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THE ECONOMIC IMPACT OF EUROPEAN INTEGRATION

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ABSTRACT

The Economic Impact of European Integration*

Economic integration, from the European Payments Union and the European Coal and Steel Community to the Common Market, the European Monetary System, the Single Market, and the euro, is one of the most visible, controversial and commented-upon aspects of Europe's development since the end of World War II. It is hard to imagine that Europe's economy would have developed the same way without it. Or is it? We see how far we can push the argument that European living standards, growth rates, and economic structure would have been little different in the absence of the institutions and processes that have culminated in today's European Union. We adopt the methodology applied by Fogel to the railroads: suspecting that the results are small, wherever possible we adopt assumptions that bias upward the estimated impact. We conclude that European incomes would have been roughly 5 per cent lower today in the absence of the EU.

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An integral part of Western Europe's post-World War II success story was its rapid integration into the world economy as well as its rapid integration with itself. The Great Depression, protectionism and the war had reduced foreign trade to the levels recorded just before World War I. In 1947-48, for instance, the volume of West European exports was barely above what it had been in 1913 (Svennilson, 1954). As for capital movements, these had virtually come to a standstill, in a world riddled with inconvertible currencies and rigid controls on foreign exchange flows. Sixty years later, the volume of exports had been multiplied by 50, free trade prevailed in both Western and Eastern Europe, the degree of openness had reached unprecedented levels everywhere, as had the extent of intra-European trade, while capital movements were almost completely free. Indeed, a significant number of countries had gone as far as doing away with their domestic monies in favour of a new common currency – the Euro.

The rising importance of foreign trade over the period is documented in Figure 1 which shows the share of exports in GDP for Western Europe as a whole in constant prices. The series, after dipping in the inter-war years, rises very sharply after 1950 to levels that, already by 1973, had overtaken those achieved during the last phase of globalization at the beginning of the 20th Century. The rise in the trade share is even more spectacular in the last few decades, at least when expressed in constant prices. In current prices, there is also some increase, but this is more modest in view of two longer-run trends working in the opposite direction: first, the rising importance of service activities in GDP, at the expense of the much more trade intensive manufacturing (and agricultural) sectors; second, the longer-run tendency for tradeable prices to fall relative to those of non tradeables, in view of the faster productivity growth usually recorded in goods production.

Not only did trade shares grow rapidly. They also reached levels that are very high by international standards. Neither Japan nor the United States, for instance, experienced increases that were at all comparable, and neither are as open today as are the major West European countries. And while Europe's share of world output (measured at purchasing power parity, or ppp) declined quite rapidly through the period, the same was not true for Europe's share of world trade (Fig.2). This had fallen from almost 60 per cent in 1870 to barely one-third in 1950, but it then rose again in the 1950s and 1960s, fluctuated in the 1970s and 1980s and only began gently declining since the early 1990s, as a number of erstwhile relatively closed and now rapidly growing emerging economies entered into world markets. One important reason lying behind this resilience was the much greater share taken by intra-European exchanges (Table 1). Of the world's three major trading areas, Europe is today by far more integrated than are either the Americas or the Asia-Pacific zone.

The same may well be true of capital movements (though the frequent absence of data on country-by-country flows makes it more difficult to reach firm conclusions in this area). As mentioned above, the period began with severe restrictions on capital transactions which were relaxed only very slowly between the 1950s and the 1970s. Starting with the UK, Europe saw a rapid jettisoning of controls and a move towards free capital movements in the 1980s, a move that was given further powerful boosts by the EU's 1992 Single Market Programme and by the creation of the Euro. Probably the best indirect indicator of this gradual opening is provided by so-called Feldstein-Horioka tests

(Feldstein and Horioka, 1980). These look at the simple relationship between gross domestic saving and investment rates. A near perfect correlation (as would be expected in a closed economy) is at least suggestive of the absence of free capital movements; lack of correlation, conversely, would show that countries can supplement their domestic savings by borrowing abroad, or, alternatively, are able to freely lend their excess savings to the rest of the world.

Table 2 presents some tests of this relationship over half a century for 14 West European countries. The lower the figure shown (i.e., the lower the coefficient linking gross investment to gross savings in a simple linear regression), the closer Western Europe would be to perfect capital mobility. The evidence, as it stands, suggests that either this is still far from being the case and/or that portfolio preferences have a strong bias in favour of domestic assets. It also points, however, to a gradual and fairly steady move towards greater mobility from the 1950s to the mid-2000s.

The reasons for these various trends are numerous. Falls in transport costs and improvements in communication techniques are likely to have helped raising trade and encouraging capital mobility (though transport costs, of course, impinge less on intra-European trade than they do on, say, transatlantic exchanges). More importantly, economic growth must have strongly contributed to greater opening and integration. In rapidly growing economies, demand spills over into imports, while productivity gains create new and cheaper products and hence potential exports; also, as growth proceeds, financial systems become more sophisticated and the distorting influence of controls more costly. Equally, of course, rapid involvement in international exchanges adds to growth by raising demand, stimulating competition, promoting technological spillovers and attracting foreign direct investment.

Yet, most observers of post-war Europe would add a further institutional explanation for the Continent's successful opening and integration – the process of economic and political unification. The abolition of tariffs on intra-European trade, the dismantling of non-tariff barriers, the abolition of capital controls, etc., must surely have been one further important, indeed crucial, contributor to the process. From the timid beginnings of the Common Market to the enlargements to the East of 2004 and 2007, Europe has moved from a club of six countries to a union of 27 (Table 3). Indeed, it might well grow to 30 or more over the next decade as several Balkan economies also join the project. According to conventional wisdom, had this process not occurred, the integration story that has just been briefly sketched out could never have happened. And in the absence of that integration story, surely, the growth that was recorded would also have been a good deal more modest. Yet, is this conventional wisdom necessarily justified?

1. Approach

The view that regional integration was one of the leading processes shaping the development of the European economy since World War II is very common. Contributors to the literature generally take one of two approaches to identifying its effects. Exponents of the narrative approach point to influential individuals (Jean Monnet, Robert Schuman, Jacques Delors), key events (the decision to form the European Coal and Steel Community or ECSC, sign the Treaty of Rome, establish the Single Market) and underlying forces (the preference of export and banking interests for trade and financial liberalization, the acquiescence and even support of the United States for European integration), implying that things would have turned out quite differently in their absence. Those taking a quantitative approach employ data for a cross section of countries, regressing measures of economic performance – the growth of, say, output, exports, or employment – on their standard determinants, augmented by measures of a country's participation in the European Union. Here the assumption is that the impact of European integration on the economy can be captured by setting the EU membership variable to zero and in effect comparing the statistical performance of member states and other countries, controlling for their other observable characteristics.

Both approaches have limitations. In the narrative approach the conclusion that things would have turned out differently in the absence of key individuals or events typically remains implicit. And how exactly they would have differed is unspecified. Things might have indeed been different had, for example, Jean Monnet not been a committed Europeanist, an able diplomat and first head of the ECSC. But these observations beg the question of how precisely the actual and hypothetical would have diverged. Absent Monnet, would the ECSC never have been created, and would Europe have been unable to sustain its recovery from World War II? Or would other mechanisms have been devised for locking Germany into Europe, freeing her heavy industries of production ceilings, and reactivating Europe's principal source of capital goods? Might not alternative avenues have led as successfully to the Treaty of Rome? And, if not, how then would Europe have developed? Would European countries have ended up trading less with one another and more with the United States? Would the Common Agricultural

Policy (CAP) have failed to develop, and if so would the price supports and import restrictions imposed at the national level instead have been more or less generous?

Similarly, in the quantitative approach the belief that the impact of European integration on, say, exports can be captured by setting the EU membership variable to zero rests on the assumption that the degree of integration is exogenous and everything else is equal. But, in reality, exports and European integration were simultaneously determined as part of a larger historical system. Not only did the liberalizing influence of the EU encourage intra-European exports, but the growth of intra-European exports lent further stimulus to the deepening and development of the EU. In this setting, estimating the effect of an endogenous variable like EU membership is not simple. Moreover, as in any simultaneous system with positive feedbacks, one can imagine the existence of system-level increasing returns and multiple equilibria, one at a high level of exports and integration, another at a low level of exports and integration. By ignoring such complications, most quantitative studies take a very partial-equilibrium approach to estimating the effects of European integration.

