

THE TRANSITION TO E.M.U.: STRUCTURAL AND STRATEGIC ASPECTS

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ABSTRACT

The recurrent crises in the EMS have bolstered a lively debate about the transition to EMU. Indeed the political economy of regional integration is at odds with the theory of optimum currency areas. Essentially static and based on real criteria alone, the latter is not suited to deal with a process which has historical roots, political ends, real and nominal dimensions. The relevant concept is convergence.

Part I first discusses the interplay of nominal and real convergence, then examines the structural and behavioural asymmetries between European countries. It shows why convergence is not the outcome of spontaneous market mechanisms. Resting on deep-rooted asymmetries, market forces interfere with ill-conceived policies to induce a divorce between nominal and real convergence. Three types of asymmetries, which raise concern for the transition to EMU, are highlighted: the conditions of competitiveness, the disparities in the transmission of monetary policies, the difficulties of fiscal consolidation.

Part II draws lessons from the structural analysis which enables to define the principles and the operational procedures of a workable transition. Three principles are emphasized: self-selection of countries respective to EMU membership according to their own convergence paths; achievement of the highest stability of exchange rates compatible with the progress of real convergence; compliance with the institutional procedures written down in the Treaty. These principles have strong operational consequences: the emergence of a hard core working as a stable center to guarantee the coherence of multiple transitions; the set-up of a two-tier exchange rate arrangement within the wide bands; the strengthening of financial solidarity and monetary co-responsibility within the hard core.

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INTRODUCTION

The EMS crises of 1992-93 have shown that the transition to European Monetary Union (EMU) is a complex process. The hope of a steady convergence by means of a quasi-fixed exchange rate system has disappeared. The process has proved not viable for three intertwined reasons: the adjustment imposed to some countries would have been intolerable; the magnitude of the distortions brought about by German unification cast doubts on the wisdom of pegging to the German anchor; the dismantling of all foreign exchange controls, starting in the beginning of the nineties, has unleashed financial dynamics that have strained the commitment of governments to the Maastricht Treaty.

The recent monetary events in Europe and their aftermath are the source of a stimulating debate among economists as well as a reassessment of priorities for monetary authorities. These events have stressed the importance of convergence, particularly how stubborn the obstacles to real convergence could be. They have also shown, contrary to market opinion and at the surprise of many economists, that the EMS has not collapsed and that a core of countries is still being determined to go forward with the requirements of the Maastricht Treaty. Strategies might be available, which emphasize flexibility more than they used to but which keep track of the ultimate goal.

The first part of the paper discusses the requirements of convergence and the obstacles to the transition to EMU. The obligations of the Treaty emphasize nominal convergence criteria, while the theory of optimum currency areas is based upon real criteria. These contrasting views make up the substance of the arguments between the upholders of the coronation theory of EMU and the proponents of a more active approach. The former rely on real criteria because they believe that economic structures cannot be affected by changes of monetary rules and institutions. They see the introduction of a single currency as the end-result of economic structures slowly getting closer. The latter believe that monetary rules can change the behaviour of individual agents and alter macroeconomic adjustments. They want to conceive transitory rules that help governments shaping policies destined to lead their countries to monetary unification. To make the proposed rules widely acceptable, the monetary activists are driven by the political economy of international negotiation. Nominal criteria are the outcome of an original approach of integration with no precedent in historical experience. Those criteria have been generated by a bargaining process. They are measured under agreed-upon and precisely quantified indicators. They can be compared to macroeconomic performances which governments can be made accountable of. It is why sticking to the objectives of nominal convergence is an operational procedure for checking whether the policy preferences of the participating countries are committed to the final goal of monetary union or not.

However the crises of the EMS have taught that the notion of real convergence should be better integrated into the political process. A prerequisite to achieve a compromise between formal criteria and real conditions for the candidates to EMU is to look comprehensively at the asymmetries between them. Indeed, the larger and the more pervasive the structural or behavioural asymmetries, the higher the costs of a monetary

union. It is why long run structural asymmetries will be examined in the real and in the financial sectors. Then the problems of fiscal consolidation and public debt management will be investigated because they constitute the Achilles' heel of the transition to EMU.

Better strategies to fulfil the objectives of the Maastricht Treaty must make account of the structural and dynamic asymmetries. They are considered in the second part of the paper. Three principles are highlighted. The first is self-selection which entails multiple speeds for the transition. No country should be forced into a uniform pattern of convergence, lest the whole convergence process be unstable. But no country should be in a position to thwart the whole process either. The second principle is the highest degree of de facto stability of exchange rates achievable. Had the discipline of exchange rate stability been given up altogether, the Single Market itself would be at stake and the credibility of the future pegging of parities would be impaired. The third principle is the respect of the procedures provided by the Treaty. Because there are benchmarks and deadlines governments are committed to while the process of transition is going on, the procedures can help keeping an overall consistency in the process of differentiated transitions. Lacking the procedural constraint, the final goal could be lost by too many countries and the efforts of convergence would become less compelling.

Therefore, the second part of the paper looks at the principles underlying post-EMS crisis strategies. It also outlines how they could be implemented. Finally, conclusions about the European experience are drawn more generally for regional integration.

Part I: REQUIREMENTS AND OBSTACLES TO CONVERGENCE.

Convergence is the utmost objective for the transition to EMU. Member countries carry on strenuous efforts in order to fulfil the criteria attached to it. Aiming at convergence is a guarantee of closer performances, a check against centrifugal forces, a condition for the catching up of the less developed economies, a basis for further steps towards a full monetary union. Indeed, it is risky for the EMS to enforce the same rules and to expect the same adjustment mechanisms in countries which differ substantially by their competitiveness, their financial structures, their cyclical positions. However, what is meant by convergence is not self-evident. The official statements spell out criteria and procedures; but they stay mute about their foundations.

The first task is thus theoretical. One has to understand the European doctrine of convergence. Why are nominal criteria exclusive? Why does the Treaty's doctrine contradict so blatantly with the optimal currency area approach? This analysis will give a rationale for the nominal criteria.

The second task is empirical. It is of no avail to point out all the disparities between countries. What matters are asymmetries that create diverging responses to common shocks and which prevent the absorption of idiosyncratic shocks. For instance, capital controls had been for long a cause of financial asymmetries. Yet they did not prevent the EMS from functioning as a machine of convergence in the eighties. Actually the controls helped stabilize exchange rates. In turn, exchange rate stability was a powerful device to reach a steady disinflation towards the least inflationary country. Then the construction of the Single Market made capital controls inappropriate for the ongoing stage of European integration. But more financial integration, i.e. less disparities between countries due to capital controls, can lead to more difficulties in fostering a continuous convergence process.

The lack of parallelism between integration and convergence can also be underlined in the real economy. The mutual opening of European economies under the auspices of the Common Market has brought about an intra-branch industrial specialisation which reduces the likelihood of sectoral shocks being asymmetrical. But the economic history of the United States teaches that the positive correlation between industrial specialisation and convergence can be reversed with further integration (Krugman, 1991). Geographical specialisation has increased, leading to the need of more powerful adjustment mechanisms. Thus, convergence and integration keep up a dynamic relationship which is path-dependent. It is why in Europe one has to investigate both the structural and the conjunctural factors of asymmetries. Only with a proper assessment of those factors can one set up the right incentives to convergence.

1.1. Nominal and real convergence.

It looks surprising that the Treaty defines nominal criteria while countries are preoccupied by real problems (unemployment, competitiveness, growth). It conflicts with the optimal currency areas theory which is upheld by most academic economists. Yet the requirement of nominal performances has a good rationale.

1.1.1 Contrasting views.

The present doctrine of convergence was laid down by the Council of Ministers of the European Community in 1990 and made operational in the Maastricht Treaty. Nominal convergence expresses the conditions for participating to the monetary union. The formal criteria are embodied into quantified variables: exchange rates, relative inflation rates, relative long run interest rates, deficit and gross debt of the public sector in % of GDP. They are the relevant variables for assessing macroeconomic performances and for submitting macroeconomic policies to multilateral surveillance.

Real convergence is not forgotten, but it is not precisely defined and it pertains to the realm of structural policies. Under the pressing demand of the Southern countries, fearing that integration would not reduce the discrepancies between levels of development, Structural Funds have been raised at the Community level. Nevertheless, a tenuous link has been established between both macro and structural policies. The financing by the Community of infrastructural projects in countries suffering from a relative lack of development depends on an approved convergence program presented by the beneficiary country.

The aforementioned criteria determine initial conditions to start the monetary union. They have been subjected to bitter critics by many economists. The first brand of critics points out how arbitrary the financial thresholds for public finance are. The threshold for public debts is 60% of GDP, which happens to be a past average of public indebtedness in the EC. It has only a distant kinship with a solvency ratio. The threshold for public deficits is 3% of GDP and does not seem to depend on the positions of the countries in the business cycle. The second brand of critics objects that the criteria do not guarantee that the union will be viable once it has started. A currency area should be based upon the capacity of response against asymmetrical shocks which threaten the cohesion of the union. This issue is addressed by the theory of optimal currency areas.

