanies revitalizes the "two speeds approach" to integration of the remaining EC countries. Another subsidiary question is whether German unification will further delay or anticipate Britain's entrance into the exchange rate mechanism (ERM) of the European Monetary System (EMS), and its eventual transformation into a EMU. This first set of questions is dealt with in section 3.2.

The second set of questions boils down to asking whether German unification will change the *outcome* of the EEMU process, and in particular the monetary and fiscal policies and institutions that shall eventually characterize it. This set of questions is dealt with in section 3.3.

Both sets of questions may also be raised from a slightly different point of view, which consists in asking why German monetary unification (GMU) has been accomplished in one step rather than gradually, by choosing as the common currency and central bank those of one of the two countries; whereas in the case of EMU the process that has been designed by the Commission is gradual, and the currency and institutions that would eventually result from it should be new ones. The relation between this point of view (which is discussed in Willms (1990)) and the two sets of questions analyzed in this section 3 is clear. In fact here I wish to analyze whether German unification will change the process and the final outcome of EEMU; Willms, on the other hand, wonders what is specific to the case of Germany, that makes the process and the outcome of GMU different from that of EMU. Knowledge of such specificity may trow light on the question whether the process and the outcome of EEMU may or should be changed as a consequence of GMU.

### 3.2. The process towards EEMU.

Clearly, German unification could either accelerate or slow down the process towards integration of Western Europe. Less clearly, it could disintegrate the set of countries involved in that process, by making some of them keen to accelerate it, and others more inclined to slow it down. Thus it could revive the so-called "two speeds approach" to European integration.

While the *economic* side of the process and the outcome of EEMU is already well specified and on its tracks at least until 1993, so that the danger of slowing or disintegrating it is

less likely, its monetary side --designed last year in the Delors Report (1989)-- has been the subject this year of renewed debate, initially and more openly from the British side, but more recently also from the Spanish and, most notably, the German side.3

3.2.1. Convergence of monetary and fiscal policies.

The view of the Commission, in brief, is that the plan and the schedule drafted in the Delors Report should be made more precise and accelerated in reply to the challenge of German unification and Eastern European developments. Recent declarations by the Deutsche

Bundesbank have thrown cold water on this view.

The position of the German monetary authorities is now openly opposed to proceed further or faster, until greater convergence of fundamental monetary and fiscal variables is achieved among the members of the EC that really want to embark into EMU, and not just be part of EEU. While I shall later discuss whether this change in attitude is really determined by the reasons officially presented, it is anyway clear that, in relation to this new German stand, the British position --recently reshaped in the form of a proposal for a parallel currency, called the "hard ECU", that would never be depreciated vis-à-vis the national EC currencies-- is less than in the past exposed to the criticism of being inspired by ideological or political obstructionism. For once, the British may even play a mediatiory role, between tough German leadership and Brussels cooperative federalism.

If, for both its political weight and simplicity, we concentrate on the German position, we may summarize it by stating that convergence should come before and not after monetary integration or unification. On the basis of this position, it is far from clear that all countries that are supposed to move towards full monetary unification during phase 2 of the Delors plan, have already achieved the degree of convergence that is necessary for giving up realignments of exchange rates during that phase. Moreover, such incomplete convergence does not promise well for the the independence of the new European Central Bank, and in any case for a currency that, such as the traditional ECU, should at least initially be a weighted average of the individual currencies of the present 12 members of the EC, managed by separate Central Banks, although

cooperatively.

Since the reservations of the Deutsche Bundesbank concern the ability of a cooperative European monetary policy to be aimed only at price stability, independently of fiscal or other political considerations, the empirical basis of their distrust must be based on variables measuring that ability for the various countries that should be part of EEMU. Price inflation is certainly one such variable; as for political independence, more than by the statutes of central banks, it is usually represented by the danger that large Government debts or reckless fiscal policies may eventually bend monetary policy to fiscal purposes rather than to price stability. In order words, that the need to finance current Government expenditures or to reduce the accumulation of past Government deficits may be resolved through the inflation tax. Thus, in addition to actual price inflation, the danger of future inflationary policies is measured by the importance of current Government deficits or by the weight of Government debt.

Fig.1 shows the average price inflation rates during the period 1970-89 for a partition of the EC countries and for EFTA. West Germany, the group of Benelux plus Denmark, and EFTA present the best performance (with Germany clearly on the lead); France and UK occupy the middle positions; Italy, Spain and the rest of the EC come gradually last. However, Fig. 2a shows that the dispersion of inflation rates (measured by the coefficient of variation across each

individual country belonging either to the EC or to EFTA), after having reached a peak in 1986, has been falling since. Because the German criticism is directly addressed to the countries belonging to the EMS, Fig.2b presents the corresponding graph for them only. Notice that, relative to the larger group of EC and EFTA countries, the EMS group has had a lower dispersion of inflation rates throughout the period. Notice also how dispersion has been falling since 1986: that year marks, with the last effective realignment of EMS parities at the beginning of 1987, the end of a regime of adjustable parities in the EMS and its "de facto" transformation into a regime of fixed parities, with stronger discipline on monetary policies in the more inflationary prone countries of the EC. In fact, at the end of the period the degree of dispersion of inflation rates has almost reached the same low level that it had at the beginning of the period, when exchange rates were still fixed according to the Bretton Woods system.

Fig.3 graphs the difference of inflation rates of the main EC countries and the Benelux plus Denmark, relative to West Germany, during the same period. The graph shows that, although all inflation differentials have been progressively reduced since about 1980 --with the exception of the Spanish datum for 1986-- the EC remains divided into two groups: France and the Benelux (plus Denmark) on one side, with an inflation rate which has already been lowered to the German one; and the UK, Italy and Spain, on the other side, with a still significantly higher

inflation.

Fig. 4 depicts the behaviour of Government deficits (measured as the difference between consumption expenditures of the Government net of taxation) as ratios of GDP. Here the odd country is reduced to one, namely Italy, while the others have more or less converged to the West German level by 1989. In noticing this, I only mean to examine the grounds for the argument that some fiscal policies are persistenly out of line in the EC, without implying that their convergence should be advocated, regardless of the economic cycle in different countries. In any case, since the worries about the inflationary potential of fiscal deficits are based on the needs to finance the whole of Government expenditure requirements, a better measure is provided by comparing the different countries' Public Sector Borrowing Requirement (PSBR). This is done in Fig. 5, which shows the same odd situation for Italy, and somewhat less convergence to the German level for the other countries (but here the "best" recent performance is by the UK).