In this paper we take another approach that acknowledges the limitations of these earlier literatures. Rather than imagining that one can analyze the impact of European integration by imagining that a particular integrationist initiative did not occur but that everything else of substance remained unchanged, we emphasize the importance of fully specifying the counterfactual. We ask for example: if the European Coal and Steel Community had not been created, would European countries have found other ways of restarting production and trade in the products of their iron and steel industries? If the Common Market had not been established, would the major Western European economies have found other ways of commensurately increasing their intra trade? If the European Monetary System had not been created, would they have found other ways of stabilizing their exchange rates? Rather than simply imagining the non-existence of a specific initiative and assuming that nothing else of substance would have changed, in other words, we explicitly consider how the entire system would have adapted in its absence. In this sense we follow economic historians like Robert Fogel (1964) in attempting to fully specify the counterfactual.

We also seek to counter the triumphalist bias in previous accounts of the European integration process (accounts written by individuals "present at the creation" in particular) by seeing how far we can push the hypothesis that little would have differed economically in the absence of the European Union. It is our hypothesis that the EU *did* matter for the development of the European economy and the rise in European living standards. By seeing how far we can push the argument that it didn't – and adopting assumptions that work to minimize its effects – we are biasing our procedures against our preferred conclusions. Here again we are drawing on Fogel's approach to counterfactual analysis.[1]

Section 2 outlines in more detail our analytical framework. Section 3 then turns to the counterfactual exercises themselves. In each case we imagine that a pivotal event did not occur, or a particular factor that operated to encourage European integration had operated less powerfully or not at all. We then envisage how the integration process and

[1] Recall that Fogel (1964) wished to argue that the impact of the railways on American living standards was small. He could thus adopt any assumption of convenience, no matter how unrealistic, so long as this worked to exaggerate the change in American living standards that would have taken place in the absence of the railways. In our case, we wish to argue that the impact of the European Union on European living standards was nonnegligible. Thus, we want to see how far we can push the argument that, in the absence of the EU, the difference in European living standards would have been disappearingly small, either because the economic impact of the EU was negligible or because, in its absence, Europeans would have found other ways to reach the same ends.

the European economy would have developed in its absence. The last section, in concluding, reviews what we have learned.

2. Analytic Considerations

A first way of framing counterfactuals is in terms of the determinants of economic growth. In early neoclassical models like that of Solow (1956) – developed at the same time the European Economic Community (EEC) was established - the level of income per capita depends on the aggregate savings rate (domestic savings determining domestic investment in this period of low capital mobility), the rate of population growth and the rate of technical progress. In this restrictive framework, the key variable through which European integration affected steady state levels of income (and growth for a transitional period) would have been by encouraging savings. By fostering peaceful cooperation between France and Germany, it could have promoted a sense of security that resulted in higher savings and investment rates. By facilitating the speedier relaxation of wartime controls, it could have encouraged firms to reallocate resources to more profitable activities and stimulated additional corporate saving. These mechanisms, however, most plausibly operated in the 1950s; it is more difficult to see how they could have been of first-order importance in later years.

One possible exception to this last statement is the formulation in which savings, investment and profitability depend on wage pressure (Bruno and Sachs, 1985; Armstrong *et al*., 1991) and wage pressure is affected by European integration. One might imagine that the more competitive environment created by freer cross-border trade raised the likelihood that jobs would be lost as a result of excessive wage claims, encouraging wage moderation. The problem for this linkage is that the period famous for wage moderation was one when European integration was in its infancy and import competition was still limited. The period when integration-linked competition intensified, with the completion of the Customs Union, was also the period when wage moderation was notoriously lacking. Similarly, in recent years, and despite monetary union, there have been very different nominal and real wage trends in different euro-area countries – contrast Italy and Portugal with Germany, for example – suggesting that wages are more heavily determined by national factors than Europe-wide processes.

In the Solow formulation, the rate of technical progress is exogenous and therefore unaffected by factors like European integration. In subsequent growth models, technological change was endogenized and linked to, *inter alia*, the rate of growth of exports. Models of export-led growth (e.g., Myrdal, 1970; Little *et al*., 1970) suggest that learning by doing is faster in export-linked activities; they thus suggest that Europe's creation of a customs union and then a Single Market, by speeding the removal of cross-border barriers to trade, could have stimulated learning, led to technological spillovers and increased the rate of growth of productivity. Insofar as higher productivity meant higher profits, there also would have been an incentive for additional capital formation, leading to faster growth and higher incomes still. And, to the extent that technological progress is embodied in capital equipment, the result could have been an even faster rate of growth. In this class of endogenous growth models, a shock like the creation of the Single Market can shift the economy to an entirely new growth trajectory in which not just the level of income and output but the growth rate itself is permanently higher (Baldwin, 1989). This is in contrast to Solow-like models in which shocks have a one-time impact on the capital/labour ratio and output per capita but not on the longer-run growth rate.

The models considered so far tend to assume that markets are perfectly competitive. If this assumption is relaxed, economic integration can generate further effects. One channel of transmission would be through economies of scale, fostered by the existence of larger markets. Another would build on the idea of X-efficiency (Leibenstein, 1966), and suggest that Community policies, by intensifying cross-border competition, could have stimulated the development and adoption of new techniques and modes of corporate organization by firms now having to innovate or die. Further effects could come through improvements in institutions. "Good" institutions foster development. In an integrated Europe, demonstration effects from countries with "superior" institutions might have encouraged the adoption by other governments of better practices and policies. Similarly, Brussels might have been able to encourage reforms stimulating more pro-competitive behaviour or more market-friendly policies than would otherwise have occurred.

Thus, alternative models of economic growth point to potential impacts on saving, investment, profitability, exports, the determinants of technical change and corporate and institutional reform as channels through which European integration could have had an impact (possibly a substantial impact) on the rate of economic growth. The changing focus of these models suggests that the relative importance of different channels may have also changed over time, with the tendency for the European Community (EC) to enhance security and boost savings having been more important toward the beginning of the period and its efforts to enhance competition and encourage measures boosting efficiency being more important more recently. These models also suggest that integration mattered most for outcomes (in other words, that the counterfactual would have been very different) insofar as it operated through channels emphasized by models of economic growth with endogenous technical change or in models stressing the role of trade in increasing competition.

Following a long literature, the preceding discussion takes policies as exogenous and asks: how would economic outcomes have differed in the absence of the policies actually observed? In the same way that new growth models endogenize technical change, new political-economy models endogenize policies. One tradition – the so-called adding-machine model – takes policies as a function of the self-interest of sectors or factors of production (Moravcsik, 1998; Frieden, 2006). The EEC developed the CAP as one of its first accomplishments because agriculture was still an important source of employment and production in the 1950s and 1960s. Or it adopted a Social Charter enshrining the rights of workers because workers were numerous and well organized through Social Democratic parties and trade union organizations. Or it eventually mandated free capital mobility because financial capital became increasingly influential. The common element in these applications is that policies flow from the sectoral composition of activity, and the sectoral composition of activity flows from factor proportions. Thus, unless the policies of European integration have a first-order impact on, say, the capital/labour ratio, they cannot have a first-order impact on policies.

Again, these observations point to the question of what is the relevant model of growth and factor accumulation: in Solow-type models, there is a tendency for factor proportions to settle down not far from the initial equilibrium following a shock. In terms of the relevant counterfactual, if a particular set of policies had not been adopted then it is plausible to think that self-interested lobbying by the same factors that had, in reality, helped to bring about those policies would have led governments to devise substitutes in a counterfactual world. In contrast, in new growth models a counterfactual change in policy can lead to a very different capital/labour ratio and a very different sectoral composition of production. One can then imagine that the lobbying and the policies that would result could be very different.

The other tradition in the literature on European integration assumes that policy outcomes are shaped by particular individuals with agenda-setting powers. Policies are endogenous with respect to their actions. Thus, the literature emphasizing the influence of, *inter alia*, Schumann, Monnet, De Gaulle and Delors posits that policies would have been very different in their absence. If this is one's approach, then one needs merely to trace out the implications of counterfactual policies (presumably, the *status quo ante*) in one's preferred growth model. Alternatively, scholars writing in the tradition of Haas (1958) suggest that early policy choices and institutional developments importantly shaped subsequent policy options. Policy itself was path dependent, in other words. If Schumann and Monnet had not been there to create a European bureaucracy to regulate the coal and steel industries, there would not have been a Treaty of Rome. If Delors had not been there to help create the Single Market, there would not have been a single currency, since there were positive spillovers, both economic and political, from economic to monetary integration.

Whichever of these approaches is adopted, imagining the counterfactual is no easy task. Depending on the growth model one regards as relevant, counterfactual policies might have had either very large or very small effects on economic growth. And depending on the model of policy one regards as pertinent, one can imagine the counterfactual policies might have been very different or differed little at all from those actually observed. The following section will attempt to flesh out some of these counterfactuals.