The basic idea of this theory is that economic structures do not depend on monetary institutions. Since Mundell's seminal paper (1961), the work on optimal currency areas has focused on real criteria supposed to make a currency union viable. The criteria are twofold. The first ones are structural parameters: mobility of the factors of production, opening to foreign trade, pattern of industrial specialisation. The second ones are

sensitivity parameters: the relative importance of common versus asymmetrical shocks, the elasticities of response of output in each member country to relative price changes between this country and the rest of the union, the stabilizing properties of capital flows while exchange rate risks have been discarded altogether. A monetary zone is thus optimal if the structures are close enough so that asymmetrical shocks are absorbed fully without relying on nominal exchange rate changes.

One can understand how the adjustment works. Permanent divergences are ruled out if production structures are homogeneous (intra-branch specialisation), opening to foreign trade high, factors of production flexible. Only transitory real shocks remain. Assuming for instance an unexpected fall in domestic demand in one country for whatever reason, what is an effective adjustment in a monetary union? With a high degree of opening and an horizontal specialisation, member countries produce the same range of products in their industrial sectors. Therefore, consumer preferences are almost indifferent to the origin of the products. It makes trade flows very elastic to price changes. A country undergoing a fall in domestic demand can easily substitute for foreign demand. An incipient fall of employment in the country will trigger the needed price adjustment if the labour market is flexible and the goods markets competitive. The more substitute in demand between countries the products are, the smaller is the change in relative prices to reallocate the available production capacities to foreign demand. Because the products are close substitute, factors of production can move easily from one product line to another within the same firms. The high elasticity of supply to relative price changes leads to a smooth adjustment which cancels out the incipient unemployment. When equilibrium is restored, relative prices are back to their original levels if the country is small compared to the size of the union. If the country undergoing the adverse shock is large, the real adjustment leaves an overall shortfall of demand spread over the entire union. It can be a matter of concern for the monetary policy of the union.

The conclusion of the above analysis for convergence is straightforward: the conditions for participating to a monetary union are exclusively based upon real criteria. The alleged neutrality of money makes nominal variables irrelevant. If real criteria are fulfilled, a monetary union can be safely established and a single monetary policy run, to which nominal variables adjust with no difficulty. This is the essence of the argument of the coronation theory mentioned herein above. It is the opposite of the Treaty doctrine. The theoretical dissonance is so huge that it demands an explanation.

1.1.2 Reasons for the dissonance.

The reasons come from different economic assumptions and from the decision making process in the EC. The latter is not grounded onto pure economic analysis. It was shown herein above that the standard adjustment in a currency area rested on the assumption of perfectly flexible prices. There should be no real price rigidities for the optimal output response to country specific demand shocks. There should be no nominal price rigidities for nominal criteria being unimportant. Both assumptions are unrealistic. Nominal price rigidities have quite significant consequences on convergence as long as the gaps between trend inflation rates are substantial (i.e. over 3%). Deprived of the opportunity to change

the nominal exchange rate, the adjustment mechanism would be impaired because distortions of competitiveness would build up. Perverse developments could ensue when high inflation countries lost market shares and accumulated foreign debt at a non-sustainable pace. This is why reducing steadily trend inflation gaps have consistently been a priority of convergence.

When inflation rate differentials have been brought back within a narrow range, however, keeping them put is not a sufficient condition of convergence. On one hand, German unification has shown that the certainty of a low long run inflation did not prevent a temporary burst of price increase as part of a real exchange rate adjustment under fixed nominal exchange rates. On the other hand, speculative attacks against the French Franc in 1992-93 point out that overcoming inflation is not enough to convince financial markets that an economy rigged with real rigidities can counter a downturn shock under fixed exchange rates. Therefore the problems faced by the EC emphasize the need of a compromise between real and nominal convergence. The former justifies the choice of a lengthy process going through three different stages. The latter commits governments to a well-defined procedure including the respect of a formal schedule and of nominal criteria.

The doctrinal compromise between gradualism and monetary activism fits with the Single European Act approved in 1985. This agreement was a substantial revision of the Treaty of Rome which founded the European Economic Community in 1957. From a free trade area, the project launched by Jacques Delors and approved by EC governments moves to a much deeper degree of economic integration. It provides the basis for real convergence, because it has unleashed powerful competitive forces with the mobility of goods, services and factors, as well as with the dismantling of non-price barriers to competition. Therefore real convergence is to be taken care of mainly by market mechanisms. Structural policies can help, but they are distinct from macroeconomic management. Monetary policies aiming at nominal convergence are thought to provide the background for structural policies to be effective. Actually the doctrinal compromise covered a political compromise between Germany and France. On one hand, the Bundesbank would resist fiercely a sharing of decision-making with partners who did not have the same culture of price stability. On the other hand, the French government, backed by a few others, wanted to make sure that the deadline for monetary union would not be postponed indefinitely. Therefore the procedure is more akin to a logic of political economy than to pure economics.

The decision-making process in the EC is being made tortuous because of strategic impediments. On political grounds, all EC countries should be equal before the perspective of monetary union. On economic grounds, the enthusiasm of some candidates had to be cooled down, the reticence of others had to be overcome. But the equity of the whole process should not be questioned. Given the different attitudes towards the urgency and the prerequisite of a monetary union, the negotiation focused on the nature of the criteria to be applied for membership. The end result was a compromise which managed to weigh the conflicting demands made by the negotiators. First, the criteria are strict enough to preclude the weaker countries from participating at the nearest possible time. Second, the

criteria are transparent, meaning that they are based upon well-defined macroeconomic variables linked to policy objectives. This condition excluded any structural parameter which could not have been treated as a policy objective, or would have discriminated a priori against specific countries. Third, to tie Germany's hands, the jump to monetary union is automatic in principle whereas the criteria have been met. However, the Court of Karlsruhe, while accepting the constitutionality of the Treaty, has enunciated restrictive clauses which show its reluctance to endorse the principle of automaticity. But it is unlikely, under all but extreme circumstances, that the Bundestag would reject a perspective already ratified.

1.1.3 A rationale for the nominal criteria.

It was noticed above that price rigidities make a case for nominal criteria on economic terms. More evidence can be put forward concerning the free riding and the credibility problems.

-First, entry into the monetary union will not abolish national currencies from the start. In this respect, it is not a radical monetary reform for an indeterminate time. If there is no accepted nominal restraint, regional inflation could occur. Indeed, their national currencies being still in full use, economic agents will not perceive a dramatic rise in the cost of inflation. Particular countries will be able to initiate a burst of inflation via excessive wage demands or higher budget deficits. The European central bank will not be able to preclude a regional inflation, as long as the costs are not felt within the wider area. Thus, with strictly fixed exchange rates and national currencies, some countries not firmly dedicated to price stability could exploit more virtuous countries in the short run. This free rider problem would induce the latter countries to renege on their commitments towards the monetary union. The same reasoning can apply to public debt. If there were no limits on the deficits and on the debt outstanding, as arbitrary as they might seem to be, a free rider problem could ensue.

-Second, the nominal criteria are decisive to overcome the credibility problem. If sacrifice ratios are disparate across countries, financial markets will doubtless question the credibility of the fixed exchange rate system under adverse economic conditions. Indeed, the speculative attacks against the French Franc in 1992-93 can be explained by the uncertainty of market opinion on the ability of the French government to keep the link with the Deutschemark amidst a severe recession. The time consistency of the policy had to be proved in the hardship of the recession and by the records of monetary policy since the introduction of the wide margin ERM in August 1993. The new ERM has been successful for its greater flexibility and for its ability to reveal the true preferences of the monetary authorities with regards to the formal criteria of the Maastricht Treaty.

I.2. Asymmetries and real convergence.

From the above analysis it results that nominal and real convergence are both important for the transition to EMU. The political context in Europe helps explain why no explicit real criteria have been embodied into the Maastricht Treaty. But the EMS crises have given rise to a renewed interest in real convergence. According to theoretical teaching, real convergence ensures that effective flow adjustments absorb asymmetrical shocks. Because the EC will not have strong federal institutions in the foreseeable future, stabilizing flows will not be generated by federal budget transfers; they must come from highly elastic price adjustments. It is why the comparison between Federal States like the U.S or Canada on one hand and the EC on the other, however fashionable in the academic community, is misleading.

American industry is highly specialized across regions, while European industry (at least in the core countries) has developed along intra-branch specialization. A narrow European monetary union would be less prone to regional effects of sectoral shocks because member countries would be affected much in the same way. Given the proximity of economic structures, asymmetrical shocks have rather their origins in differences of macroeconomic behaviour and economic policy. The latter are handled by the formal criteria; the former are expected to be absorbed by elastic price adjustments. But elasticities of trade flows to changes of price competitiveness are enhanced by improvements in non-price competitiveness which are generated by similarities in industrial structures. It follows that real convergence policies, between countries which are already convergent according to nominal criteria, are structural policies which foster non-price competitiveness and which increase the price flexibility of labour and product markets.

The mechanisms to absorb shocks are not restricted to price adjustments in the real sectors. Financial adjustments also play a significant role in a currency area. It is indeed one of the advantages of such a monetary organization to allow much higher investment-saving disequilibria than any international exchange rate regime. Long run growth differentials between regions can be financed by permanent capital flows at the ongoing interest rate, only augmented by project-specific risks, since no foreign exchange risk is to be feared. Temporary shocks can be financed by foreign borrowing since capital mobility is perfect. It gives time for real forces to take over and provide with a smooth adjustment. The positive contribution of capital mobility does not depend only on the setting of the monetary union however. It also depends on the transmission of changes in money interest rates to credit, asset positions of the main institutional sectors in different countries, degrees of sensitiveness of domestic demand to monetary impulses through the financial

structures of the countries. Therefore, there is a real convergence problem in financial as well as in economic structures and behaviours.