Both the data on inflation rates and on Government deficits (or PSBRs) show the current evolution of monetary and fiscal policies. However, the worries referred to above are even more based on the inflationary potential accumulated through past deficits, and their overhang on future behaviour of monetary policy. This is described more directly by the accumulated Government debt, whose burden may become unbearable and thus make it impossible to maintain a monetary policy independent from fiscal needs. Fig. 6a presents, again for the main countries of the EC, the Government debt ratios with respect to GDP in 1989. Again Italy appears to be the odd country, and the UK the best one. West Germany takes the lead when considering net Government debt (Fig.6b), while Italy remains in last position. However, if we were to consider also the smaller EC countries, Italy would not be the worst of the group.

Thus, on the basis of the admittedly simple evidence presented in these graphs, it is difficult to deny that there are empirical grounds for considering the EC as being still made up of countries, with systematically different attitudes towards inflation, and with different fiscal and debt heritage hanging up on the future of their monetary policies. On the first point, there appears to be a low inflation group --made up by now of both Germany and France, plus Denmark and

the Benelux countries-- and a high inflation group, made up of the UK, Italy, and Spain. On the second point, there seems to be only one country on the odd side --at least if we consider only the

main ones, i.e. Italy.

Thus, the German stand for a programme of monetary unification that is either delayed for all countries, or, if it has to proceed faster, should only apply to a subset of the EMS countries, does not seem to be unreasonable. However, there is a curious element that should make us suspicious about accepting this as the only justification for the German stand. After all, the odd position of some EC countries with respect to inflation and fiscal policy has ben known for a long time. It is strange that, just at this time, the Deutsche Bundesbank has come out so bluntly to restate that their convergence to the average (or, rather, to the German) level is a prerequisite for proceeding further towards EEMU, or for admitting also those countries into the new club.

We should therefore search for new elements, that may justify why the German position, although not really new, has certainly been expressed with a new tone and at a well chosen time, i.e. just before the incoming political conferences that should determine the new schedule and shape of EEMU. The mind naturally goes to the new developments in Eastern Europe, and more particularly to German monetary unfication. In other words, rather than looking for a justification only at the monetary and fiscal policies of the EC countries, we should also consider structural economic elements, old and new. These may refer not just to Germany's partners, but also to Germany itself, and to its relations with the economic structures of East Germany and the East European countries. It will be shown in the next sections that a more complete and convincing picture appears, when we add these structural elements to the traditional arguments about the inadequate convergence of monetary and fiscal policies.

3.2.2. Convergence of economic structures.

The arguments and data presented above refer to variables of main interest to monetary authorities that, like the German ones, give high priority to price stability and independence from other objectives. Now, the question arises whether, even on the grounds of economic variables different from purely monetary or fiscal ones, there could be some value in the idea that the EC countries should not all proceed at the same speed or in one step towards full economic integration. Thus the question becomes less one of debating a "monetarist" versus an "economist" school, and more one of knowing whether it is possible or advisable that all countries proceed at the same speed toward both monetary and economic integration.

The theoretical framework for analyzing the process towards structural economic integration depends upon the objective of the analysis. This could be aimed at finding the sustainable sequences among the many that are possible, or also at identifying the optimal one

among the set of sustainable sequences in the process of economic integration.

In a recent paper Dellas and De Vries (1990) distinguish two strands of thought in previous economic literature on this field, and propose a third one. The first two strands rely on "second best" arguments for a gradual process towards integration, whereas the third one relies on "first best" arguments. A fourth strand goes along traditional trade theory, which can be used in order to examine how the integration of East European countries (and in particular of East Germany) within the framework of market economies may need changing the terms of trade or the real exchange rates among the EC countries. This would strain their monetary relations, possibly endangering the fabric of the EMS and even the completion of the European Economic and Monetary Union (EEMU), unless room is left in that fabric either for entering it at different

stages or for some intermediate flexibility. This strand of analysis has something to say both on the process and on the final outcome of EEMU.

The first two strands of thought identify in market frictions or market failures the basis for moving toward unification in a gradual way; thus they are second best arguments, relative to a first best economic situation, where no frictions or failures exist so that no such argument could

apply.

According to the first strand, these frictions are due to costs of adjustment or costs of delay, so that countries may want to move faster or slower depending on their particular cost functions. Similarly, according to the second strand, frictions could be different for different markets, with some markets finding their equilibrium faster than others, thus requiring countries to integrate first the markets that adjust less rapidily towards equilibrium (such as the products

and labour markets), and only later integrate the fast adjusting markets.

Notice that the argument of this second strand of literature does not refer different speeds of integration to different countries, but rather to different markets. However, in so far as different markets may find their equilibrium more or less efficiently in different countries, this argument may also suggest internationally different speeds of integration. Thus labour markets may be more or less regulated in different countries, and their variables (wages and salaries, or employment) be more or less sensitive to market disequilibria. Countries with more efficient labour markets could presumably integrate at lower costs than countries with less efficient ones.

Notice also that, according to this line of thought, it seems difficult to understand why labour markets in the Community have been integrated less or later than product markets: in so far as they are less efficient than product markets they should have been integrated first. Also, if they are less efficient, trade theory could not be invoked to argue that it is enough to integrate product markets in order to reach the same equilibrium that would result from integrating factor markets. Hence the very rationale of the 1993 "internal" market programme is that it has not been enough to allow free trade of products throughout the EC: unless other factor markets—both capital and labour—are also fully integrated, and unless non-tradeable sectors are opened to indirect competition from other member countries through freedom of establishment, full economic integration of the EC will not be achieved.

However, it is here necessary to disentangle positive from normative analysis. On the positive side, it could be argued that more efficient markets are easier to integrate, at least economically: thus capital markets should come first, product markets second, labour markets last. On the normative side, because of the costs of adjustment, it could be argued that countries should first integrate the slow adjusting markets, in order to avoid that efficient markets may backlash on the less efficient ones, with the overshooting effect so familiar from the exchange

rate literature.