3. Some Counterfactuals

Here we apply the counterfactual method to different stages in the European integration process, starting with the European Payments Union (EPU) and the European Coal and Steel Community (ECSC), proceeding through the Common Market, the European Monetary System (EMS) and the 1992 Single Market Project, and concluding with European Monetary Union (EMU).

The European Payments Union. The European Payments Union of 1950 was the first significant step in European integration after World War II. Exchange control had been used for regulating the balance of payments during the war and in the second half of the 1940s. Now eliminating exchange control and making currencies convertible on current account (that is, allowing them to be freely bought and sold for trade-related purposes) was a precondition for reconstructing intra-European trade and creating a common market.

But in seeking to restore current account convertibility, European countries faced a coordination problem. Imagine that one country had unilaterally freed up imports and exports by making its currency freely available for such transactions. Residents would have indulged their pent-up demands for imported goods, but exporters would still have been unable to sell their products abroad (since other European countries had not similarly relaxed their exchange restrictions). The danger of a worsening of the balance of payments thus discouraged governments from liberalizing unilaterally. It prevented anyone from moving first.

The EPU solved this problem by committing European governments to coordinate this transition. The participating countries – essentially, all recipients of U.S. Marshall Plan aid – agreed to adopt a Code of Liberalization committing them to jointly phase out exchange controls and other discriminatory trade measures over a period of years. The Organisation for European Economic Cooperation, or OEEC (what eventually evolved into today's OECD), was chosen to administer that code. The U.S. contributed $500 million through the Marshall Plan to provide adjustment assistance to countries that experienced temporary balance-of-payments problems in the course of liberalizing, such as Germany in 1951. An EPU Managing Board composed of independent financial experts monitored the compliance of governments with their commitments and to administer that emergency assistance.

Full current account convertibility was gradually restored over the course of the 1950s. Meanwhile, intra-European trade expanded robustly from roughly $10 billion to $23 billion. The counterfactual is that, in the absence of the EPU, trade liberalization would have lagged. European exports would have grown more slowly. Economic expansion and adjustment would have suffered. Economic performance would have been less satisfactory.

It is hard to dispute the importance of trade in the golden age of European economic growth (1950-1975). Without the ability to export, it would have been impossible for countries to restructure along lines of comparative advantage – that is, to specialize in doing what they could do best. Learning-by-doing, which was heavily export-linked, would have been slower.[2] Productivity growth being slower, investment would have been less attractive, and rates of capital formation would have been lower. And a more sluggishly growing European economy would have meant less enthusiasm for other regional initiatives.

But it is possible to dispute the assumption that trade would have stagnated in the absence of the EPU. If the advantages of reconstructing Europe's trade were so strong, then other means might have been found to this end. The obvious alternative was the International Monetary Fund (IMF). The IMF's Articles of Agreement similarly obliged countries to restore current account convertibility within five years of the Fund's coming into operation. As events transpired, the IMF had limited influence over the course of events in the late 1940s and early 1950s. The U.S., which had adopted the Marshall Plan in 1948, essentially prohibited the recipients of its Marshall aid from also borrowing from the IMF, which would have constituted double dipping and undermined American conditionality. Indeed, the EPU can be thought of as the Marshall Plan administrators' targeted response to this very ban (recall that $500 million of Marshall Plan funds were used to capitalize the EPU.) With no EPU – which in the aforementioned sense implies no Marshall Plan – the ban on borrowing from the IMF need not have followed.[3] Absent adjustment assistance from the EPU, there would have been more adjustment assistance from the IMF. Liberalization by different European countries would not have been

[2] These points are developed in detail in Eichengreen (1996).
[3] This additional counterfactual is beyond the scope of our paper, but it is addressed in DeLong and Eichengreen (1993).

coordinated as closely, since an IMF-led process would have been less Europe-centered.[4] Different European countries might have liberalized at different times. If, as a result, they had not been able to expand their trade with one another, at least as quickly, they would have still been able to trade with the United States. This form of trade would presumably have grown more quickly.

Thus, the relevant counterfactual is not no EPU and all other institutional arrangements unchanged. Rather, it is no EPU and an expanded role for the IMF in pressing for current account convertibility and providing emergency financing to countries experiencing difficulty in attempting to carry out its instructions. It is somewhat faster expansion of Europe's trade with the U.S., offsetting in part the somewhat slower expansion of intra-European trade. European countries would still have been able to raise their exports. They would still have been able to restructure along lines of comparative advantage. It is not clear that learning effects and rates of capital formation would have been all that different.

The European Coal and Steel Community. The heavy industry community centered on France and Germany was the next significant step in European integration. As Gillingham (1995, p.151) put it, the ECSC was based on a new idea: supranationality. Membership required transferring sovereign powers to a new European authority. A working paper produced under the direction of Monnet provided the basis for the conference convened in Paris in June 1950 with the task of establishing a new High Authority. Monnet's blueprint sought to empower this body to promote competition, steer

[4] That said, it would still have been Europe centered to a considerable extent. The IMF had a European managing director and European countries had a fully a third of the seats on the Fund's executive board.

investment, create a single market, and eliminate all subsidies, quantitative restrictions, and cartel-like restraints on trade.

Imagine, however, that Jean Monnet had not come up with this idea and that the French foreign minister Robert Schuman had not developed it further. How would the European economy have differed as a result?

In terms of the pricing, production and profitability of coal and steel and the investment in productive capacity and technology that flowed from them, little would have been different. Following the Paris conference at which Monnet's ideas were presented, governments moved quickly to avoid having to cede their control of taxes, subsidies and tariffs affecting coal and steel products to the High Authority responsible for creating a single market. Contrary to Monnet's aspirations, the ECSC did not create a single market in coal and steel. In coal, subsidies and price controls at the national level remained pervasive, national governments regarding subsidized energy as essential for social stability (fuel costs figuring importantly in household budgets) and for their economic development plans; the High Authority could do nothing about it. In steel, tariffs were harmonized rather than eliminated; European markets continued to be segmented by residual restraints on intra-European trade. A concrete indication of the failure of the architects of the ECSC to create a common market in steel among the Six was that German exports to the members of the so-called common market grew less quickly than the country's exports to other European countries. This change in trade patterns was precisely the opposite of what one would have expected if the coal and steel community had had strong trade-creating effects. As a result, the ECSC did little if anything to stimulate technological and organizational change.[5]

Another aspiration of the community's architects was to promote competition by breaking up large producers and pre-World War II cartels. But it is hard to sustain the argument that Europe's coal and steel industries would have been less competitive in the absence of the ECSC. The deconcentration of German heavy industry never occurred, since U.S. officials recognized that a radical reorganization of German ownership and production was incompatible with their desire for an immediate increase in production in response to the outbreak of the Korean War. As for collusion, a new organization to replace the old German cartel of coal producers was established as soon as the so-called common market in coal was created. The International Steel Export Cartel was then formed in Brussels in 1963 to regulate prices both in Europe and third markets, and began by setting price minimums for some 15 percent of total community production. The evidence thus suggests that the ECSC had little ability to restrain the recreation of cartels along prewar lines. It is hard to imagine that cartelization and concentration would have been significantly greater in its absence.

Might there be subtler reasons why prices, production and profits – and therefore the development of the European economy – would have differed under the counterfactual? Authors like Gillingham (1995), Berger and Ritschl (1995), and Eichengreen (1996) have argued that, without the ECSC, France and the other victorious powers would not have acquiesced to the removal of ceilings on German industrial production. As Gillingham (1995, p.152) puts it: "The great achievement of the

[5] Gillingham (2003), p.27.

ECSC…was to have made the revival of Germany acceptable to its former victims…" It created at least the myth if not the reality that the industries on which the country's military prowess hinged had been placed under supranational control. In its absence, the conclusion follows, ceilings on German steel production would have been maintained in order to make France and the other Western European countries feel secure.[6] But with the maintenance of such ceilings, a key precondition for European economic growth would have been missing. The German machine-building industry that was critical to the recovery of not just Germany but also other Western European economies that relied on German capital goods would have suffered as a result.[7] And the slower economic growth in this counterfactual scenario could have resulted in other serious economic and social consequences, for example increasing labour militancy, as labour struggled for a larger share of a more slowly growing pie, and more support for left-wing governments, both of which could have depressed the high investment rates that were one of the key economic motors of the so-called golden age of postwar growth.[8]

But this pessimistic counterfactual assumes that, in the absence of the ECSC, another mechanism could not have been found to reconcile the economic and political advantages of freeing German heavy industry from production ceilings with France's desire for security. Insofar as the U.S. saw higher levels of European industrial

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[6] An alternative formulation is that in the absence of the ECSC a revived German steel industry would have led to the quick remilitarization of that country and the rapid renewal of military conflict. We regard this counterfactual as implausible – not just France and Germany but also the U.S. were prepared to go to great lengths to prevent the outbreak of another war.