Following those views, asymmetries between European countries, in the real sectors and in the financial sectors, will be considered in turn. Structural disparities will be stressed in order to outline the core of the prospective monetary union. The consequences of the EMS crises will be examined to assess the progress toward convergence and to reshape the strategies of transition.

1.2.1 Asymmetries in the real sectors.

Two types of asymmetries are to be considered. The first ones are structural; they stem from structural differences in the level of development between European economies. The second ones are accumulated divergences from the rigid exchange rate policies that were pursued in the EMS and from the adverse economic conditions of the early nineties. They must be carefully distinguished since they have different implications for the time horizon of convergence and for the strategy of transition to EMU.

-Structural asymmetries

Part of the EC (the South of Italy, Spain, Portugal, Greece, Ireland, East Germany) has substantially lower levels of productivity and real income and a much less diversified industrial structure than the rest of the Community. The Southern countries also have a weak tax system which makes a higher inflation rate economically sensible if not optimal. To reduce their structural asymmetries those regions need consistently high rates of productive investment. They are looking for an East Asian-type of real convergence through high growth rates in the medium run.

High productive investments are expected to sharply increase productivity in order to catch up the levels of the more advanced countries. The modernization of industry always begins with lower grade intermediate and consumer products. The relative prices of those products benefit from the highest rise of productivity. The increase in income and activity, which goes with the high rate of productive investment, spreads over the whole economy. As productivity is lower and increases less in the more backward sectors, inflation is rising faster in developing countries with high growth rates. If those countries were keeping their exchange rates pegged to a strong currency, they would create a distortion in the structure of their relative prices. Traded goods would become very cheap in the country relative to non-traded goods. With a rapidly increasing domestic real income, domestic demand would be diverted onto traded goods markets, hindering exports of the most productive sectors.

Those countries are facing a dilemma of the Mexican type. If their initial real exchange rate is undervalued enough, they have a potential for real appreciation without harming the domestic economy. Keeping their nominal exchange rate fixed enables them to finance their high catching-up growth rate with large capital inflows, because the exchange rate constraint prevents inflation from diverging. Yet, practical experience proves that the process is exceedingly difficult to regulate. The reason can be found in the highly different

dynamics of the real and financial sectors. The latter always overshoot because capital inflows are not attracted by long-run growth potential. They rush for uncovered short-run arbitrage; they exaggerate the appreciation of the target currency; they are abruptly reversed as soon as the tiniest hint at financial fragility has been detected. It is noteworthy that the financial crises in Southern Europe as well as in Mexico had the same origins in unsustainable capital flows and excessively overvalued exchange rates, despite their low initial real exchange rate prior to financial liberalization. The unhappy experience of these countries is at odds with the success story of the East Asian nations. They financed protracted high growth with domestic saving, tight capital controls and a persistently low real exchange rate. Capital inflows have always been considered by Asian countries as only vectors of technology transfers by means of foreign direct investment.

Therefore a managed depreciation of the nominal exchange rate plays a structural role in high growth developing regions. It prevents an excessive drift of relative prices inside the regions and allows the accumulation of foreign debt to remain compatible with the path of domestic growth. A higher inflation rate, which goes with a trend depreciation of the exchange rate, can thus be optimal from the point of view of real convergence. If too stringent nominal criteria are imposed too soon on countries undergoing rapid structural changes, the convergence process would be impaired. As happened in Italy, Spain and Portugal, a too large and too long overvaluation of the real exchange rate entails abrupt depreciations of the nominal exchange rate. In turn, the foreign exchange crisis triggers financial disorders which make the financing of productive investment unavailable.

It ensues that the transition to EMU is at least a two-tier process, since the conditions of real convergence are qualitatively different among less and more advanced countries. Can the latter or part of them constitute a hard core of countries? What are the conditions of real convergence for them?

Among the biggest European economies, Great-Britain has two specific economic handicaps. The first one is the narrow industrial basis, consequence of the massive disinvestments of the early eighties, following the dazzling appreciation of sterling with the profits of oil and the abrupt lifting of capital controls. The second one is the low industrial research spending which could hamper the accumulation of the factors of non-price competitiveness. To overcome her handicaps, Great-Britain has to shift the investment-saving balance in favour of the business sector. The shift is encouraged by a depreciated real exchange rate which boosts the profitability of industrial firms. Obviously it is a workable policy only if an exchange rate arrangement forbids the retaliation of other countries.

Apart significant differences in non-price competitiveness, the most decisive question about structural asymmetries among the more advanced countries is the flexibility of the labour market and of product markets sheltered from foreign competition. Much has been done to foster labour mobility. In Germany, work rules have been loosened recently and unit wage costs cut. The model of the social market economy has been unimpaired. Social cohesion is still considered a valuable factor of economic efficiency. Flexible adjustments

are successfully made by negotiations in the traditional procedures of collective bargaining. In France, the adjustments entailed by competitive disinflation have become more contentious lately, because unemployment has risen very high. However barriers to labour mobility, which existed two decades ago and which raised the cost of lay-off, have been dismantled. Labour costs have been consistently brought down. Structural unemployment, in both countries and in smaller countries candidates to EMU, results from barriers to competition in private sectors sheltered from foreign competition and from inefficiencies in the large public sectors rather than from the labour markets. But it is unclear that structural divergences from this source can bring on serious impediments to EMU between the core countries.

-Asymmetries, competitiveness and the EMS crises.

The high inflation context of the seventies was a major reason for the creation of the EMS. Several European countries had experienced the high inflationary potential of devaluation. It was acknowledged that more rigid exchange rate rules could substantially contribute to disinflation. Encouraged by their success, more countries wanted to stiffen exchange rate rules in the late eighties to reach nominal convergence. Governments had rationalized the policies that were successful to fight inflation. The policies acquired the legitimacy of a dogma, when cast into a doctrine saying that the nominal devaluation of a currency feeds inflation through its two-ways interaction with domestic price inflation. Because of this vicious circle, the expected improvement of price competitiveness is not lasting enough to be transmitted to the trade balance and to stimulate favourable supply effects.

But the doctrine has no general scope. In the seventies unemployment was still limited, labour markets were rigid, indexation was widespread, oil shocks raised production costs in the whole OECD zone. In the early nineties those conditions were completely reversed. Unemployment was high, indexation had disappeared, recession hit every European country but Germany, deflation stormed primary commodity markets. In this radically changed context overvaluation had serious drawbacks for convergence. As we will shortly see, real divergence in competitiveness accumulated between France and Germany on one hand, Italy, Spain, Great-Britain on the other, from 1987 to 1992. The price distortions were an underlying cause of the EMS crisis, whereas doubts had been cast on the acceptance of the requirements of the Maastricht Treaty by public opinion all over Europe. The outcome of the crisis was a substantial change in real exchange rates with quite positive consequences on the trade balance and growth in the countries who had devalued, contrary to the accepted doctrine. An important lesson can be drawn from this episode. The incentive to convergence can be fostered by different exchange rate regimes according to the structures and initial situations of the countries. A differentiated transition process is the best way to reach the final objective, i.e. EMU for all countries.

If this reasoning is accepted, the question is: were exchange rate adjustments triggered by the EMS crisis enough to restore a satisfactory pattern of competitive positions? Tables 1 and 2 go a long way in giving the answer.

Table 1
*Real exchange rates measured on export prices of manufactured products**
(basis 100 in 1987)

Nation	vis à vis EMS					vis à vis OE CD				
	1989	1990	1991	1992	1993	1989	1990	1991	1992	1993
France	97.0	96.7	95.4	95.0	97.2	96.7	100.7	97.5	98.0	97.0
RFG	96.3	96.2	95.7	97.0	101.2	96.1	101.0	98.3	100.7	100.8
UK	107.1	104.9	109.0	106.4	104.3	105.8	110.2	111.2	110.5	103.9
Italy	102.7	106.2	108.4	106.8	95.8	101.9	110.3	110.2	109.8	95.6
Spain	110.1	109.6	108.9	106.8	96.7	109.0	112.6	110.2	109.0	97.4

Source: Bank of France; Foreign Exchange Department

*An increase in the numbers indicate an appreciation of the real exchange rate.

Year 1987 is taken as a benchmark. Table 1 shows a clear-cut split between France and Germany on one side, the three other countries on the other for the period 1987-1991. The comparison shows the substantial real appreciation of the latter countries which went along with quasi-fixed nominal exchange rates. On the opposite the real exchange rates of France and Germany vis-à-vis Europe remained remarkably stable until the EMS crisis. Vis-à-vis OECD, variations were more pronounced because all real exchange rates are influenced by the fluctuations of the dollar. But the conclusions about the widening divergences between the two subsets of countries are much the same. It can also be seen on table 1 that the adjustments made after September 1992 have restored competitive positions more in line with the needs of the countries.

The pressures of overvalued exchange rates are better understood if the data of table 1 are compared with those of table 2 which measure real effective exchange rates on the basis of unit wage costs in manufacturing.