In any case, the relationship between the cost of integration and its speed must be clearly specified: in the end it should involve both the sequence of costs and benefits, and the social versus the political rates for discounting that sequence. Only an analysis based on the discounted value of social and political objective functions could deal with a normative evaluation of the results.

If, with much simplification, we summarize the process of integration already followed or still planned in the EC, it would appear that a compromise has been struck between positive and normative points of view, in so far as tradeable product markets have been integrated first, general labour markets second, money and financial markets third, with the nontradeables or

other artificially protected markets coming last. A question that arises with respect to the new challenges coming from Eastern Europe -- and in particular with the migration of labour already experienced from those countries and at least temporarily diminished from East Germany- is whether the same sequence will also be adopted with respect to the eastward enlargement of the EC.

The third strand of analysis, proposed by Dellas and De Vries, is cast in terms of a neoclassical growth-theoretic model. Their reference is to positive theory (identifying the sustainable sequences in the integrating process), but they can hardly avoid normaline implications (identifying the optimal sequence). Also, the sequential difference that they discuss is one between an international liberalization of factor markets that immediately leads to an integrated endowment of factors (one stroke or "precipituous" integration), and a liberalization that must be preceded or accompanied by steps aimed at making sustainable the eventual merging of the factor endowments (gradual or "piecemeal" integration).

As already mentioned, this analysis does not rely on market frictions or failures, but on the possible existence of multiple equilibria, in order to justify a gradual process towards international economic integration. Thus the approach, although grounded on theoretical characteristics that may be difficult to test, has the advantage of being a "first best" argument for gradualism; as such it is complementary, rather than substitute, to "second best" arguments for gradualism, as those discussed by Willms (1990) on the basis of the theory of opening

currency areas".

The gist of the argument is captured by Fig.7, where the function g is the capital accumulation function that, on the basis of the production capacity and saving behaviour of a country, relates current to previous period capital/labour ratios. Even with a well-behaved neoclassical production function there could exist more than one equilibrium points. In Fig.7 there exist three positively valued equilibria, with the low and the high K/L ones being stable and the intermediate one being unstable, as can be checked by projecting successive K.L. rabbs through the diagonal: if a country's K/L ratio happens to be to the left of point B it will progressively step down to point A; if it is to the right of B it will progressively step up to C.

A worrying possibility is that two countries, that find themselves in equilibria separated by an unstable one (as at points A and C in Fig.7), may -- by deciding to integrate their capital and/or labour markets, i.e. to merge their separate K/L ratios into a common weighted one - end up in one stroke to the left of the unstable equilibrium point B, and thus converge appealer to A, the lowest of the two stable equilibrium points. In this case the low capital about min country (i.e. the one with the (K/L)<sub>L</sub> ratio) attracts the high one (i.e. the one with the (K/L)<sub>L</sub> ratio) into its low original position, as if it were a "black hole". This position is considered less efficient than the high capital/labour one, in so far as, with given labour endowments in the two countries or given equal rates of their growth, it corresponds to smaller production possible seasons

In this case it can be shown that, while a precipitous (i.e. one stroke) integration of the two countries' capital and labour markets may lead to the low equilibrium point, there may also exist a preliminary transfer of capital from the high to the low K/L ratio country for a country transfer of labour from the low to the high K/L country), followed by an integration of their factor markets, such that the two merged countries would land to the right of the unstable equality and point, and therefore jointly converge from there to the highest K/L equality

Notice an interesting implication of this case: other things given, precipitus factor market integration is more likely to be efficient the larger is the capital-abundant country relative to the

labour-abundant country --where size is measured by the ratio of a country's labour force to the total of the two countries' labour force. This suggests that countries of similar size should be more careful in integrating their factor markets in a precipitous way, whereas countries of smaller size could, with higher probability of success, proceed to one stroke integration of their

factor markets with larger countries.

Although obtained from a simple but elegant theoretical model --where clearly many empirical economic and political elements are missing-- such a result is suggestive of why smaller countries clustered around a larger one --such as the Benelux countries, Denmark, or even Austria and Switzerland, not to speak of East Germany-- may find it easier than larger countries to integrate their economies with that of the largest country (e.g. West Germany). Notice that this result is in line, although for different theoretical reasons, with an element of the theory of optimum currency areas, i.e. the one based on the degree of trade openess of a country

vis-à-vis its prospective main partner.

According to this model, it could be against the interest of a large country (e.g. Germany) to integrate with countries of not much smaller size (such as France and Italy), since these could be large enough to attract the large country into their black hole. The large country may instead be indifferent, and thus possibly willing, to integrate with much smaller countries (such as, again, the Benelux and other small countries neighbouring Germany). On their side, the smaller countries would be indifferent between precipitous or gradual integration --indeed between integrating or not with the large country-- if integration were to attract the larger country into the smaller country's black hole; the smaller countries would be interested only if integration, gradual or otherwise, were leading them to the higher position of equilibrium. Thus the large country would be interested in integration --whether with small or large countries-- only if it could eventually obtain from its partners a compensation for bringing them up to its higher position.

These results partly fit the actual experience of the EC. It is a fact that relatively large members, such as France and Italy, until recently found difficulties in moving to fast integration of their capital markets with that of Germany, while smaller ones were more inclined to move fast. In line with these results appears to be also the higher willingness of Germany to integrate itself closely with smaller than with about equal sized countries. Even though political elements were clearly dominant, the model could also be stretched to explain the desire by East Germany to integrate fast with West Germany, and some initial attempts by the latter to slow down that process. In fact the German case seems to fit the "transfer cum integration" approach, and the likelihood that, in the long run, the larger country (West Germany) will be "compensated" for the transfers that it has to grant initially in order to implement a successful integration with East Germany.

Clearly, other elements must be introduced in the model in order to capture the complexities of the German case. A possibility, which would link this analysis to the traditional trade-theoretic model to be recalled below (section 3.3.1.), is to consider that German unification, by making the capital stock of East Germany suddenly obsolete and thus to be partly scrapped, would land that country (i.e. East Germany) to the left of a lower and unstable equilibrium, whence it would move to an even lower one (see the movement from point  $(K/L)_M$  to point  $(K/L)_L$  in Fig.8), possibly attracting down to that black hole also West Germany (initially located at  $(K/L)_H$ ), unless the latter were to assist it with transfers high enough to take

the joint K/L ratio to the right of the unstable point D.