[7] This scenario is most plausible for the first half of the 1950s, when the steel producing capacity of the Ruhr provided essential inputs into German machinery production. By the second half of the decade, additional capacity had been added in Europe's coastal regions and elsewhere, making Ruhr capacity less essential. From this point the argument would have to be that without high employment and growth in the Ruhr, the rate of growth of the German economy as a whole would have been less, dragging down aggregate demand and growth rates Europe wide.

[8] These assumptions might seem extreme. But here is an example of how we adopt assumptions with the effect of accentuating the difference between the actual and counterfactual in order to reinforce our point.

production, and thus the elimination of restraints on German heavy industry, as critical to geopolitical stability, it is likely that America and its European allies would have found another solution to this problem. For example, there might have been more support in both the U.S. and France for putting German troops under some sort of European command. Monnet himself drafted a plan for a joint European army following the outbreak of the Korean War. One can imagine that the French would have dropped their opposition to a European Defense Community in the absence of the ECSC and that this would have produced much the same result.

Alternatively, one can imagine that the U.S. would have guaranteed French security in the absence of the ECSC by maintaining more troops in Germany. NATO had already been established not just to provide security against the Red Army but to tie the hands of "would-be mischief-makers" within Western Europe itself.[9] A related possibility is that the French would have demanded and the U.S. would have agreed to delay adoption of the German state treaty, which terminated the operations of the Allied High Commission, beyond the actual date of May 1955.

The other important effect ascribed to the ECSC is that it paved the way for the Treaty of Rome. Without the High Authority, the Council of Ministers, the Common Assembly and the High Court of the ECSC, it is said, it is hard to imagine that as part of the Treaty of Rome the same six countries would have envisaged the creation of a Commission, a Council, a Parliament and a Court of Justice. In the counterfactual world where there was no ECSC, in other words, there very well might have been no Treaty of Rome in 1957. Of course, answering the question of how much difference this would

[9] Gillingham (2003), p.23.

have made for the development of the European economy requires considering another counterfactual.

The Common Market. Europe's great achievement following the Treaty of Rome was to complete its Common Market which entailed eliminating tariff barriers to intra-Community trade. However, quantitative restrictions were still used to limit trade in sensitive sectors (e.g., agricultural products produced by powerful farm lobbies, or selected industrial goods whose domestic production was seen as essential to national security). Barriers behind the border (product standards and regulations) were also maintained initially.

Despite such lingering restrictions, intra-European trade saw an impressive expansion. The share of the total exports of the Six destined for their partners in the Common Market rose from 35 percent in 1960 to 49 percent in 1970. The problem with ascribing this to the Common Market is that Europe's economies were expanding robustly throughout the 1960s – growth Europe-wide was even faster than in the 1950s – and not merely because the members of the EC enjoyed increased freedom of trade. Given income elasticities of demands for imports and exports of more than unity and the tendency of countries to trade disproportionately with other countries in their neighborhood, it is not implausible to think that the main effect ran from higher incomes to greater trade, and greater intra-European trade in particular, rather than from the creation of the Common Market to greater trade and from there to higher incomes.

The conclusion of the great majority of the studies which have tried to separate the various influences is, however, that the customs union did make a difference and that this difference was welfare enhancing since trade creation was significantly larger than trade diversion, particularly in the early years of integration. For example, the estimates of Bayoumi and Eichengreen (1997) imply that trade among the Six in 1953-73 grew 3 percent per annum faster than can be explained by their other economic characteristics and the behaviour of other countries. As a result, growth in the Six might have been boosted by one third of a percentage point per annum, resulting in a 1969 GDP level some 4 percentage points higher than otherwise (Eichengreen, 2007). Indeed, applying the results of Frankel and Romer (1999) roughly doubles the size of this figure (*ibid*.). Alternative estimates have attempted to quantify the increased scope for economies of scale. Owen (1983), extrapolating from his detailed microeconomic work on three sectors (cars, trucks and white goods), puts the total GDP gain of the customs union (including trade creation effects) at 3 to 6 percentage points in 1980.

These and other not dissimilar estimates are clearly tentative and involve heroic assumptions. They do, nonetheless, suggest significant gains to which could also be added further, if small, favourable effects coming from increased foreign direct investment attracted by the large size of the market, and improved terms of trade (this last gain, of course, would have come at the expense of other countries) (Petith, 1977). As a very rough guess, it could thus be argued that the customs union may have boosted the GDP of the original six members by, say, 5 percent by the mid-1970s. Against this should be set the welfare losses arising from the CAP. These were almost certainly substantial for the United Kingdom, once it entered the EEC, but are unlikely to have been very significant for the original six (as indirectly suggested by the very small amount of trade diversion that seems to have occurred, according to most estimates, between 1958 and 1973).

Not all of these gains and losses can, however, be attributed to the Common Market since, in its absence, the participating countries might have found other ways of satisfying their appetite for more product variety and hence greater trade, and would probably have gone on protecting their farmers. But while it was relatively easy to argue that what the ECSC accomplished would in all likelihood have occurred even in its absence, and that, similarly (given the importance of agriculture at the time) a fair amount of protection in this area would have materialized irrespective of the CAP, the same is probably less true for the customs union. Though pressures for liberalizing trade had been a constant since the war and would have continued in the 1960s under the push of the United States, there was, nonetheless, strong opposition in several countries as scarce factors and/or weak sectors feared for their incomes and jobs.[10] In Germany and Italy, the politicians overcame this opposition by appealing to the need for European integration.[11] France, which had deep misgivings about fully freeing trade in industrial goods (Bonin, 1987), did so only because the Treaty of Rome allowed it to achieve several other more political aims (Milward, 1992). And while it is true that the Kennedy Round of trade negotiations would, in all likelihood, have succeeded in lowering tariffs substantially, it can be argued that having a single large negotiator facing the United States instead of several smaller countries eased the process (Davenport, 1982). Sapir's (1992, p.1500) judgment that "the process of EC integration was a catalyst in the reduction of Europe's external protection" seems appropriate. Similarly, while some scale

[10] In the event, of course, the unforeseen rapid growth of intra-industry trade greatly mitigated any such potential costs.

[11] Interestingly, the main opposition to the customs union in Germany came not from protectionist but from liberal interests. Erhard was against any form of trade discrimination and German industry was in favour of free access to the world market (Milward, 1992). In Italy, on the other hand, industry feared that, deprived of protection, it would be decimated by German competition (Corbino 1964; Sylos-Labini, 1970).

economies in the durable goods sector would surely have been reaped even in the absence of the customs union, the rapid growth of trade integration must have helped. All these are reasons for thinking that the level of output in a counterfactual world where the Common Market did not exist would almost certainly have been somewhat lower than the one that was recorded. A very rough guess could put the figure at perhaps 3 to 4 per cent of GDP.

It is true that this effect was of only a transitory nature, at least according to the standard neoclassical model of economic growth described in Section 1 above. More specialization along lines of comparative advantage, and even greater X-efficiency, may mean more profitability and more investment, but this will sustain a higher growth rate only temporarily, along the transition path. In the new steady state the capital/labour ratio settles down at a higher level, and the expansion of income per capita returns to its previous lower rate. Only if one is prepared to argue that trade and economic liberalization have a permanent impact on the rate of total factor productivity growth can one conclude that the growth effects would not peter out. But then, few commentators have suggested that European integration could impart a permanent growth bonus. As it is, it provided a welcome, if perhaps only limited, addition to living standards that were already growing very rapidly.

A final argument about the effects of the Common Market is that, in its absence, there would have been less pressure to stabilize intra-European exchange rates following the breakdown of the Bretton Woods System. Had intra-European trade been lower, policy makers would have worried less about the tendency for exchange rate variability to depress intra-European imports and exports. Hence there would have been less pressure to create the European Monetary System (EMS). The limitation of this argument is that empirical studies have failed to find a first-order negative impact of exchange rate variability on the volume of intra-European or world trade. Alternatively, and more plausibly, had European countries not removed barriers to cross-border transactions in agricultural goods, it would not have been necessary to harmonize agricultural support prices and hence to stabilize exchange rates between the cooperating countries in order to avoid creating incentives for cross-border arbitrage. The problem here is whether to ascribe Europe's appetite for exchange rate stability to EEC policies like the CAP or to memories of the economically and politically disruptive effects of haphazard exchange rate movements in the 1930s – memories that would have persisted and presumably influenced policy even in the absence of the EEC. And even if one accepts the argument that no Common Market would have meant no EMS, answering the question of how much difference this would have made for the development of the European economy once again requires considering another counterfactual.