Table 2
*Real exchange rates measured on unit labor costs in manufacturing**
(basis 100 in 1987)

	Vis à vis EMS					Vis à vis OECD				
	1989	1990	1991	1992	1993	1989	1990	1991	1992	1993
France	91.5	91.0	90.2	90.8	95.4	90.6	89.8	88.7	89.0	94.2
Germany	101.4	101.2	101.7	106.4	115.0	98.9	105.0	103.9	109.2	112.1
U.K	110.5	108.2	114.7	109.0	98.1	106.7	112.5	116.8	112.7	97.2
Italy	110.0	111.2	103.0	100.3	85.2	103.8	112.7	106.5	105.3	87.6
Spain	116.4	123.5	127.2	128.7	116.1	114.1	126.5	129.2	132.1	116.4

Source: Bank of France; op. cit.

*An increase in the numbers indicates an appreciation of the real exchange rate.

Comparing tables 1 and 2 for France and Germany reveals interesting differences in the way price competitiveness was achieved in both countries. In France one can see how competitive disinflation has been working. French competitiveness has been entirely borne by wage pressures. Pervasive wage restraints have allowed both competitive prices in the industrial sector and comfortable profits for the firms. The drawbacks of this process lies in the high level of unemployment and in the stagnation of real wages of industrial workers. In Germany by contrast real wages consistently increased in the eighties. German industry bore rising production costs, magnified by a trend appreciation of the D-Mark, thanks to non-price competitive advantages sustained by a high ratio of investment which increased both labour productivity and production capacities. Things changed after the shock of unification. The real exchange rate appreciated excessively for two reasons: externally it was the consequence of the EMS crises; internally it was the consequence of a shortage of production capacities with regards to high domestic demand brought about by consumer demand in Eastern provinces and by excess housing demand in the Western part of the country with the flow of immigrants. Profits in the industrial sector declined dramatically because German firms were squeezed between rising wage costs and a slowdown of productivity growth with an unusually high level of utilization of productive capacity.

Table 2 shows that the real exchange rate on unit labor costs in Germany appreciated substantially in 1992 and 1993, more than the real exchange rate on export prices. However German firms have made a spectacular cost-cutting adjustment since 1994, indulging in aggressive rationalization and taking advantage of the monetary tightening-induced recession to rebuild their production capacities. The catch-up process, between the increase of productivity and non-price competitiveness on one hand and the appreciation of the D-Mark on the other, will undoubtedly go on through 1995.

Table 2 also points out that after the currency crisis of September 1992, exchange rate changes were successful for the competitiveness of the U.K and Italy. In the latter country the depreciation of the lira was backed by courageous measures (disindexation of wages and reduction of employment in the public sector) taken by the Amato government. If it were not for the political turmoil following the 1994 legislative election, which interrupted abruptly Italy's structural adjustment process, real convergence would have made positive steps in the right direction. Finally Table 2 shows that Spain, despite the devaluation of the peseta, still has high labour costs with regard to her productivity and industrial specialization. The industrial structure was not compatible with the strategy of nominal convergence followed in the early nineties. The situation of Spain helps a lot in explaining the recurrent depreciations this country has been undergoing up to the time being.

All in all the above analysis shows that the systematic real divergences, fostered by a premature regime of quasi-fixed exchange rates, have been stopped and even partially reversed. The recovery in Europe and the alleviation of the German shock create a favourable economic climate, not seen in Europe for several years. Higher rates of business investment help weaker or less advanced countries resuming their efforts in strengthening their ability to sustain shocks which affect the real sectors. But there are

also asymmetries in the financial sectors. Public finance problems are well-known. There also deeper structural asymmetries in the channels which transmit monetary impulses to the whole economy. Disparities in this respect, if not correctly treated, can impair the effectiveness of the single monetary policy while exchange rates have been strictly fixed.

1.2.2 Asymmetries in the financial sectors.

From the early eighties, European governments started liberalizing domestic financial systems. They did it at different times and in different ways. The processes were far from being smooth. Some governments believed in gradualism; others chose shock therapy. Germany alone did nothing at all for fear of destabilizing the channels of monetary policy. And rightly so, if one considers other countries' experiences: the faster the deregulation, the more fragile the financial structures, the more pronounced the debt cycles in the private sectors. These were factors of divergence which contributed to the failure of the quasi-fixed exchange rate regime. Indeed, the demise of the Pound Sterling in the EMS was not least due to the heavy indebtedness of the household sector on flexible interest rate liabilities, issued against real estate assets at grossly inflated prices. One has just to recall that the ratio of gross liabilities of households to nominal GDP leapt from 62% in 1981 to 85% in 1985 and 116% in 1990, whereas it stayed put in Germany. When doubts about the soundness of British building societies began to spread in 1991 with the burst of the speculative bubble, a lot of investors questioned the wisdom of the commitment to the ERM. Rising interest rates to defend the Pound against a tide of defiance conflicted markedly with the bail-out of indebted households to preclude a deepening of the recession. Therefore the prevailing exchange rate regime was torn down by diverging financial dynamics, stemming not least from asymmetries in financial structures, provoking conflicts of objectives in some countries and not in others.

Those dynamics are not the outcomes of a once and for all consequence of deregulation. They reveal different transmission processes of monetary impulses, which could impede more co-operative monetary policies in the course of the transition and the working of the single monetary policy itself at the start of the monetary union. The relevant structural factors influencing the monetary transmission process will thus be examined, prior to the thorny problem of interpreting the formal criteria for public sector finance.

-Asymmetries in financial structures and specificities in monetary transmission mechanisms.

Financial structures can impinge upon monetary policy because they shape multiple intertwined channels. When financial systems are liberalized, the main instrument of monetary policy is the current level of money market interest rates which are directly affected by the central bank. Let's assume that the implementation of monetary policy has already been homogeneized in principle among the countries which have deregulated their financial systems. This assumption allows to focus on convergence problems proceeding from monetary mechanisms. A change in money market interest rates exerts its influence through stages. Two basic steps shall be considered: the first one includes the channels

which drive the impact of interest rate changes onto the cost of credit, aggregate demand and exchange rates; the second one conveys changes in aggregate demand and the exchange rate on output and inflation. Real convergence problems arise on both steps. But the latter involves the structural asymmetries that have already been examined. Only the former will be analyzed hereupon because they display structural asymmetries in the financial sectors, as opposed to asymmetries in the real sectors.

The current level of money market rates bears upon only part of the sources of financing expenditures. The most common way for economic policy to affect aggregate demand in uninhibited financial markets is through the cost of credit. Different stages occur which depend on structural features:

-The time structure of the debt of non-financial sectors (ratios of short term/ long term lending, fixed/ flexible lending). If short and variable lending prevail, changes in short term interest rates can affect non-financial sectors quickly and directly. If long and fixed lending is prevalent, the demand effects of changes in short rates are mitigated.

-The extent of financial intermediation. Since the pass-through effect of changes in money market rates on bank lending rates is lagged, the relative importance of intermediated versus direct financing affects the response of aggregate demand to monetary policy. Even if the long-run adjustment is more or less complete, the transmission mechanism is dependent on the speed of adjustment of bank lending rates to changes in market rates.

After changes in leading interest rates have been transmitted to the cost of credit, the impact of the latter on aggregate demand is carried out through three possible channels whose relative importance is partly unknown and critically dependent on the balance sheet positions of non-financial agents:

-The substitution effect: it would be exclusive and independent from the financial structure if markets were complete and perfect. The cost of capital would affect the real economy through the behaviour of firms (substitutability between capital and labour in production functions) and households (substitutability between current and future consumption).

-The income effect: it depends crucially on the positive or negative income flows arising from interest receipts or payments. These flows are in turn affected by structural variables: the net asset positions of the different sectors, the relative importance of assets or liabilities at fixed or flexible interest rates, the heterogeneous propensities to spend between net creditors and net debtors.

-The wealth effect: changes in real estate and equity prices have net wealth effects in the aggregate. Effects of changes in the price of financial assets depend on the creditors' and debtors' propensities to spend in reaction to changes in wealth.

The propensities to spend out of interest income and out of wealth can be highly variable in the cycle, because they depend on the assessment by the agents of their current level of indebtedness compared to what they deem appropriate.

-Evidences of financial asymmetries between European countries.

Table 3 sums up the scattered available information on the structural parameters found relevant above to explain different responses to monetary policy in EC countries.

Table 3
Indicators of long-term financing
(Stocks outstanding at end-1993)

	Government debt(% of long +fixed rate)	Bank credit to private sector (% long-term)	Household mortgage debt(% L.T+fixed rate)	Company debt (% long-term +fixed rate)
Germany	92	77	~100	> 1\2
France	64	57	90	1\3
Italy	33	n.a.	~50	1\6
U.K	77	24	10	> 1\2
Belgium	76	48	~100	1\4
Netherland	99	77	75	> 1\2

Source: National central banks and B.I.S estimates

The most dramatic difference occurs between the U.K on one hand, the continental countries on the other, about household debt and to a lesser extent bank credit. The short run and flexible rate-type of mortgage financing in the U.K helps a good deal explaining the extent of the real estate bubble in this country in the late eighties. Such an extreme dependency on short rates makes the economy vulnerable to a tightening of monetary policy near the peak of a real estate market boom. It would have become exceedingly difficult to preserve the commitment to an exchange rate rule, had the needed increase of interest rate given rise to collapse of asset prices and to widespread financial distress.