Another possibility is to consider that, rather than requiring part of the capital stock to be scrapped, transformation of the East German economy into a market economy would require changing its production function to a more efficient one (from g, to g, in Fig. 3), so that the new higher capital accumulation function would, for the same K/L ratio, correspond to a point to the left of a new unstable equilibrium, and thus make East Germany fall down to a lower K/L ratio (from (K/L)<sub>L</sub> to (K/L)<sub>LL</sub>). Again, adequate assistance -- in the form of a capital transfer from West Germany-- might be necessary prior to integrating at a point to the right of C and then jointly

proceeding to point D.

As already pointed out with respect to "second best" arguments for gradualism in economic integration, it is not easy to distinguish between gradualism referred to different markets and to different countries. This can instead be easily done within the "first best" model just discussed, since in its simpler formulation there is just one homogenous product and the two factor markets (labour and capital) play a symmetric role in the process of integration. Indeed this model provides a simple but elegant theoretical basis for arguing in favour of the so-called "two speeds approach" to European economic integration. This approach -- particularly discussed in relation to integrating capital markets among the EMS countries and to moving ahead towards narrower bands for exchange rate fluctuations in the ERM-- is now, as already recalled above, again on the foreground of debate concerning the fate of the Delors plan.

In order to meaningfully analyze the "two speeds approach" we need to consider in our model at least three countries and three stable equilibrium points. An example is shown in Fig. 10, where, with four stable equilibrium points, three of them correspond to the K/L ratios of

three different countries before integration of their factor markets.

Apparently, with three countries, there are five possibilities: (i) precipitous integration of all three countries, (ii) gradual integration among all three countries, (iii) precipitous integration between countries 1 and 2, followed by their gradual integration with country 3, (iv) precipitous integration between countries 1 and 3, followed by country 2, (v) precipitous integration between countries 2 and 3, followed by country 1. Clearly, for the "two speeds approach", only possibilities (iii)-(v) are of interest. Upon closer consideration, however, a larger set of possibilities can be identified. The two countries to be selected for merging their factor markets before integration with the third country, may themselves move to such merging with or without a preliminary transfer (i.e. by piecemeal or by precipitous integration), and then successively integrate in a precipitous or piecemeal way with the third country. Conceptually, therefore, each one of the three pairings of countries gives rise to four possibilities. Thus, there are in total twelve possibilities in which a "two stages" (rather than a "two speeds") approach could be applied to a community composed of three groups of countries. The first stage is when a pair of countries (or of groups of countries) integrate first (whether precipitously or gradually); the second stage is when that pair of countries, having completed integration of their factor markets, decide to integrate (in a precipituous or piecemeal fashion) with the third one. In any case, whether the two speeds approach should encompass, with three countries, either three or twelve different possibilities, I shall only consider, in the following, the three different pairings of countries, without further specifying whether among them (and subsequently with the remaining country) integration is one-stroke or gradual.

It is also clear, from the enumaration of all possible cases, that their number grows rapidly with the number of countries involved. This, more than casting doubts on the usefulness of such theoretical analysis, should induce us to be cautious before jumping to conclusions on what

seems to be, even on pure economic grounds, the best or most likely reaggregation of countries within the existing or within a larger EC, for the process of gradual and differential movement towards EEMU.

In any case, returning to the three countries example, which of these cases is preferable, i.e. which of the three countries (groups of countries) should integrate first, depends upon (a) the shape of the capital accumulation function g, and in particular the distance between the stable equilibrium points from which the countries start considering integration, (b) the countries' relative economic size. However, the choice cannot be based only on such positive elements: in the dynamic setting of the model, the choice must also involve the present value of the countries'

social welfare or policy objective functions, and weigh them appropriately.

Some interesting questions arise in this context, two of them strictly interconnected. A first question is whether two countries with capital/labour ratios at opposite extremes (ratios  $(K/L)_H$  and  $(K/L)_L$  in Fig.10) may find it advantageous to integrate their economies at a stable equilibrium point *lower* than the one from which the highly placed country starts, in order to be able to integrate, subsequently and gradually, with a third country that was placed at an intermediate ratio (ratio  $(K/L)_M$  in Fig.10). This might be possible, if there are more than three stable equilibrium points, if the mid-country starting point is below the one to which the two fast-integrating countries decide to step (e.g., point  $(K/L)^*$  in Fig.10), and if the lowest placed country is sufficiently small relative to the highest placed one. This point, although lower than the starting one for the highest placed country, would be more efficient for the three countries as a whole, if the highest placed equilibrium cannot be reached by any combination of one-stroke and gradual integration of all three countries' factor markets.

A second and analogous question is whether a country may efficiently proceed to gradual integration with the other two, only if these are allowed to move to their integration first and in

one stroke.

The analysis of these two cases could be applied to the German unification process. It may be generally advantageous that West Germany (possibly the highest K/L country in the EC) is integrating its economy first and/or faster with East Germany (possibly the lowest K/L country, as compared with the rest of the EC), in order to make subsequently viable for the united Germany to integrate with the rest of the EC. The West German "sacrifice" would be necessary in order to make it possible for the rest of the EC to integrate with the united Germany.

Perhaps more suggestive with reference to the other prospective members of the EC --such as Czechoslovakia, Hungary and Poland-- is to apply the analysis and argue that stricter integration of their markets with only some of the present members of the EC is a prerequisite to making subsequently possible also for the other present members to integrate with them.

A third question is whether, out of the multiple pairings of countries (or groups of them, when they are more than three) to be candidates for faster integration, more than one pairing leads to the same stable equilibrium. If so, the choice among alternative country pairings should, as mentioned above, be based on the higher present value of the sequence of steps leading to the steady state. In other words, and again applying the analysis to the German unification, it could be that both a precipitous integration of East and West Germany, and their alternative integration at the same pace as with the rest of the EC, would have eventually landed all EC countries in the same steady state position. However, the paths leading to that position would have been different under the two alternatives: presumably the present value of the integration path that has led to German unification first, is (at least when discounted at the German political discount rate)

higher than the present value of the alternative path.