The European Monetary System. The next important step in the road to European integration was the late 1979 attempt to stabilize exchange rates via the EMS. The system had a perceptible impact only until August 1993, when the permitted fluctuation bands for each currency were moved from 2½ to 15 percent. Up until then, and with the exception of the September 1992 episode when the Italian lira and the British pound left the Exchange Rate Mechanism, the EMS was broadly successful in achieving its main aim: exchange rate stabilization. It is true that currency realignments were numerous in the years to 1987, but academic studies have shown that, overall, member countries' exchange rates fluctuated significantly less than the currencies of other developed economies which did not at the time benefit from similar arrangements (Artis and Taylor, 1994; Hu *et al*., 2004).

The impact on longer-run growth is likely, however, to have been negligible. For one thing, as already mentioned, the available evidence suggests that exchange rate variability reduces trade only very modestly, if at all. Hence, any gain from the greater stability that was achieved would have been small. In addition, it could plausibly be argued that such gains could well have been more than offset by the, presumably, higher interest rate volatility that pegging the exchange rate should have caused. Interestingly, however, one of the studies quoted above, which established that exchange rate fluctuations were dampened, also found that, contrary to expectations, interest rate variability was no higher than it was, at the same time, in the control group of other non-EMS industrialized countries (Artis and Taylor, 1994). One plausible explanation for this apparent paradox lies in the likelihood that financial market participants saw the system as reasonably credible and did not, therefore, engage in speculative portfolio shifts that would have elicited interest rate responses on the part of the authorities designed to preserve existing parities.

The EMS's second main contribution was to reduce inflation in countries such as France and Italy. It is doubtful, however, that this would have had an important effect on longer-run growth. Both countries would almost certainly have reduced their rates of price increase, if over a longer time horizon, even in the absence of the EMS.[12] Any EMS-specific gain could only have come if the "sacrifice ratio" (the amount of extra unemployment needed to squeeze out any reduction in inflation) had been lowered thanks

[12] Indeed, in the case of France, it has been argued that the relentless pursuit of a "franc fort" policy within the EMS may well have kept unemployment well above desirable levels (Blanchard and Muet, 1993).

to credibility effects. Devolving *de facto* monetary policy control from the national central banks to the Bundesbank could, it was argued at the time, lower the inflationary expectations of French and Italian workers and, thus, speed up price deflation. Yet, the available research shows that, contrary to what seems to have happened on financial markets, no such credibility bonuses were forthcoming – inflation declined because unemployment rose, not because wage and price setters were convinced that a "regime change" had occurred (Egebo and Englander, 1992). Financial markets may well have seen the EMS as a credible system; labour and product markets seem to have been much more skeptical.[13]

A final EMS contribution was, of course, the one of paving the way for eventual monetary union. While earlier attempts such as the Werner plan of 1970 were shelved in the aftermath of the Bretton Woods collapse, the EMS was seen by most observers as a step towards that ultimate goal, and not just because it aimed at stable exchange rates. An important feature of the period was the gradual acceptance of countries such as France and Italy (but also Spain and others) of macroeconomic policies that put a premium on monetary stability and, in particular, on low inflation and orderly public finances. Both of these were seen by Germany as *sine qua non* conditions for its acceptance of eventual monetary integration. Whether this stepping stone role would justify a more upbeat assessment of the EMS's contribution to Europe's economic growth depends on how one assesses EMU's impact on the area's welfare.

The 1992 Single Market Programme. The origins of the SMP go back to the early 1980s, a period in which growth had faltered and the EEC had become bogged

[13] This finding matches, by the way, similar UK and US results suggesting different responses by financial and labour markets to what might be characterized as "regime changes" (Buiter and Miller, 1981; Blanchard, 1984).

down in CAP and budgetary rows. A 1985 White Paper called for a removal of non-tariff barriers (tariffs having already been abolished), such as restrictive regulations and product standards inhibiting cross-border competition in goods and services, as well as the free movement of factors of production. Approved in 1986, it presided over a gradual liberalization and deregulation process through the next 20 years.

The rationale was to enhance efficiency and stimulate growth by intensifying product- and factor-market competition. In goods markets the principle of mutual recognition was used to ensure that products in compliance with consumer-safety standards in one member state were automatically deemed in compliance elsewhere in the Community. National preferences were similarly reduced and, if not, challenged by the European Commission in the Court of Justice. In factor markets, controls on cross-border capital flows were removed to create a level playing field for investors and establish a more competitive environment for financial institutions.

The so-called Cecchini Report (Emerson *et al*., 1988) calculated that full implementation of the SMP's provisions could boost EC output by 2½ to 6½ percent of GDP over the next decade or so, via resource reallocation, the exploitation of scale economies and, most importantly, a higher degree of competition. In addition to this one-off gain, even more optimistic estimates suggested that a permanent GDP growth bonus of between one quarter and nearly one percentage point was also attainable thanks to the higher income, savings and investment that the SMP would have brought about (Baldwin, 1989). In a similar vein, OECD (2002), a committed proponent of deregulation and product-market competition, provided a catalogue of candidates for further longer-run growth effects that could have stemmed from the SMP. For example, it argued that competition calls forth innovations that are not subject to strongly diminishing returns and presented evidence that the R&D intensity of production was negatively and significantly correlated with the extent of product-market regulation. Two OECD researchers (Nicoletti and Scarpetta, 2005) argued that more intense competition heightens incentives for the diffusion and adoption of new technologies. Yet another OECD paper (Scarpetta and Tressel, 2002) found that a more pro-competitive regulatory framework has a significant positive effect on the level of multifactor productivity growth even in the long run.[14] Greater product market competition may also encourage pro-competitive reforms in labour markets, if for example the reduced incidence of rent sharing makes it less attractive for workers to wait for job opportunities in high-wage sectors. Eliminating barriers to entry may also encourage inward foreign direct investment, which can be a conduit for advanced technology and new organizational knowledge, something that should have been especially valuable for Europe's relatively low-income "convergence economies."

Yet, the empirical evidence for so-called endogenous growth models is not very strong (Crafts, 1992) and few now believe in permanent growth effects arising from institutional changes as those outlined above.[15] Even the initial "Cecchini Report" assessment of likely SMP effects has been scaled down significantly by more recent research. Thus, an early estimate for the period to 1994 found that, as for the Common Market, trade creation had dominated trade diversion, but put the gains at somewhere between ½ to 1½ percent of GDP (Allen *et al*., 1998). A later Commission estimate

[14] Similarly, Nickell (1996) finds a negative relationship between productivity growth and price-cost margins (another commonplace measure of the intensity of product-market competition).
[15] For an exception, see Henrekson *et al*. (1997), a study that finds a permanent growth effect for the EC (and EFTA), but one that does so using dummy variables to quantify the impact of integration.

thought that, by 2002, the overall positive impact had been of the order of 1½ to 2 percent of GDP (European Commission, 2002), very much in line with what more skeptical observers had already anticipated at the time the SMP was being launched (e.g., Peck, 1989). Some further gains can probably be expected, since not all the SMP's provisions have been fully implemented, but any remaining effect is probably going to be quite small.

While the likely benefits of the SMP thus look significantly smaller than those apparently achieved by the Common Market, they are not insignificant. Yet, as with so many other aspects of European unification, they might well have been reaped even in the absence of Commission initiatives. The 1980s was a period that saw a good deal of domestic liberalization and deregulation in Europe, spurred by the examples of Reagan in the United States and Thatcher in the United Kingdom. To take just one example, the interventionist French government had relaxed some of its tight hold over the financial sector well before the SMP was launched. More broadly, the Fraser Institute's Economic Freedom Index, which "measures the degree to which the policies and institutions of countries are supportive of economic freedom" (Gwartney and Lawson, 2006, p.3), shows the EC countries as having deregulated their economies faster between 1980 and 1990 than they did between 1990 and 2000. It is thus quite plausible to argue that efforts to liberalize and open economies further might have happened in any case.

That said, it is hard to imagine that the European countries would have moved as far or fast in deregulating product markets in the absence of the SMP. National governments were prepared to remove subsidies only if they were assured that their neighbours would do likewise, so that domestic firms would not be placed at an unfair competitive disadvantage. The institutions of the European Community helped to coordinate these decisions and secure governments' irrevocable commitment to them. Often "Europe" was used as a shield against domestic opposition to deregulation. Thus, the German telecommunications reform commission shifted the onus for difficult measures onto EC officials, helping to overcome opposition to deregulation from the Bundespost and the unions (Moravcsik, 1998). French governments similarly saw pursuing domestic reforms in the context of Community liberalization as a way of shifting responsibility for painful actions.