The other important disparity is the maturity structure of Italian public debt. For more than twenty years, the Italian government has faced difficulties finding long-term finance at fixed rates because of the Italian record of high and relatively volatile inflation. The same conditions apply to the corporate sector, which makes the external financing of productive investment more risky. Therefore Italian private firms benefit from inflation to the extent that they can generate enough self-financing to depend less on short-term credit. Correlatively they gain from depreciating the currency. The conjunction of a lax fiscal policy and a private business sector driven by price competitiveness on foreign markets has made nearly impossible for the central bank to keep stable exchange rates.

The relative importance of intermediated versus market financing matters because the adjustments of bank lending rates to changes in money market rates are not the same between countries. A recent study by the B.I.S provides some insight on this crucial question for the mutual awareness of the constraints of monetary interdependence between central banks. Table 4 shows the results of the 1994 B.I.S study which has been confirmed by more recent work in the European Monetary Institute.

Even if one assumes that the responses of short-term bank lending rates to money market rates are one-to-one when the adjustments have been completed, the speeds of adjustment can be very different. A slow adjustment means a two-tier structure of interest rates, analogous to the traded/ non traded price structure in goods markets. The relative price is a positive function of the real exchange rate when the traded goods sector is subjected to the law of one price. It is the channel by which domestic demand bears on the level of output in countries integrated by their trade sector. Similarly the degree of pass-through of money market rates to bank lending rates, when countries are financially integrated by the law of interest rate parity on their market rates, indicates the ability of monetary policy to pursue domestic objectives with fixed exchange rates.

Table 4 exhibits striking differences in the degrees of pass-through of the different countries. As one could have easily foreseen, Belgium and the Netherlands have very high pass-throughs. These small countries are already integrated with Germany in their real as well as their financial sectors. They constitute a quasi-monetary union with Germany. But the U.K and Spain, who have important asymmetries in their real sectors, are nevertheless highly integrated in their financial sectors. The contrast between both types of interdependencies entails conflict of objectives whenever they try to follow a strict exchange rate rule. Only France and Germany have a relatively low pass-through effect, with Italy in the middle.

Bringing the findings of tables 3 and 4 together, the position of Germany stands out. This country is by far the least dependent on foreign disturbances. All its non-financial sectors have a high share of their debts which is both long-term and fixed rate. A higher proportion of total private sector's debt than in other countries is intermediated by banks. Bank lending interest rates are relatively well insulated from monetary shocks. The robustness of the financial structure, taken together with the economic strength of the country, makes Germany the indisputable anchor of the E.M.S.

Among the major European countries, France has the closest financial structures to Germany. The same finding was pointed out herein above for competitiveness and industrial specialization. Real convergence between the two countries has advanced to the point that their joint willingness can provide the hard core of a monetary union to which smaller countries will be able to agglomerate (Belgium, Netherlands, Austria, Denmark).

Table 4
Pass-through effect of 1% change in money market rate on short-term bank lending rate

	Impact effect	Six months effect	Median lag*
Germany	0.37	0.58	4.5
France	0.31	0.43	5.6
Italy	0.33	0.77	2.8
Spain	0.76	0.98	0.7
U.K	0.85	1.00	0.4
Netherlands	0.80	0.97	0.5
Belgium	0.85	0.91	0.5

* The median lag is the number of months needed to reach 50% of the long-run effect.
Source: BIS, "National differences in interest rate transmission", Basle, march 1994.

-Financial asymmetries and convergence problems.

When the financial factors which account for the main asymmetries in the transmission of monetary policy are put together in macroeconomic models, one can hope for estimates of their overall impact on the objectives of monetary policy. There are formidable obstacles to these simulations however. Reliable models, embodying all the relevant financial mechanisms and quantifying all the relevant sensitivity parameters, are not currently available. This empirical analysis will undoubtedly become an important task for the European Monetary Institute. For the time being, preliminary work reported by the E.M.I points out to striking contrasts between the U.K on one hand, France and Germany on the other. Because of the much stronger response of prices to official interest rate changes, nominal GDP in the U.K reacts to a given change in interest rate more than twice as much as in the other two countries. Such a large difference of sensitivity to monetary shocks seems to indicate that the effects of the disparities in financial structures are reinforcing. As far as the U.K is concerned, the main reason which explains the decision of the government to abandon the ERM in september 1992 was the heavy indebtedness of households at short-term and variable rates.

It is not easy to figure out how this type of asymmetries can be reduced. It is not even obvious that they should be. Technically what is absolutely required to implement a single monetary policy is an homogeneous interbank market, an integrated interbank payment system and Ecu-redeemable securities to run open market operations at a European-wide level. One can even argue convincingly that the partial autonomy of bank lending rates in several countries is useful to shelter small business from the instability of financial markets and to finance investments whose social returns differ from market returns. Nonetheless, differences in the transmission of monetary policy can become a source of policy conflicts in a monetary union. They can complicate the conduct of a single monetary policy and

even the coordination of monetary policies during the transition. Part of the asymmetries pertains to public finance; they will be treated by the policies which are undertaken to meet the Maastricht criteria. The other ones basically oppose the U.K and the Continental countries. They refer to the prominent role of the City in world finance and to the relative importance devoted to intermediated versus market finance, which is much less in the U.K than in the Continental countries. They are one of the many conditions, admittedly a critical one, which makes the U.K reluctant to commit to the objective of monetary integration.

1.2.3. Convergence and the problem of public finance.

The criteria for public finance raise the most difficult questions for the transition to EMU. They have been criticised in principle by academics. Nonetheless, it was shown above why criteria of that type were unavoidable in a process of unification which is departing markedly from the optimal currency areas theory. Have such criteria been accepted however, how they shall be interpreted remains an open question. Public deficits and public debts call for different answers.

-Public deficits.

Too high a level of public deficit may be feared for different reasons. The most popular is the contention that a large public deficit will crowd out private investment. It might be possible for very large deficits. One shall nevertheless notice, keeping in mind the cases of Belgium and Italy, that the countries with the largest deficits are also the ones which generate the highest private savings relative to GDP. While it is true that Italy has a high level of long-run interest rate, the opposite occurs for Belgium. This country had a long-run rate substantially less than the U.K between 1990 and 1992 (prior to the devaluation of the Pound) in spite of a larger public deficit. The reason is that the U.K. has a much lower rate of household saving. The difference between Belgium and Italy results rather from the ability of Belgium to change the course of fiscal policy earlier (table 5). Because Italy has an underdeveloped tax system, the government cannot easily alter demand management by increasing revenues. It needs an overhaul of the tax system to acquire some fiscal flexibility. Meanwhile holders of government securities are reluctant to accept long maturity bonds. When the economy is weak, short term debt is increasing fast out of an average deficit already high and the central bank is forced to monetize part of the new issue. These structural rigidities are reflected in the level of long-term interest rates.

Besides, too ambitious a correction of financial imbalances might have adverse consequences if capital expenditures bear the brunt of the cut to get a substantial primary surplus. Because of its multiplier effect the cut has to be offset by a devaluation of the currency. With fixed exchange rates and rigid prices the jump of unemployment could be such that the marginal increase of unemployment subsidies matches the marginal diminution of capital expenditures. The Italian situation illustrates the consequences of a poor initial situation cum structural impediments on the convergence criteria. A progress toward the norm for public deficit could well be secured only at the expense of exchange rate stability, at least for a transient period. It is a vivid example of strategic choices that have to be made in the transition to EMU, stressing the need of multiple transitions.

The criteria of the Treaty must also be interpreted with respect to the positions of the countries in the business cycle. Tables 5 and 6 show OECD data for past years, forecasts for 1995 and 1996, then a baseline projection for the year 2000, for both the financial and the structural deficits. 2000 is supposed to be an average year, so that financial and structural balances coincide.

Table 5.
General government financial balances
Surplus (+) or deficit (-) as % of nominal GDP

	1980- 89 average	1990	1992	1993	1994	1995	1996	2000
Germ.	-2.1	-2.0	-2.9	-3.3	-2.7	-2.4	-1.8	-1.5
France	-2.1	-1.6	-3.9	-5.8	-5.7	-5.0	-4.0	-1.3
Italy	-11.0	-10.9	-9.5	-9.6	-9.7	-9.1	-7.8	-4.2
U.K	-2.0	-1.2	-6.2	-7.7	-6.8	-4.7	-3.2	-0.7
Belg.	-9.2	-5.4	-6.7	-6.6	-5.3	-4.6	-4.1	-2.2
Denm.	-2.7	-1.5	-2.6	-4.4	-4.2	-3.0	-2.2	+0.6
Neth.	-4.9	-5.1	-3.8	-3.3	-3.8	-3.6	-2.9	-1.8
Spain	-4.3	-4.1	-4.2	-7.5	-6.8	-6.1	-5.2	-2.9

Table 6.
General government structural balances
Surplus (+) or deficit (-) as % of potential GDP

	1980- 89 average	1990	1992	1993	1994	1995	1996
Germ.	-1.4	-3.2	-4.3	-2.7	-2.1	-1.8	-1.5
France	-1.6	-2.2	-3.4	-3.8	-3.7	-3.5	-3.1
Italy	-11.4	-12.4	-9.8	-8.7	-8.9	-8.5	-7.5
U.K	-1.7	-2.5	-3.7	-5.0	-4.7	-3.1	-2.0
Belg	-9.0	-6.4	-7.5	-5.2	-4.0	-3.8	-3.7
Denm.	-2.6	-0.2	-0.3	-1.9	-3.0	-2.5	-2.1
Neth.	-3.9	-5.5	-3.4	-1.6	-2.3	-2.6	-2.4
Spain	-3.3	-5.9	-4.2	-5.5	-4.7	-4.0	-3.5

Source: OECD economic outlook, n° 56, December 1994.