In any case, in order to see how the model may throw some light on our empire. problems, it should be useful to examine the capital/labour ratios of the countries for groups of countries) in the EC. Fig.11 shows them for the year 1988. Unfortunately, data for East Germany is too unreliable to be used; moreover, as already suggested above, its actual capital stack may be such as to be scrapped when faced with the efficiency standards of a market economy. Thus we cannot see how close is East Germany with respect to its other newly joined EC parties. We cannot therefore judge whether the hints, suggested above at a purely theoretical even with respect to German precipitous integration, have some more empirical basis. Even see Fig. 11 shows that the EC countries may be clustered in two groups, according to the KL common. The first one --made up of West Germany, the UK, France, and the Benelux plus Demant group- is actually close to the more capital rich EFTA group. The second one, although less homogeneous, is made up of Italy, Spain, and the rest of the EC.

Thus we may argue that, unless there is a political willigness on the part of the higher K/L group to assist with transfers a gradual integration with the lower group, fast integration of the EC factor markets is more likely to take place among the first group of courses possibly even with EFTA, rather than with the second group. Clearly, this argument assumes that there might be unstable points of equilibrium that separate the two groups of countries, and that was a knowledge of the danger of falling into their trap that may explain, at least in the relationship to their trap that may explain, at least in the relationship to their trap that may explain, at least in the relationship to their trap that may explain, at least in the relationship to their trap that may explain, at least in the relationship to their trap that may explain, at least in the relationship to their trap that may explain the relationship to the relation

to move towards EEMU integration of all EC members at the same speed.

The argument is based on structural, rather than economic policy differences are countries. More empirical research is clearly in order, before accepting it as a relevant additional explanation of the difficulties currently experienced in the process of EEMU. However, before rejecting it as just theoretical or simply artificial, we may want to consider how relevant it could be in order to explain historical experiences, such as that of the North and the South of hely. where some economic historians argue that their precipituous integration in the nine economic century --accompanied by an immediate monetary unification -- did not so much contribute to lifting the South up to Central European standards of developments, but rather to pulling the North down to a level lower than the one it could have reached with a different choice of partners for political integration, or with a transitory monetary arrangement short of full monetary union with the South.

The fourth strand of literature used to analyze the consequences of East European developments on the process (but also on the final outcome) of EEMU, is based on machine trade theory. In particular, two models have been applied to analyze the effects of these developments on the terms of trade of the main countries in the EC, and particularly those of Germany. Depending on the model, the terms of trade (sometimes identified with the real exchange rate) are defined as the relative price of tradeables vs non tradeable goods, or as the relative price of exports vs imports. The first concept is used by Gros and Stember (1990), the second one by Fitoussi and Phelps (1990).

According to these models it could be argued that, either because of the higher demand for German products that will result from restructuring the Eastern economies, or because of the higher net demand for German exports that would follow from the transfer of purchasing power as aid to the ailing Eastern European countries, the real exchange rate of the DM, or the terms of

trade of Germany, should improve.7

This result, if empirically true, shall have important implications for the evolution of the

EC and the EMS towards a full EEMU, both in terms of process and outcome. In fact, in order to change the relative price of German products in the direction required by the argument, the EEMU should allow in the next few years either a nominal appreciation of the DM or a higher relative rate of inflation in Germany, or both. Clearly the Deutsche Bundesbank is less ready now than before to allow a higher price inflation, since, after having had to bow to political decisions during the preparation of German monetary unification, it now has to prove to the outside world that that was an inevitable and wholly exceptional historical compromise, one that will certainly not be repeated on the occasion of European monetary unification. Hence the improvement in Germany's terms of trade, if necessary, shall come about through nominal appreciation of the DM. Since this would be made difficult by moving now and fast into phase two of the Delors plan, and would definitely be excluded by accomplishing that phase and moving to the final one, the severe attitude of the Deutsche Bundesbank with respect to moving ahead with the Delors plan seems to find here, rather than in the lack of other countries' convergence, a more convincing explanation.

#### 3.3. The outcome of EEMU.

In the preceding section I have presented arguments that, based either on lack of convergence in economic policy (section 3.2.1.) or on differences in economic structures (section 3.2.2.), could help analysing the implications of developments in Eastern Europe and, more specifically, of German unification, for the choice between different time *processes* that lead to European economic integration. In so doing, also the present cooling of German attitude vis-à-vis EEMU has acquired a new and possibly clearer meaning.

In the present section I am mainly interested in the final *outcome*, as described both by market equilibrium and by the economic institutions and policies that will characterize it. Admittedly, a clear-cut separation of outcomes and processes that lead to them, is not always possible. Moreover, as alrealy pointed out above, a normative choice among different final outcomes cannot ignore the present value of the preceding stages, hence of the different processes. Yet, for classificatory purposes, I shall proceed in this section to analyzing only the final outcomes.

#### 3.3.1. The static trade model.

The first analyses of the problems raised by German unification have often utilized the theoretical framework of neoclassical theory of trade, i.e. the Heckscher-Ohlin-Samuelson model

(e.g. Fitoussi and Phelps (1990), Siebert (1990)).

A simple application of that model to the German case is to consider the relative K/L endowments of the two Germanies, and how merging them would affect equilibrium after, as compared to equilibrium before, trade. In so far as it is assumed that East Germany is relatively labour abundant (West Germany relative capital abundant), that the merged country will still be capital abundant relative to the rest of the world, and that East Germany was not previously trading on the basis of comparative advantage, the model suggests that merging the two countries will, at given relative prices, reduce the unified country's output of its export good (the capital-intensive product) and increase that of its import good (the labour-intensive product). In order to restore equilibrium, the terms of trade of the unified Germany (i.e. the price of its

exports relative to the price of its imports) should increase. This result could imply ensures in the process and the final outcome of the EEMU, and it may help explaining—together with the similar result that follows from the transfer model analyzed at the end of section 322—the current coldness of the Deutsche Bundesbank towards the Delors plan, better than the radiional German request for policy convergence to low inflation and fiscal prudence.