In addition, two aspects of the SMP might not have occurred (or might have occurred only very partially) in its absence. One was the push to open public procurement to foreign firms, a push that was imposed by Brussels on usually very reluctant member states. It is true that the efforts many countries were making at the time to reduce the size of their budget deficits might have led them to seek economies by resorting to cheaper imports, but any such effect would, almost certainly, have been much more drawn out. The other was the (earlier and unrelated) legal decision that standards and regulations adopted by partner countries should be mutually recognized, a decision taken by the European Court of Justice in 1979. This greatly facilitated the SMP's task of doing away with non-tariff barriers. Here too, one could have expected that efforts at harmonization would have proceeded even in the absence of the SMP (as they are, for instance, proceeding, if very slowly, between the US and the EU), but mutual recognition is a far faster and infinitely less bureaucratic procedure than is harmonization. Both these practices thus seem to have been genuine achievements of the European integration process. As an upper estimate it could, thus, be argued that perhaps half of the SMP's gains, as estimated by the Commission in 2002, might not have been obtained in its absence.

European Monetary Union. EMU has clearly been (and still is) Europe's most ambitious project since the Treaty of Rome. Originally entered into by 11 countries on 1st January 1999 (15 by 2008), it has involved devolving monetary (and exchange rate) policy to a supranational (and fiercely independent) European Central Bank (ECB), while also constraining, at least in theory, the use of fiscal policy by limiting the size of budget deficits and public debt/GDP ratios.[16]

After a decade of operation, the verdict on EMU's achievements is still open. Both growth and inflation in the Eurozone have been somewhat lower than in, for instance, the United States and the United Kingdom, though higher than in Japan. Financial integration has clearly grown very rapidly and economic integration, through increased trade, seems to have risen further. Yet, at the same time, significant divergences in economic performance have emerged, in particular among some of the countries of the European periphery. Thus, Finland, Ireland and Spain have grown rapidly, spurred in part by low real interest rates; Italy and Portugal, on the other hand, have hardly grown at all, held back, in particular, by high real intra-euro exchange rates.[17]

EMU's contribution to the growth of the European economy could come through three channels: higher investment rates because of greater confidence, lower real interest

[16] These constraints were initially enshrined in the Maastricht Treaty and apply, therefore, to all the EU member countries. They are, however, somewhat more binding for EMU members because of the perceived potential negative externalities that an over-expansionary fiscal policy could generate in a monetary union.
[17] A common nominal interest and exchange rate, in the presence of still diverging inflation rates, has clearly led to diverging performance across the area. In theory, the growth of high inflation countries, while benefiting from low real interest rates, should be held back by the appreciation of their exchange rates, and *vice versa* for low inflation countries. In practice, in open economies in which financial markets are still highly regulated (such as those of Italy, but also of Germany), the impact of interest rate changes on activity is muted, while exchange rate changes can have powerful effects.

rates and a lower cost of capital; increased X-efficiency encouraged by a rapid growth in intra-Eurozone trade; and further efficiency gains brought about by institutional reforms spurred by the increased competitive pressures that countries are now facing within a single currency area. The evidence, so far at least, does not suggest major effects in any of these areas.

Nominal interest rates have clearly been very low by historical standards, largely reflecting the low inflation rates that have been recorded. Real interest rates have, similarly, been well below the levels recorded in, for instance, the 1980s and 1990s and this may well have stimulated investment above what would otherwise have been achieved. It is difficult, however, to attribute such developments to EMU. World inflation, world nominal interest rates and world real interest rates have all been low over the last decade, reflecting global forces (e.g., the widespread switch to central bank independence, increased international trade competition, world financial deregulation, the large current account surpluses of East Asia and of the OPEC countries, etc.), that have little to do with the creation of EMU. The latter could still have had favourable effects had it created a climate of greater confidence in future growth and stability. This too, however, seems to have been lacking. For several years, in the early 2000s, the Eurozone went through a phase of very modest growth, while, in the more recent period, the difficulties of Italy, in particular, have sown the first doubts about the perennity of the present monetary arrangements. Neither development was, or is, conducive to increased confidence.

One area in which EMU's contribution to investment is, however, highly likely to have been positive is the creation of a vast and liquid financial market that may well have lowered the cost of capital (Freixas *et al*., 2004). This has been particularly the case in the bond market. For the public sectors of the eurozone countries, bond yield differentials have been virtually eliminated, allowing much lower budget deficits (and hence higher savings) than would otherwise have been the case, at least in those (many) countries with high public debt/GDP ratios. The private sector has seen a boom in corporate bond issues in the years immediately following the introduction of the single currency, a boom that was more pronounced in the euro area than in other European countries (Rajan and Zingales, 2003). This must have had a favourable impact on investment and hence on economic growth. The size of the effect is, however, likely to have been very small. For one thing, investment is not particularly interest-rate elastic. For another, any favourable effects have probably been limited to a sub-sample of the corporate sector, namely large companies.

A second channel of transmission could come through increased trade integration fostered by the single currency and promoting resource reallocation and greater X-efficiency, along the lines already looked at in the sub-section on the Common Market. Initially, it was expected that such effects would be small - since the move to floating exchange rates following the breakdown of the Bretton Woods system seemed to have hardly dented the growth of world trade, symmetrically, the move to fixing parities should have had only a minor trade-stimulating effect. This consensus view was then shaken by research that showed that currency unions boosted intra-union exchanges by a factor of three relative to the trade of countries not participating in such monetary unions (Rose, 2000). Adapted to the experience of Western Europe, research in the same vein suggested that future trade gains, while not as large, could still raise trade by 50 percent or more (Rose and van Wincoop, 2001). Indeed, even the ultra-skeptical UK Treasury, in an evaluation of the costs and benefits of British participation in EMU using such estimates, concluded that, on this score at least, membership could boost the country's per capita income growth rate by as much as 0.2/0.3 percent per annum for some 20 to 30 years (HM Treasury, 2003).

The Eurozone has seen a significant expansion of its intra trade, but the orders of magnitude so far are a good deal less than those suggested by such studies. In a recent review of the evidence, Baldwin (2006a, 2006b) has pointed to some problems with the earlier optimistic estimates and concluded that trade may have risen by some 5 to 15 percent between 1999 and 2003 over what might otherwise have been expected. More importantly, he also argued that this rise derived mainly from the increased trading activities of small and medium-sized firms which now faced lower fixed costs in intra-Euro trade. This effect is in the nature of a one-off adjustment, suggesting, therefore, that further large gains on this score are highly unlikely. That benefits have accrued would, thus, seem undoubted. Their impact on the level, let alone the growth rate, of output would, however, on the basis of the available evidence, seems to have been very small so far and is likely to remain so.

Finally come growth effects that could stem from institutional changes, designed to make member countries more market friendly and spurred by the increased competition inevitable in a monetary union. Firm evidence in this area is difficult to come by. The OECD and the World Bank have both tried to quantify the importance of regulation and other restrictions in hampering competition in labour and product markets. A selected sample of their results is presented in Table 4. This shows (unweighted) averages for the Eurozone and for a group of five other West European countries not participating in the single currency (or, indeed, for two of them, in the EU). The overall impression is that there has been some reform in EMU countries (at least in some areas), but this is not noticeably faster than in the non-EMU ones, especially given the much more liberal nature of the latters' economies.[18] For the one indicator for which evidence is available for the 1990s (strictness of employment protection), it would appear that reform had been a good deal more rapid in the decade preceding monetary union than it has been since. And, according to the World Bank, deregulation seems to have been very limited over the years 2003-07.[19] A similar impression is conveyed by the already mentioned Economic Freedom Index produced by the Fraser Institute – for the years 2000-05, this shows, if anything, a slight regression for the Eurozone.[20]

The overall verdict is thus only mildly positive. The single currency has undoubtedly provided greater financial stability to those member countries that were in the past prone to high inflation and rapidly depreciating exchange rates. It has also helped create a large capital market which has almost certainly reduced the cost of raising money for both governments and companies. It has, in addition, led to somewhat faster trade integration than would otherwise have occurred and it may also have spurred some regulatory reforms that might not have been adopted in its absence, though the evidence

[18] Taking the percentage "improvement" (i.e. change towards less regulation) for all the 14 indicators for which the World Bank provides data in both 2003 and 2006-07, results in a average change for the Eurozone countries of some 9 percent, as against a very small change in the opposite direction for the other European economies. But then the latter were, in 2003, some 40 percent less regulated than the former.