In depressed economic conditions, recent experience shows that automatic stabilizers create deficits well above the limits set by the criteria (table 5). If the limits were to be respected every year, irrespective to the position in the business cycle, the counter-cyclical function of fiscal policy would be paralysed. It is especially the case whenever the recession is European-wide. Since the Community budget is tiny and has no role in

macroeconomic management, a temporary slump in aggregate demand can only be alleviated by national fiscal policies. For reasons given when the rationale for the formal criteria was analysed, it is understandable that the Maastricht criteria remain unscathed. But the Treaty also recognizes the need for some margins of maneuver. For these margins not to be the pretext of a lax interpretation, they shall be sustained by a set of objective indicators and by a broadly accepted macroeconomic analysis; hence the use of auxiliary indicators like the structural and primary balances.

Adjusting for changes in economic activity helps measuring a fiscal situation more in line with the criteria of the Treaty. Objections to the adjustment could be made arguing that there is much arbitrariness in the estimates of the structural balances. The structural budget balance reflects what government revenues and expenditures would be if output was at its potential level. It thus depends crucially on the estimate of the output gap. Yet, comparing tables 5 and 6, one can see that financial and structural balances are close for the average of the decade 1980-89, as might have been expected since on the time span of a whole decade the fluctuations of output are averaged away. Admitting that structural estimates are reasonably reliable, one can use them to assess the nature and the extent of fiscal deterioration in recent years. It is a preliminary step before examining the scope for fiscal consolidation in the coming years. Table 7 shows how the recession of 1990-93 impinged upon underlying trends which were disparate among European countries.

Table 7
Changes in financial, structural and primary balances from the average 1980-89 to 1993
Improvements (+) or degradation (-) as % of nominal GDP

	Financial	Structural	Primary
Germany	-1.2	-1.3	-0.7
France	-3.7	-2.0	-2.3
Italy	+1.4	+2.7	+5.9
U.K	-5.7	-3.3	-6.5
Belgium	+2.4	+3.8	+3.4
Denmark	-1.7	+0.7	-1.8
Netherlands	+1.6	+2.3	+2.2
Spain	-3.2	-2.2	0.0

The situation is not as bad as it looks like if one simply measures the 1993 financial deficits against the threshold of 3%. The rise of the deficit in Germany was surprisingly small in view of the shock undergone by this country; but it was fully structural as expected. Three countries (France, U.K, Spain) experienced a clear deterioration since both financial and structural deficits increased, the latter making for more than half the overall adverse change. But the countries who had accumulated the worst public finance problems were able to improve their financial balances amidst the recession. They did it by a substantial improvement in their structural balances, brought by a sustained move

toward primary surpluses. The achievement of the Amato government in Italy was particularly impressive. Had not it be for the subsequent political turmoil following the 1994 election, Italy would have been on track to improve her structural balance at the same speed, as Belgium is doing and as Denmark had already done in the late eighties.

To outline the paths to convergence, OECD provides forecasts through 1996 and a reference scenario for 2000. The reference scenario is compatible with the assumption of a growth rate of 3% and an inflation rate of 2.5% per year from 1997 to 2000. On a structural basis, table 6 shows that all countries but Italy would have a deficit below the 3% threshold or would be close to the limit. It would be hard to reject the application of Belgium and France on the ground that their financial deficits are still around 4% in 1996 on view of the steady decline of their structural deficits. Along the baseline scenario which encompasses the objectives of fiscal consolidation for all the countries singled out in tables 5 and 6, financial balances will improve substantially to year 2000. This impressive fiscal consolidation will not be sufficient however to permit a dramatic reduction of public debt ratios to GDP.

-Public debt.

The public debts of every European countries have crept upward systematically. They exhibit considerable inertia since a downturn is not expected for nearly all countries until 1996 despite the spectacular fiscal consolidation just mentioned, let alone their ratio to GDP under 60% for a majority of countries. Table 8 provides the evidence.

*Table 8
General government gross public debt according to Maastricht definition.
Amount as % of nominal GDP.*

	1990	1992	1993	1994	1995	1996	2000
Germ.	43.8	44.1	48.1	51.1	59.1	58.3	54.9
France	35.4	39.6	45.8	49.5	52.4	53.8	54.1
Italy	97.9	108.4	118.6	122.4	125.0	125.3	120.9
U.K	35.4	41.8	48.4	53.0	55.2	55.3	50.8
Belg.	130.8	133.8	138.9	138.7	136.7	134.0	124.1
Denm.	59.6	68.8	79.6	81.7	82.8	83.1	78.2
Neth.	78.8	79.9	81.4	80.6	81.5	81.4	78.4
Spain	45.1	48.3	59.8	64.3	67.5	69.7	72.3

Source: OECD, op.cit.

The criterion for public debt is tricky. The ratio associates a stock (the public debt) with a flow (GDP). It is heavily determined by the past. A high ratio of debt to GDP says little about present and nothing about future policies, though the future fiscal path is the relevant information to evaluate the progress of convergence. It is why the Treaty states that one should pay attention to the trend and to the yearly change of the ratio. Before making an interpretation, one has to recall the reason of the public debt restraint:

sustainability of the debt profile, crowding-out of private investment, moral hazard, need to keep fiscal policy flexible in the monetary union. These arguments cannot be easily discarded. They must be weighed against the objections, perfectly valid, of economists who point out that in the long run there is no compelling reason for countries to have the same public debt ratio. If the marginal utilities of public versus private consumption are different from one country to another, if closing the real income gap entails a higher ratio of public capital expenditure in less developed countries, these divergences shall not preclude a monetary union. Following this line, a dynamically relevant criterion should introduce the variables which determine the profile of future revenues and public expenditures consistent with a steady growth path of potential GDP: future real interest rates and growth rates, marginal tax rates for plausible tax reforms, public consumption and investment dependent on demographic structures.

The OECD reference scenario is a crude attempt following the methodology. The resulting structural budget balance and gross public debt for terminal year 2000 reflect what government revenues and expenditures would be if potential output had grown in the range of 2.5 to 3%, inflation 2 to 3%, real long-term interest rates remaining around 7 to 8.5% (except for Italy where it would reach 11.5% in 2000). The figures for the gross public debts presented in table 8 on year 2000 illustrate a profile for each country. The profiles are auxiliary criteria which are useful to assess the present levels of the public debts relative to the 60% threshold, as recorded in the Treaty.

The figures of table 8 show the increase of the debt relative to GDP being reversed in most countries between 1996 and 2000. Italy and above all Belgium, the countries with by far the highest inherited ratios, achieve the most impressive decline. Yet the level of their debt is still appallingly remote from the 60% threshold. To be sure Italian progress will not even show up in 1996 and is dependent on the optimistic assumptions of the reference scenario thereafter. A rigorous interpretation of the criteria will eventually argue that fiscal consolidation is not advanced enough to warrant Italian participation to EMU at the turn of the century. The case of Belgium is different. The structural fiscal balance is consistently declining from 1992 on and will be doing so under the reference scenario. The downturn of the public debt has already occurred since 1993. Besides, Belgium has followed for a long time a monetary strategy of pegging to the D.M which has allowed lower long-term interest rates than would otherwise have been the case. It would be hard to deny Belgium the benefit of participation despite her still very high level of debt. The same conclusion is even more warranted for Denmark and the Netherlands who satisfy easily the public deficit criteria and who have stabilized the level of their debt while they have been in a quasi-monetary union with Germany for quite a long time.

The above theoretical considerations and the OECD prospective exercise suggest a practical way to overcome the problems due to the margins of interpretation in the Maastricht Treaty. The governments should commit to pluri-year fiscal programming, linked to macroeconomic scenarios of convergence. Since the criteria have to be interpreted, a collective control and an endorsement of national fiscal policies are required. The proper procedure is the multilateral surveillance process in the Council of Ministers of

the Community. Multilateral surveillance has the responsibility to judge the content of the convergence plans for public finance and their compatibility, to negotiate mutual adjustments and to find acceptable compromises. In the process of European integration, economic developments and political actions are closely intertwined.

PART II. STRATEGIES FOR A WORKABLE TRANSITION.

The obstacles to convergence have been studied in detail. Their knowledge constitutes a background for successful strategies. Instead of trying vainly to foresee the conducts of governments in the incoming inter-governmental conference and their possible outcomes, a scientific approach shall limit its ambition. With the benefits of the structural analysis in part I, the first task is to state the principles that should be followed by all strategies dedicated to establishing a monetary union before the end of the century. The second task is to shed some insight on ways to implement the said principles. They will be considered in turn.