Other applications of the same model point out to the temporary consequences of the need to set relative prices (in East Germany or in other Eastern European countries) competitive world market prices. This may imply scrapping at least part of the need and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the need are already section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery, as already briefly discussed in section 3.2. (Fig. 8) with the plant and machinery discussed in section 3.2. (Fig. 8) with the plant a

This model can also be used to analyse the search for a new equilibrium, the maje involve not just merging the capital and labour endowments of the two Germanes—of the search going those of some East European countries with the rest of the EC-- but also moving account to the condition, with capital going east or labour west, or both. While conditions, trade (movement of products) is a perfect substitute for movement of the case in the actual German and European assume that this may not be the case in the actual German and European and labour to migrate --an inducement which has already been reduced by the factors. In so far as some inducement may remain, however, the question immaterial which of the factor movements (labour westward or capital and prevail. In the standard neoclassical trade model referred to above, and in the standard neoclassical trade model referred to above, and in the condition of the factor movements (labour westward or capital and the conditions) is indeed immaterial. Thus we must make the model of the conditions of the factor movements (labour westward or capital and the conditions) is indeed immaterial. Thus we must make the model of the conditions of the conditions of the question. It seems that a minimum conditions is a perfect to add is economic growth.

3.3.2. The growth model.

Growth is based on investment, which clearly requires saving. When the same it is less obvious that, once we consider saving, the basis for trade in products are all the comparative advantage: it is enough to have countries with different products and different tastes between present vs future consumption). This is theoretically since it allows to use even one-product models and yet describe with them could be trade. Indeed this is what has already been done whith the multiple equation and the section 3.2. That model was used to analyze the implications of German process of European integration. Here I want to refer to it again, in order to the steady states, i.e. final outcomes, independent of the process that leads to the state of the state of the process that leads to the state of the state of the process that leads to the state of the state of the process that leads to the process the process that leads to the

In the model of section 3.2. countries had the same production and saving functions, and they only differed for their K/L ratios. In reality, countries also differ for their saving propensities --as often discussed with reference to Japan or Italy, as opposed to the U.S. In the German case it is likely that, aside for a temporary adjustment of a longtime represent to spend, the saving ratio will be higher in East than in West Germany and the other EC partners, at least for a number of years during the necessary catching up period. A higher saving rate.

other things equal, makes for a higher g function, and thus a higher steady state K/L equilibrium for a united Germany than for its EC partners. The merging of the two Germanies may therefore lead to a joint steady state situation that is above the one that could previously be reached by West Germany alone. While beneficial to Germany, this could have opposite effects on the inducement to complete EC integration. On the one hand, it should enable also Germany's partners in the EC to reach in due time a higher steady state, by successfully merging with the new Germany. On the other hand, the larger distance that would separate the unified Germany's steady state from her partners' could give rise to the possible existence of points of unstable equilibrium, that would, in absence of transfers, make it no longer interesting for the new Germany to integrate with the other EC partners.

However, East Germans are not the only people that may help West Germans to move to higher equilibria of steady growth. Fig. 12 presents the total saving rations (private plus Government) in the countries or groups of countries analyzed in this paper, again for the year 1988. Now Spain has moved up the ladder, while the UK has fallen to last position. It is still true that West Germany should have a strong incentive to integrate with the EFTA countries, but now the differences with respect to all other countries or groups of them in the EC are no longer so

wide, except perhaps vis-à-vis the UK.

#### 4. Conclusions.

Rather than summarizing a paper that is already too long, I shall briefly state those that

seem to me the main conclusions of the analysis.

(i) A hypothetical enlargement of the EC eastwards and in the direction of the EFTA countries is of different interest for the existing members of the EC. Widening the Community eastward is mainly of interest to Germany and its smaller surrounding countries; enlarging it to include the EFTA countries is mainly of interest to the UK. The two interests are not opposed, and they may be complementary in surmounting possible oppositions by the other countries and by the Commission in Brussels.

(ii) However, widening the EC, and in particular its already realized enlargement to East Germany, endangers the pursuit of deepening its integration and transforming it into a truly unified market for products and factors of production. Even higher is the danger for moving

ahead with the present plans of monetary unification.

(iii) While this gives a unique opportunity to the UK for changing its traditional dilatory position into one of compromise, it has also brought to the surface --particularly after German monetary unification-- that the German position vis-à-vis European monetary unification is no longer as clear as before, at least in terms of its motivations. While Germany was traditionally in favour, provided prospective members would first reach convergence of their policies towards low inflation and fiscal restraint, it now appears to be less interested in the project, or less timid to let understand that the only interesting unification would be under the leadership of the Deutsche Bundesbank and with a currency as good as the DM, rather than under a European Central Bank, with national currencies linked by fixed exchange rates, eventually replaced by a soft ECU as the common new currency.

(iv) This change in attitude is not justifiable only by the lack of convergence: divergence has been reduced and what is left has been there for a long time. In this paper I have tried to justify the changed German attitude --or perhaps, should I say, the open expression of an attitude that has always been in the background-- on the basis of more fundamental structural differences, whose importance has suddenly and dramatically surfaced as a consequence of German unification. If my interpretation is correct, we have to wait for this unification to overcome its difficulties, before the process of converting the EC into a more integrated European Economic and Monetary Union may be resumed. In the meantime, the other European countries should better adapt themselves to the two speeds approach, and enjoy the overall advantages that will anyway derive from the enlargement of the Community eastward, and possibly also towards the EFTA countries.

#### **Footnotes**

- \* I am grateful to Casper de Vries for the useful discussions we had on the implications of his work for the problems discussed in this paper. I also benefited from a debate with Francesco Giavazzi at a forecasting meeting of Prometeia, Bologna. Giorgio Poli has helped with his usual kind assistance.
- <sup>1</sup> For the chances of such admission see "The makings of a new constellation", in The Economist, August 4 1990, pp.17-18. For a useful survey of the prospect of expanding the Community as a result of the East European events, see "A survey of the European Community", *The Economist*, July 7 1990.
- <sup>2</sup> See "Cecchini Report" (1988) and Baldwin (1989).
- <sup>3</sup> The relative positions of the various countries with respect to this debate are well presented in "Rethinking Europe's EMU" and "Not so fast, Jacques", *The Economist*, September 15 1990.
- <sup>4</sup> For the British position, as presented in June by Mr. John Major, Chancellor of the Exchequer, see *Financial Times*, June 22 1990. The "new" position by the Bundesbank has been presented in a press comuniqué in September 1990.
- <sup>5</sup> This is no new argument, as it has often reappeared in the history of European unification. It was particularly developed during the projects leading to the aborted Werner plan for monetary unification at the end of the sixties and early seventies. The two positions were at that time identified as a "monetarist" (one whereby monetary unification, by coming first, could bring with it deeper economic integration) and an "economist" (one supporting a reversed procedure: monetary unification could not succeed unless preceded by economic convergence and integration). More recently, at least in academic circles, the "monetarist" position had apparently gained ground, by being newly based on a mix of political and economic arguments, that emphasize the importance of Central Banks' reputation and the credibility of their precommittments, or the superiority of monetary rules over discretionary policies. On this, see, among others Giavazzi and Pagano (1988), and Giavazzi and Giovannini (1989).
- <sup>6</sup> For the model used by Dellas and De Vries, see Blanchard and Fischer (1989), ch. 3.
- <sup>7</sup> Actually, Gros and Steinherr, after having theoretically presented such argument, counteract on various grounds that the real exchange rate of the DM need not appreciate significantly or at all.