[19] The World Bank has also produced a "regulatory quality" indicator for a longer time-span (1996-2006). This attempts to measure "the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development" (Kaufmann *et al*., 2007, p.5). Here too, the years 1996-2000 saw a sharp increase in the pace of deregulation in the Eurozone, but some regression in the years 2000-06, not matched in the other West European industrialized countries.

[20] An alternative, and somewhat more erratic, Freedom Index (Heritage Foundation, 2008) does, however, paint a different picture. For the years 1999-2008 it shows somewhat faster deregulatory activity in the Eurozone than elsewhere in Western Europe.

in this area is more mixed. None of these changes, however, is likely to have had much more than a very small effect on the area's growth rate or even level of output.

Would things have looked very different had EMU not occurred ? While the *de facto* monetary union linking the greater Deutschmark area (Germany, the Benelux and Austria) might, conceivably, have adopted a single currency, it is highly unlikely that France, let alone Italy or Spain would have joined such an arrangement. Hence, the (small) gains from trade and from the expanded capital market that EMU probably generated would not have been forthcoming. Similarly, given trends in the dollar, in oil prices and frequent political uncertainty, there would almost certainly have been much less financial stability in several countries, noticeably so Italy and possibly also Spain, an economy that, by 2007-08, had recorded a current account deficit close to 10 per cent of GDP.

Yet, paradoxically perhaps, Italy in particular might in such circumstances have followed much more drastic reform policies at home than it actually did. When the lira depreciated sharply in 1992, or when joining EMU was seen as a national goal, the Italian authorities took fairly drastic monetary and fiscal policy measures designed to reduce inflation and reign in the budget deficit. Absent any pressures on the exchange rate or on the interest rate thanks to the single currency,[21] Italy's deficit began growing again, pension reform was diluted, public expenditure was not trimmed (while Spain allowed its national savings rate to plummet). Necessary reforms, in other words, were almost certainly postponed, and any future adjustment might turn out to be more costly than it otherwise would have been. While it may be far fetched to suggest that EMU's contribution to Italy's welfare, in particular, could have actually been negative (after all,

[21] And thanks also to the complacent attitude of financial markets to the country's massive public debt.

net interest payments on the country's public debt fell from more than 10 to less than 5 per cent of GDP between the mid-1990s and the mid-2000s thanks to the drop in long-term interest rates that EMU membership brought about), the final verdict has not yet been rendered.

4. Conclusion

European integration, starting with the ECSC, proceeding through the establishment of the Common Market and the EMS, and culminating (if that is the right word) with the completion of the Single Market and the creation of the euro, is one of the most visible, controversial and commented-upon aspects of Europe's development since the end of World War II. It is hard to imagine that Europe's economy would have developed the same way without it. Or is it?

This brief survey of the economic impact of European unification began by taking a skeptical standpoint. We have tried to see how far we can push the argument that European living standards, growth rates, and economic structure would have been little different in the absence of the institutions and processes that have culminated in today's European Union. This entailed two steps. It was argued, first, that in standard growth models trade and other forms of integration that were central to the European process have only a relatively minor (and temporary) impact on economic growth; in endogenous growth models the effects can be larger but the empirical evidence for such models is not particularly robust, suggesting that not too much weight should be given to their predictions. And even if research could point to relatively large effects, it was then argued that many of these might well have occurred even in the absence of the European process since economic forces would almost certainly have pushed for freer trade, stable exchange rates and less regulation in Europe in any case. The *ex-ante* hypothesis was thus that the economic (as opposed to the political) impact of the unification of Europe has so far been limited.

In a sense this argument is an application of the Coase Theorem, and as such it is subject to all the limitations of that famous proposition. The Coase Theorem, it will be recalled, is that the allocation of property rights has no implications for the efficiency of economic outcomes because interested parties can always make side payments sufficient to reallocate resources and rights in a more efficient direction. In the present instance it implies that where a particular allocation was needed for efficiency, governments, banks, firms and households would have found other ways of achieving it in the absence of the European Union. And where an allocation was inefficient, governments, banks, firms and households would have been quick to find ways around it. But Coase's result obtains only when there are no liquidity constraints, no transactions costs, and no uncertainty. Yet in Europe uncertainty was and is pervasive, transactions costs were and are far from negligible, and agents were and are liquidity constrained. All these are reasons for thinking that the actions of the EU and the outcomes of the integration process have mattered for the development of the European economy.

Thus, while it would still seem to be true that the growth effects of economic unification can never match those arising from (exogenous) changes in the rate of technological progress, it would appear, from a reading of the literature, that not everything that happened on the economic integration front in Western Europe over the last half century would have happened anyway. Trade would, no doubt, have grown, but the decision to create a Common Market, a decision that went against the interests of many powerful lobbies in most of the original six member countries, might well not have been taken in the absence of the political drive to unification. While Europe's revealed preference for relatively stable exchange rates would almost certainly have led to attempts similar to those of the Snake arrangements of the latter half of the 1970s or of the EMS, the move to monetary union goes well beyond schemes to manage exchange rates. By giving up their monetary policies, the EMU countries have ceded sovereignty in what many see as one of the principal prerogatives of a state.[22] It is inconceivable that such a step would have been taken had there not been a strong political will to pursue integration.

More difficult is to quantify the effects of the process. The approach followed was in the nature of a two-step qualitative evaluation. First, potential channels of transmission between a particular episode and economic growth were selected and evaluated (often using estimates available in the literature). Then, a stab was made at seeing what part of those evaluations reflected genuine unification effects, additional to what, using educated guesses, might have occurred anyway. By design, these stabs went in the direction of minimizing these positives in an explicit attempt to bias the conclusions away from our priors.

The bottom line is that the growth effects stemming from the exchange rate efforts (the EMS and EMU) were limited, although for EMU the jury is still out. The same was not true, however, for trade integration. Here both the Common Market and the

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[22] For some EMU members, of course, that sovereignty was somewhat limited, given their financial integration with Germany: "As European Vice President Christofferson noted in late 1989 after the Bundesbank raised its discount rate, the other central banks of Europe had about 45 minutes of sovereignty" (quoted in Cooper, 1990, p.277).

SMP may well have boosted output in the EU by more than might have been expected on the strength of the trade liberalization that was occurring in the world at large at the time. Rough orders of magnitude might suggest that EU GDP is some 5 percent higher today than it would otherwise have been. Thus, we find for the impact of the EU on European incomes roughly the same thing that Fogel found for the impact of the railways on U.S. incomes. Whether these are large or small numbers is ultimately for the reader to judge.[23]

A final contribution of European unification to growth and welfare comes from its attraction to non-member countries. The economic successes since the 1980s of Spain and, to a lesser extent, Greece and Portugal may well have owed something to the strengthening of democracy and openness which membership of the EU imposed. Even more importantly, the promise of eventual membership that Brussels provided to Eastern Europe after the fall of the Berlin Wall must have strongly contributed to the anchoring of both democracy and economic reform in the Accession countries. In many ways, that promise acted as an extremely successful "structural adjustment programme," as indirectly also confirmed by the much less satisfactory performances of those East European countries that have (so far ?) been left out, be this in the former Soviet Union or in the former Yugoslavia.

The overall economic verdict is thus cautiously favourable. Integration has clearly not been a panacea for the Continent's economic ills, as claimed by some of its proponents. But it has bestowed some benefits. It is difficult to see how it could have

[23] It is a good deal more modest that a recent estimate which suggests that the "GDP per capita of the EU would be approximately one-fifth lower today if no integration had taken place since 1950" (Badinger, 2005, p.50), but such estimates, of course, assume that virtual autarky would otherwise have prevailed.

been otherwise. After all, few would doubt that America's prosperity today owes at least something to it having been a single market and a monetary union for many decades.

A final argument is more political in nature. According to many, the major achievement of European unification was not a somewhat higher level of GDP or even the advent of monetary union, but lasting peace in Western Europe. Absent, for instance, French-German reconciliation (a major by-product of economic integration), conflict would have returned to the Continent as it had always done in the past. The most appropriate counterfactual in such a scenario would be the Europe of the inter-war years against which what happened looks like a spectacular improvement. Yet, however plausible this view may have seemed to a generation that had lived through two world wars, it ignores another political factor that, on its own, would almost certainly have made for West European cooperation even in the absence of economic integration efforts, namely the cold war. The threat of a communist take-over (particularly felt in the 1950s in countries such as France and Italy), would surely have made otherwise querulous nations close ranks, all the more so given America's pre-eminent role in aiding and cajoling its much poorer and weaker European partners. Peace in post-war Europe owes almost certainly much more to Stalin (and Eisenhower) than it does to Monnet or Schumann.