II.1. Principles.

Three principles follow from the obstacles uncovered by the analysis of real convergence:

-Beyond the formal criteria, real convergence shall be given a high priority. Given the existing structural asymmetries, the transition paths to EMU shall be differentiated. Correlatively, application shall proceed from a self-selection of countries whose convergence policies have proved to be time-consistent.

-The highest degree of stability of exchange rates compatible with real convergence shall be pursued. Failure to do so would impair the credibility of the irrevocable pegging of parities when time approaches and would jeopardise the Single Market itself.

-The schedule embodied in the Treaty is a cornerstone for the compromise which makes the monetary union politically credible. It makes the union inescapable for the countries satisfying the criteria. It avoids the prisoner's dilemma which arises in a situation where a country can gain from others' sacrifices by renegeing on her commitment. Therefore sticking to the schedule is a shield against deferring the final goal indefinitely.

II.1.1. Multiple transitions and self-selection.

In the late eighties, the success of disinflation, the enlargement of the EMS, the dramatic improvement in general government finance of a few countries (namely Denmark, Ireland, the Netherlands), were interpreted by official circles and market opinion alike as a clue that a uniform pattern of transition was under way. Economic conditions of member countries were judged by financial markets as if macroeconomic fundamentals were gauged, not on their own significance, but on the future participation of the countries to the prospective union. The so-called convergence trade was the motive behind massive inflows of capital into high interest, high debt countries. The strong impact of political anticipations on market opinion helps explain why the surprisingly negative Danish referendum of June 1992 had such a catalytic effect on financial markets. The event triggered a paradigm change, i.e. a change in the cognitive scheme which picks up and weighs the variables held relevant by the markets at a particular time and which gives significance to news. The markets began to behave as if the political goal of monetary union had been discounted away. Expectations in the foreign exchange markets became

more disparate as market participants reverted to learning models which stressed the consistency of the commitment to the EMS against the present macroeconomic conditions of member countries. With heterogeneous opinions the markets became vulnerable to abrupt changes in belief about the reactions of governments to speculative attacks. Instead of being driven by a grand political design, market dynamics turned skeptic and occasionally jolted by self-fulfilling attacks.

Therefore restoring the credibility of the Treaty's objectives requires improving the markets' mood by working with the paradigm which is shaping their expectations: multiple transitions. The first part of the paper has shown that this principle has a serious economic underpinning. The structural asymmetries in real and financial sectors, the different magnitudes of imbalances in general government finance, the widely distinct public acceptance of the sacrifices of convergence, call for different patterns of transition.

For a tightly-linked core of countries, effective mutual adjustments are at hand without relying on flexible exchange rates. For others, such adjustments would be counter-productive. This acknowledgement gives rise to a strategy of self-selection. Since August 1993, the EMS has been designed to permit leading countries to go forward without being destabilized by those who are unable or unwilling to pursue a fast track convergence policy.

The notion of multiple transitions fits with the historical experience of European integration. The Community has been expanding through successive stages, whereby some countries who did not initially accept the common rules joined later. Moreover the principle of multiple transitions and correlative self-selection is conform to the Maastricht Treaty. The differentiation between countries will not be an arbitrary discrimination; nor will it be the result of conflicting alliances which spread disaster in the past. The differentiation will occur according to formal criteria commonly agreed-upon beforehand. If the procedures are strictly enforced, no feeling of exclusion should develop. All countries are being entitled to enter the monetary union. Since the formal criteria are ex-ante and will remain unaltered, countries who do not converge fast enough to become part of the hard-core are guaranteed to receiving the same treatment, while they have reached a similar quality of convergence.

The differentiated transition will be temporary, periodically revised and subjected to multilateral surveillance which all countries are participating to. Therefore the looked-upon principle of differentiated transitions is opposed to the idea of a "two-speed Europe", whereby a core of countries will establish a narrow monetary union and build barriers to entry thereafter. On the contrary, the principle of differentiated transitions, because it takes into account all economic and political conditions, eases the realization of the monetary union for every country.

II.1.2. De facto stability of exchange rates.

Contrary to the attitude of some governments in the last two and a half years, a flexible transition needs the highest degree of exchange rate stability compatible with real

convergence. Grossly undervalued currencies, as some countries are indulging in, are an obstacle to convergence and at least delay the transition. Too high a degree of exchange rate instability will bring uncertainty on the parities of irrevocable pegging when decisions of entry have to be made and trigger speculation in the markets. It is why the Treaty stipulates that member countries shall treat their exchange rate policy as a matter of common interest. Does this preoccupation mean anything short of a return to a narrow margin ERM which is ruled out by consensus of the monetary authorities?

Wide margins for the more converging countries and even flexible exchange rates for the less converging ones are useful to ease the necessary real adjustments and to absorb non-fundamental shocks. They remove the one-way risk that speculators enjoy when narrow margin bands are not credible. They allow temporary shocks to be partly absorbed by exchange rate changes, thus alleviating pressures on domestic interest rates. They enlarge the scope of monetary policy which acquires more short-term discretion. They subsequently call for a redefinition of exchange rate stability in the framework of the Maastricht criteria.

For the hard-core countries, monetary policies pursue the stability of exchange rates in the medium run relative to the anchor country, namely Germany. Pursuing such stability within wide margins takes as an intermediary objective, at least implicitly, the term structure of interest rates in a particular country relative to the anchor country. Indeed, the differential patterns of the yield curves embody market expectations on future exchange rate changes adjusted for relative risk premia. Therefore the formal criterion based on long-run interest rate differentials aims at measuring market opinion on the predictability of monetary policies in a wide-margin framework which preserves short-run flexibility. This procedure gives rise to the definition of *de facto* stability. This is the stability perceived by financial markets when interest rate differentials, but the shortest range of the yield curve, remain under a specific threshold (2% maximum differential for long run rates in the Treaty). It means that the markets forecast no adverse influence of short run volatility in both interest and exchange rates on nominal convergence. Since the hard core countries respect also a tight criterion for their trend inflation differentials, the close relationship between their nominal interest rates implies a tight link between their real interest rates as well. Therefore the *de facto* exchange rate stability defined above is consistent with real convergence, while the large band for exchange rates is interpreted as the normal band.

II.1.3. Sticking to the schedule.

The Treaty stipulates two benchmark years (1997 and 1999) when elaborate procedures are applied to gauge the conditions of convergence. If a minimal subset of countries meeting the conditions of convergence is required in 1997 to make a monetary union, no such restriction applies in 1999. The eligible countries are supposed to go ahead (except for Denmark and the U.K) with no opting-out clause. It makes the monetary union ineluctable while the criteria have been met, because no country objecting to the union in principle will be able to stifle the whole process.

Politically, the schedule and related procedures are the best guarantee for the regime drastic change not to appear discretionary. Each country shall be entitled to self-selection as far as her own convergence profile is concerned; but no country shall be entitled to contest the procedures of selection themselves. It is why sticking to the schedule is the best way to avoid making the transition arbitrary.

Economically, the formal schedule reduces uncertainty if it is strictly enforced. If on the contrary doubts are raised on the procedures of selection, excess volatility could ensue in foreign exchange markets as self-fulfilling speculations develop. In turn, the disturbances generated by those speculations would disturb the process of selection by damaging macroeconomic conditions at the time of the inquiry and debate on the countries' positions relative to the criteria.

II.2. Implementation.

Three principles have been outlined to procure a workable transition: self-selection displaying a hard core of countries convergent enough for the regime change, de facto stability of exchange rates as a market validation of monetary policies, schedule preserving as a shield against political maneuvers to undermine the transition. In the context of unstable financial markets, particularly because they are vulnerable to outside disturbances, economic policies compatible with the above principles might not be sufficient. Drawing from the lessons of the EMS crises, when several currencies were attacked in spite of the firm commitment of the authorities and the quality of the convergence, one can reasonably argue that more is needed to achieve an orderly transition.

Some proposals can be made to strengthen the ERM during the transition. On one hand, the capacity to stem speculative attacks depends on a better exchange rate management of the predictability/ flexibility trade-off. On the other hand, monetary policies in the core countries should be carried on with a degree of co-responsibility that anticipates the future unification of monetary policy. Three proposals implement these ideas: keeping the wide bands to preserve flexibility, improving the financing mechanism of the ERM to enhance predictability, learning co-responsibility to prepare monetary policy to EMU.

II.2.1 Keeping the wide band.

Wide margins have several advantages. They reduce the likelihood of a parity change whenever real convergence has not advanced enough. They also introduce a two-way risk in foreign exchange markets. Then they permit hard-core countries to pursue a policy of de facto exchange rate stability in the medium run, while absorbing some short-run financial pressure with exchange rate changes. Because these countries are firmly

committed to convergence policies, introducing wide margins has actually fostered the credibility of the ERM. Finally, since the probability of a realignment is getting much lower with wide margins, the transition is made easier if they are treated as normal margins.

Other countries, still needing large exchange rate changes to improve real convergence, can use wide margins without disturbing the more stable countries' exchange rates. Wide margins boost self-selection since the divergences due to the inability or the unwillingness of a particular country to give priority to convergence can be reflected faster on the exchange rate of this country. However questions can be raised about the fate of countries who are not candidates for the first tier of EMU membership. Will they keep incentives to achieve convergence later? Will they benefit from the stability of the more advanced countries? Positive answers are required for the transition not to degenerate into a permanent two-tier Europe.