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Table 1. - Population, product, and export trade (in 1988)
of alternative wider European Communities relative
to the United States and Japan

	Population (in mln)	GDP (in \$bln)	Exports (in \$mln)	
EC	325	4831	427395	
NEC	341	5038	434386	
NECFTA	373	5743	503990	
NNEC	437	6265	522063	
USA	246	4818	320386	
Japan	123	2843	264943	

Notes:

EC = European Community of 12, with intra-EC trade excluded

but intra-German trade included

NEC = EC + East Germany; trade between East Germany and EC excluded

NECFTA = NEC + EFTA; intra-area trade excluded

NNEC = NECFTA + Czechoslovachia, Hungary, Poland

(trade among the four E. European countries included)

Sources: OECD data

Table 2. - Relative importance of EFTA and East European prospective members (E.Germany, Czechoslovakia, Hungary, Poland) for exports by three groups of EC members (\$mln in 1988)

	EFTA	EGe+CZ+HU+PO		
WGe+BNLDK Fr+It+Sp+REC UK	73216.32 28348.08 11607.6	9948.735	83165.06 31065.04 12591	
totals	113172	13649.1	126821.1	
Shares:	EFTA	EGe+CZ+HU+PO		
WGe+BNLDK Fr+It+Sp+REC UK	64.69 25.05	72.89 19.91 7.20		
totals	100	100		
Shares:	EFTA	EGe+CZ+HU+PO	totals	
WGe+BNLDK Fr+It+Sp+REC UK	88.04 91.25 92.19	8.75	100 100 100	
				******

Notes: BNLDK = Benelux + Denmark

REC = Rest of the EC

Fig. 1: Average price inflation consumer price index (1970-89)

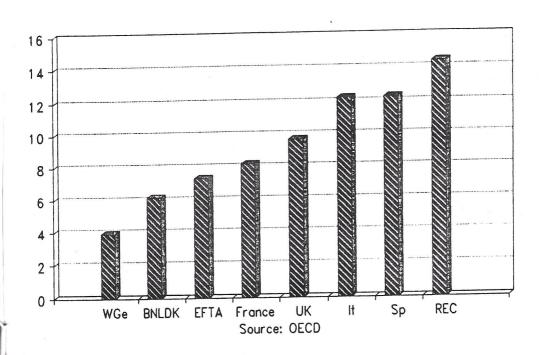


Fig. 2a: Dispersion of inflation rates EC and EFTA countries

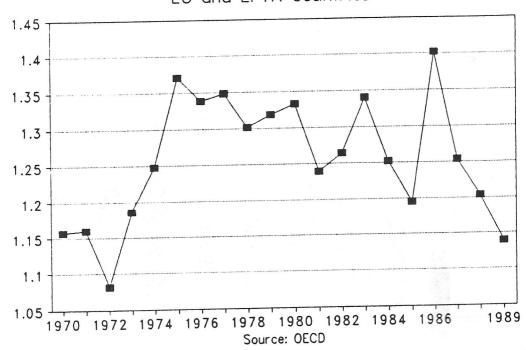


Fig. 2b: Dispersion of inflation rates

EMS countries

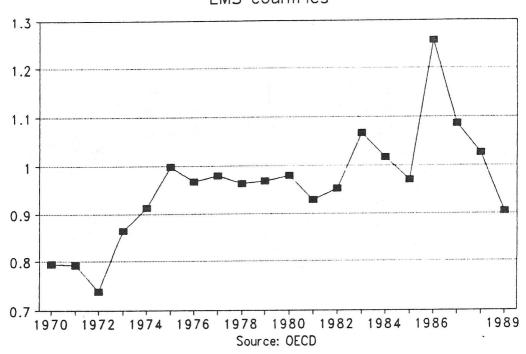


Fig. 3: Differential inflations relative to W.Germany (1970-89)

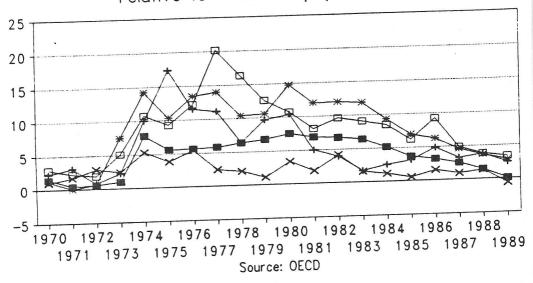


Fig.4: Govt. deficit relative to GDP (1970-89)

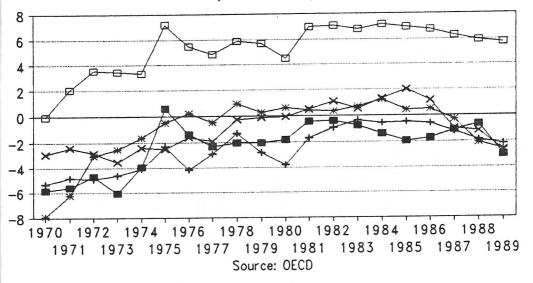


Fig. 5: PSBRs relative to GDP (1970-89)