Table 1. The Importance of Intra-European Trade

(share of intra-trade in total)

	Intra Western Europe	Intra Total Europe[a]	Intra Americas	Intra Asia-Pacific
1938	52.2	61.4	33.3	…
1950	49.3	58.7	53.9	…
1970	67.3	73.9	46.9	35.1
1990	72.2	75.2	47.8	41.7
2006	…	76.5	59.7	50.0

a. Including Eastern Europe and Soviet Union (CIS in 2006).

Sources: GATT, *International Trade* and WTO, *International Trade Statistics* (various issues).

Table 2. Capital Mobility in Western Europe

Simple "Feldstein-Horioka tests" for capital mobility[a]

	14 West European countries
1950-59	0.78
1960-69	0.76
1970-79	0.63
1980-89	0.58
1990-2006	0.48

a. The data show the value of the β coefficient in simple regressions of the form: $I/Y = \alpha + \beta\, S/Y$, where I/Y and S/Y stand for the current price shares of gross investment and gross savings in GDP. For more detail, see text.

Sources: Feldstein and Horioka (1980); OECD, *National Accounts* and *Economic Outlook Data Base* (various issues).

Table 3. Some Major Steps in Europe's Unification

	Importance of the area		
	Number of countries	Population (millions)	Share of Europe's total GDP[a] (%)
1957 Signing of the Treaty of Rome	6	167	49
1973 First enlargement	9	257	68
1981 Entry of Greece	10	271	69
1986 Entry of Iberian peninsula	12	322	77
1991 German unification	12	346	82
1995 Further expansion	15	373	88
2004 First East European enlargement	25	456	95
2007 Entry of Bulgaria and Romania	27	489	96

a. At constant 1990 prices; the Europe GDP data include estimates for Eastern Europe (excluding the former Soviet Union).

Source: Groningen Growth and Development Centre, *Total Economy Database*, January 2008 and Maddison (2003).

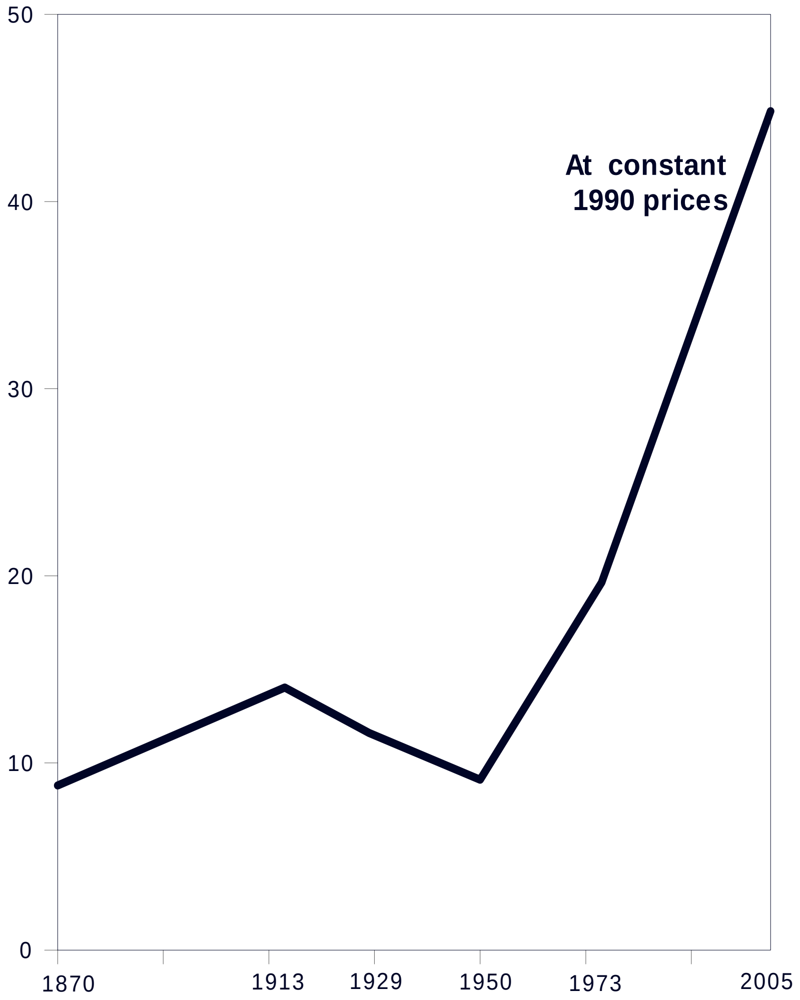
Table 4. Regulatory Reform in Western Europe

		OECD Indicators[a]			
		Employment protection	Regulation[b]		
Eurozone[c]	late 1980s	3.19	…		
	late 1990s	2.66	2.26		
	2003	2.52	1.57		
Other W.Europe[d]	late 1980s	2.51	…		
	late 1990s	1.94	1.72		
	2003	1.94	1.31		
		World Bank Indicators[a]			
		Labour market rigidities[e]	Starting a business[f]	Closing a business[g]	Enforcing contracts[h]
Eurozone[c]	2003	45.5	26.5	67.6	494
	2007	41.9	12.6	70.7	547
Other W.Europe[d]	2003	28.4	10.6	73.3	224
	2007	24.0	8.9	76.8	404

a. Unweighted averages.
b. Average of four indicators: barriers to entrepreneurship, product market regulation, barriers to trade and investment, extent of state control.
c. Excluding Cyprus, Luxembourg, Malta and Slovenia.
d. Denmark, Norway, Sweden, Switzerland and United Kingdom.
e. Average of difficulties in hiring, in firing and in the rigidity in hours worked.
f. Average of number of procedures and duration (in days).
g. Financial recovery rate (per cent).
h. Duration (days).

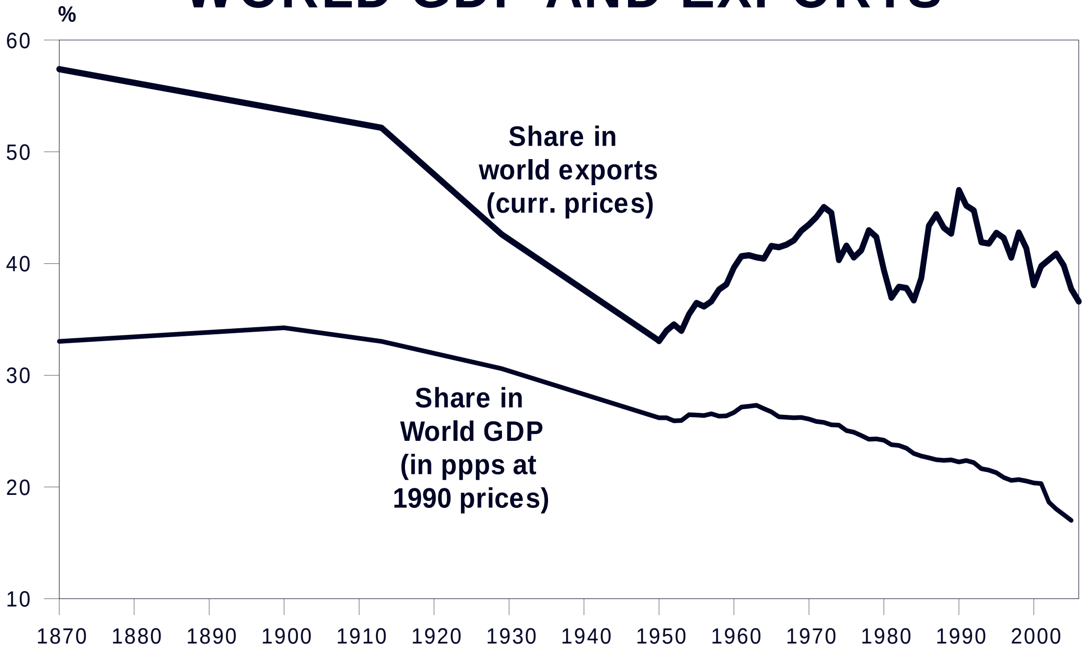
Sources: Conway *et al*. (2005); OECD, *Employment Outlook, 2004*; World Bank, "Doing Business", http://www.doingbusiness.org.

Fig. 1 WESTERN EUROPE EXPORTS/GDP SHARE



Sources Maddison (1995); IMF, *International Financial Statistics*; OECD, *National Accounts*; World Bank, *World Development Indicators*; WTO, *International Trade Statistics* and authors' estimates.

Fig. 2 SHARE OF WESTERN EUROPE IN WORLD GDP AND EXPORTS



Sources **Maddison (1995), (2003) and WTO, Statistics Database.**

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