To monitor the policies of countries demanding a longer transition and to discourage an excess volatility of their exchange rates, some loose exchange rate rules connected to a surveillance procedure will be helpful. The rules could define target zones for the real exchange rate, consistent with the convergence path projected by the governments of those countries. If the target zones adjusted for nominal price changes slide into the + or - 15% official fluctuation band, the surveillance procedure can get an understanding on the opportunity to realign the central parity. Such a device would limit instability of exchange rates in the less convergent countries and would prevent competitive devaluations for the benefit of the system as a whole. Because excessive real exchange rate fluctuations are harmful between countries linked together in a single market, a real exchange rate regime cum multilateral surveillance should encompass all the countries participating to the single market.

II.2.2.Improving the financing mechanism.

Even wide margins do not rule out speculative attacks under financial shocks of unusual magnitude. Those shocks can jeopardize the bands of fluctuation or provoke an overshooting of exchange rates within the bands. Both disturbances can blur the selection of convergent countries and create difficulties to fix the parities at the opening of EMU. Since wide margins have great virtues, they are here to stay; their drawbacks must be taken care of by other means.

What is needed is a kind of co-operation between the central banks of already converging countries being able to stem speculative attacks triggered by non-fundamental shocks. If the joint response against a self-validating attack is credible, it can diminish the likelihood of such attacks on hard core currencies. Everything else equal, a successful defence would make the ERM more robust and would allow lower interest rate differentials with the anchor country. On the opposite, less converging countries will be denied the joint support of their currencies. They will thus be incited to devalue quickly or to make more efforts toward convergence if they want the stability of their exchange rates to be effectively supported.

Conceptually a non-fundamental speculation is analogous to a bank run. It is a pure liquidity problem created by the self-validating attack. Only liquidity assistance provided by a lender-of-last-resort can stifle a full-fledged liquidity crisis. The need of a similar mechanism to implement a tight exchange rate rule was recognized in the design of the EMS. A very short term financing is available whenever a couple of currencies reach the margin of the fluctuation band. This financing is automatic, unconditional, unlimited in principle. However it is well known that moral hazard always plagues lender-of-last-resort rescues. To contain this negative externality, conditions must be attached to the non-market emergency financing. The purpose of the conditions is to make emergency liquidity assistance costly enough for the beneficiary and to reduce the risk taken by the lender. Under proper conditions, a lender-of-last-resort facility can thus be analyzed as a contingent contract designed to screen solvent and insolvent firms.

The financing mechanism of the EMS is flawed on two respects as compared to the contractual approach hinted at above. First, no conditionality is attached to the very short term financing since it is supposed to be redeemed in three months. However the Bundesbank has repeatedly objected that unlimited marginal interventions disturb the German money supply despite sterilization operations. Second, relying on marginal interventions is doomed to be ineffective if the band is not highly credible. The experience of numerous episodes teaches that infra-marginal interventions are often required to convince markets that the authorities' commitment to the exchange rate rule is firm. But there has never been any agreement on the financing of infra-marginal interventions. When financial shocks occurred, the markets were identifying a one-way risk between currencies with similar fundamentals. An important reason was the failure of the authorities of the anchor currency and of the authorities of the currency under attack to agree on the opportunity, the scale and the time span for financing cooperative infra-marginal interventions.

It follows that a contractual approach among independent central banks, concerning the financing of their infra-marginal interventions, could be a significant contribution to the stability of exchange rates between hard-core countries. To make stable exchange rates credible, a contract should be set up by which long and large enough infra-marginal financing would be provided, but at a cost for the beneficiary. The cost should imply restraints on the monetary policy of the debtor stringent enough, not only to guarantee the creditor, but also to discriminate between countries able and willing to keep up their parities on one hand, countries who do not or cannot make the stability of their exchange rates a prominent objective on the other. Therefore the strengthening of the ERM would fit with the principle of self-selection. It is also dependent on the follow-up of the convergence process. Independent central banks, having acknowledged the quality of their partners' currencies, can conclude mutually advantageous contracts without alienating their sovereignty. They can also begin with implementing a broader cooperation.

II.2.3. Learning co-responsibility.

Another way to improve the ERM in the prospect of EMU is to start organizing information on monetary policy in the European Monetary Institute (EMI), in view of a better co-operation between central banks. The presumption is that central banks of convergent countries, more subject to common shocks than to asymmetrical ones, can learn from an institutionalized debate about their mutual experience. On time, they will deliver better responses to global shocks. Mutually compatible monetary policies will be a preview of the future common policy required at the start of EMU.

The cooperative process can be made progressive at the initiative of EMI. Using its links with the national central banks, the Institute has the data and the staff to study the compatibility of ongoing monetary policies and to elaborate prospective solutions to problems encountered during the transition. The materials can be debated in the EMI Council, recommendations and advice issued for the benefit of national central banks, which remain fully responsible for the effective conduct of their policies.

A more ambitious cooperation suggests further steps whereby deviations with respect to agreed-upon scenarios will be detected. A diagnosis of their causes and an estimate of their consequences will be made by the EMI staff and the national central banks under the auspices of the EMI Council. The information thus provided will undoubtedly increase the consistency of national responses.

The learning process will limit discretionary policies, not by imposing tougher constraints but by reconciling national interests. Accumulating a common experience, it will become the forerunner of the decision making process of the future European central bank. To fulfil this ambition the learning process must reach a common understanding on monetary indicators and on the channels of transmission of monetary impulses. The financial asymmetries pointed out in the first part of this paper make divergences between central banks difficult to overcome. Yet this learning process is ineluctable for the sake of EMU. The relevance of the diagnoses and recommendations provided by the Institute will be crucial to develop a spirit of co-operation which will in turn boost a renewal of market confidence about a successful transition.

CONCLUSION.

The paper has acknowledged a shortcoming in the Maastricht Treaty. The Treaty does not define an explicit transition to EMU. The experiment of a gradual path based on quasi-fixed exchange rates and predominant nominal restraints failed in 1992. Drawing lessons from this failure is essential to spell out the principles and practical solutions of a workable transition. The paper has tried to identify the obstacles to convergence. It has also outlined a strategy which gives priority to as robust as possible a transition, without being at odds with the final goals of the Treaty. The conclusion of this exercise concerns both the economics of regional integration and the political process of institution-building which brings coherence to the potentially dissonant forces unleashed by competition.

A regional integration which projects to tie together heterogeneous countries is doomed to encounter serious difficulties. The project will find no support in the theory of optimal currency areas. This essentially static theory assumes perfect markets and rests on the neutrality of money, which paradoxically makes a monetary union largely irrelevant whenever it is possible! Instead the relevant concept is convergence. In an environment of imperfect markets it has both nominal and real dimensions. Convergence is not the outcome of spontaneous market mechanisms. It must be promoted by policies which are the engine of regional integration.

The main problem which makes an orderly process of convergence unlikely is the highly different dynamics of productive and financial sectors, while liberalization is going on and competition is rising. Be it in Spain or in Mexico, capital flows had the same effects albeit admittedly not on the same magnitude. Because of different time horizons and speeds of adjustment, capital inflows spurred by integration distort the conditions of competitiveness in the real sectors. They induce a divorce between nominal and real convergence which becomes non sustainable and threatens the whole integration process altogether. This pathology is inherent in any integration which encompasses countries at different stages of development. Keeping integration on a workable track requires policies conceived to reconcile nominal and real convergence. The relevant policies cannot be engineered by separate governments alone. Whatever the final goal may be, a monetary union or not, integration brings about macroeconomic externalities which require a compatibility between national policies.

A compromise between nominal and real convergence is a set of policies that makes both aspects reinforce each other instead of conflicting with each other. The gist of the compromise is the balance between the flexibility of a realistic real exchange rate and the predictability of a reasonably stable nominal exchange rate. Because the compromise is country-specific, depending on initial situations and on the effectiveness of structural adjustments, each country shall be made able to select her own path to convergence.

Self-selection entails a danger for convergence opposite to the peril of forced uniformity. With self-selection the benefits of integration can easily be lost if regional integration does not give to the adjusting countries an environment more stable than the

world economy. The environment can only be provided by a center which is made of a hard-core of countries in the EC and of a dominant country in the NAFTA area. What is important is that the center pursues policies dedicated to the stability of the whole region. The consistency of the convergence paths also needs some multilateral surveillance mechanism. It has not to be as institutionalized as in the EC. But a forum to debate convergence programs and to issue early warnings to countries carrying on non-sustainable policies is part of a minimal institution-building if market confidence is to be preserved.

A stable center and a multilateral surveillance mechanism create a climate which ensures continuous capital inflows into countries where convergence needs foreign finance the most. If regional integration means something, it ought to prevent a crisis "à la Mexicaine". It is why a loose exchange rate agreement combined with a conditional financing mechanism would be less costly, both economically and politically, than the massive bail-out the U.S. government had to undertake. With both economic and financial integration proceeding together between countries with highly asymmetric structures, smooth adjustments cannot be delivered by financial markets alone. The guidance of inter-governmental arrangements helps absorb the adverse externalities which develop along with the benefits of regional integration.

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