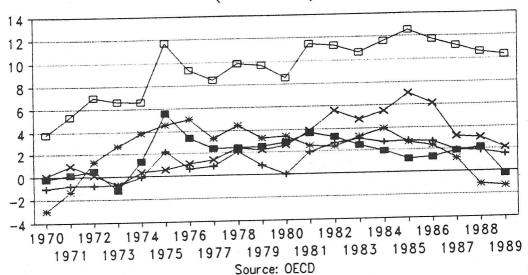


Fig.6a: Govt. debt relative to GDP (1989),

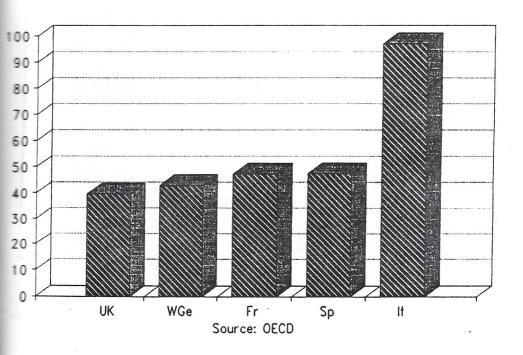
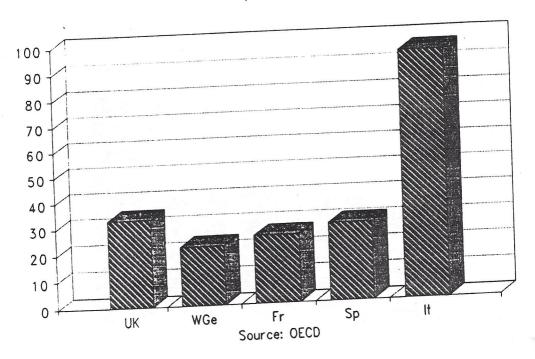


Fig.6b: Govt. net debt relative to GDP (1989)



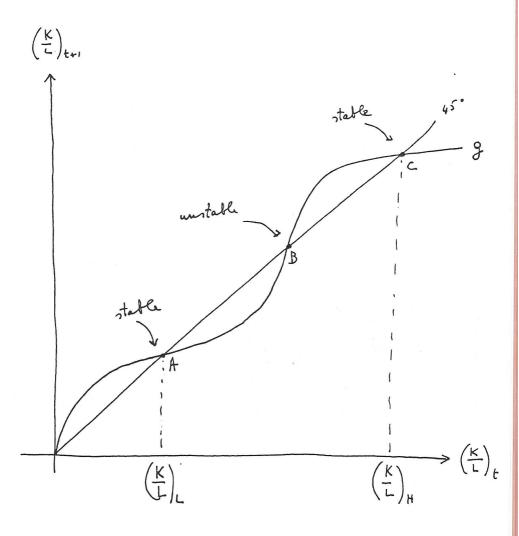


Fig. 7

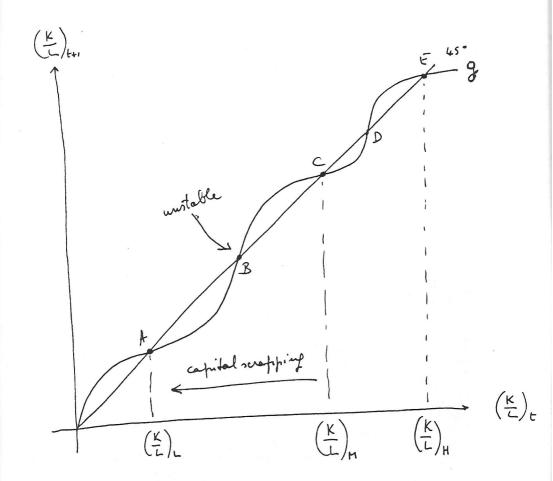


Fig. 8

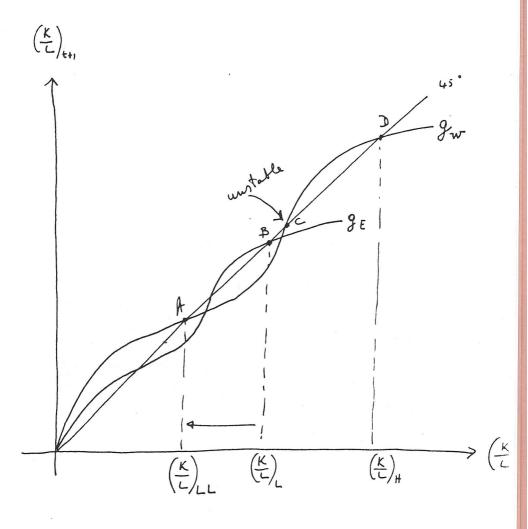
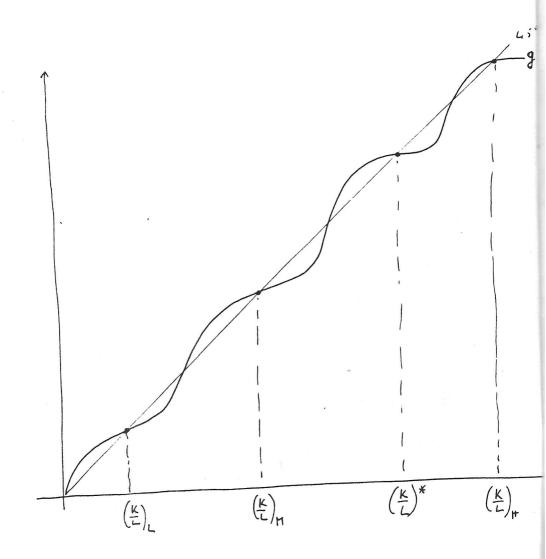


Fig. 9



F.j. 10

Fig. 11: Capital/labour ratios (1988)

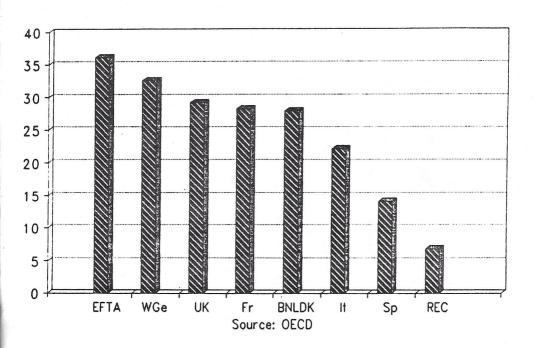


Fig. 12: Total saving relative to GDP (1988)

