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Ansgar Belke* and Daniel Gros**

Asymmetric Shocks and EMU: Is There a Need for a Stability Fund?

A recent report by the European Parliament looks into questions relating to the likelihood of asymmetric shocks under EMU, the system's ability to absorb them and the need for new instruments and mechanisms. Our authors evaluate the report and qualify it on some important accounts, adding a proposal of their own on how to cope with unanticipated and asymmetric regional shocks in the euro area.

Many commentators and politicians (especially from the UK and the USA) predict that EMU will not be viable because it will not be able to deal with asymmetric shocks, i.e. shocks that impact on few (or any one) of the participating countries. Now that EMU will go ahead on 1st January 1999 with eleven participating countries, the forecasts of "doom and gloom" need serious examination. For this reason, a recent Report by the European Parliament (EP) prepared by Metten looks into the following questions:¹ Are the chances of asymmetric shocks brought on by EMU rising or falling? How great is the likelihood of asymmetric shocks? What can be done to forestall asymmetric shocks? Are there sufficient means and mechanisms in place to absorb possible asymmetric shocks? If not, what new mechanisms are necessary? All these questions are of serious concern since they relate to the viability of the EMU project. Moreover, there is a debate going on in the profession between those who maintain that EMU will perform badly with respect to asymmetric shocks compared to other monetary regimes and those who claim that the problem of asymmetric shocks has been grossly exaggerated.²

This paper is organized as follows. In the first part, the main arguments contained in the EP Report on the adjustment mechanism in cases of asymmetric shocks are highlighted. Following that, the Draft Report is evaluated and qualified on some important accounts. Finally, a concrete proposal on how to cope with unanticipated and asymmetric regional shocks in the euro area is developed and conclusions are drawn.

The European Parliament Report

The Report at first lists some of the most severe shocks the European union member states were confronted with in the past. These include the sudden sharp rises in primary-product prices (1973 and 1981 oil crises) and the sharp falls in the exchange rate of the dollar, e.g. in 1985 and 1995. A common feature of these shocks were suddenly and sharply deteriorating competitive positions of all European economies.

¹ See A. Metten: Draft Report on 'Asymmetric Shock or Shock Specific to One Country' (INI0972), European Parliament, Part B: Explanatory Statement, Committee on Economic and Monetary Affairs and Industrial Policy, 16 July, Brussels 1998. For endemic difficulties of operationalisation cf. M. Funke: The Nature of Shocks in Europe and in Germany, in: *Economica*, Vol. 64, 1997, pp. 461-469.

² Proponents of the first view are D. Currie, P. Levine, J. Pearlman: The Choice of 'Conservative' Central Bankers in Open Economies - Monetary Regime Options for Europe, in: *Economic Journal*, Vol. 106, 1996, pp. 345-358. The second view is favoured e.g. by J. Méliitz: The Current Impasse in Research on Optimum Currency Areas, in: *European Economic Review*, Vol. 39, 1995, pp. 492-500.

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However, some EU member states were more affected by these shocks than others so that they had an asymmetric impact. Moreover, the Report maintains that policy reactions to these shocks diverged widely. Some analysts even maintain that it was divergent reactions to shocks that were in fact common that posed the most serious problem for the EU (asymmetric effects of common shocks).

The Report also refers to shocks which were entirely specific to one country (asymmetric shocks), e.g. the coming onstream of North Sea petroleum production in the early 1980's which provided the United Kingdom with a vigorous balance of payments surplus and a strongly overvalued pound which caused problems for manufacturing. Huge transfers caused purchasing power to explode in Germany's five new *Länder*. German inflation increased and the Bundesbank raised interest rates significantly. This put the brakes not only on the German economy but, with all other central banks following suit, on the whole EU economy.

Rising Chances of Asymmetric Shocks?

The next question the Report tackles is: will the chances of asymmetric shocks specific to one country under EMU rise or fall? The Report feels inclined to forecast a fall in asymmetric shocks as the most likely outcome. It is interesting to note that the Report refers to the removal under EMU of the option of competitive devaluations as a first reason. Second, the Report expects that the effect of increased policy coordination will be to reduce the likelihood of policy-induced shocks (policy convergence). Third, it maintains that the closer integration of European economies under EMU will diminish the likelihood of shocks specific to one country. To underline its forecast, the Report refers to the fact that, compared with the USA, the EU member countries (perhaps except Finland) display a much lower level of sectoral specialisation (e.g. in the motor vehicles sector).

The advent of the euro and the single monetary policy – so the argument of the Report goes – would, however, also lead to an additional potential source of asymmetric shocks. The uniform interest rate to be fixed by the ECB might be entirely unsuited to individual member states in the light of the fact that the business cycle across the Union is as yet less than fully synchronized. The ECB would be forced to orient its policies towards the European average, and not to react to individual (national) peaks and troughs.³ The Report mentions Ireland as a good example, whose

exuberantly growing economy will be confronted with the need to reduce short-term interest rates by 3.5% on transition to EMU. However, the Report argues that a significant overheating of the economy can in principle be avoided by appropriate contractionary fiscal policy in EMU. In contrast to Ireland, the UK which currently also is in a different stage of the business cycle compared with other EU members (rapid growth, high interest rates, and – caused by the former – a strong pound) traditionally refuses to use contractionary fiscal policy to slow down its economy and thus has no reason to join EMU at this time.

The Report concludes that the likelihood of asymmetric shocks to any significant degree can be assessed as low, but cannot be excluded altogether. It states that, in order to absorb unavoidable shocks specific to one country, member states can resort to their own budgets or rely on EMU as a means of more pressure on the social partners to exercise wage-restraint.⁴ In that respect, the Report refers to the plan drawn up by trade unions and employers in Finland for making pension premiums dependent on the economic cycle – higher than average at the peaks, lower than average in the troughs.⁵

The Role of Automatic Stabilisers

The Report then stresses the significance of the so-called automatic stabilisers (here interpreted as not offsetting falling tax revenues and rising expenditure on unemployment benefits by imposing extra-public spending cuts) as a means of absorbing asymmetric shocks. Moreover, the Report refers to a magnitude of 2-3% of GDP – that automatic stabilisers can easily absorb and need to produce their full effect – as the reason for basing the medium term benchmark budget in the Stability Pact at an equilibrium level, given the 3% budget deficit criterion. Finally, it

³ See M. B. Canzoneri, B. Diba, G. Eudey: Trends in European Productivity and Real Exchange Rates: Implications for the Maastricht Convergence Criteria and for Inflation Targets after EMU, CEPR Discussion Paper, No. 1417, June, London 1996. They state that different regional inflation rates in the non-tradable sector might continue to exist under EMU. This might pose problems for a uniform monetary policy.

⁴ For formal treatments see A. Beike: EWU, Geldpolitik und Reform der Europäischen Arbeitsmärkte, in: Jahrbuch für Wirtschaftswissenschaften, Vol. 49, 1998, pp. 26-50; and L. Calmfors: Unemployment, Labour Market Reform and EMU, Keynote Speech at the 9th Annual Conference of the Association of Labour Market Economists, Aarhus/Denmark 1997.

⁵ However, the Report limits the usefulness of wage-restraint as a means to counteract asymmetric shocks to small member states. Its main (Keynesian-style but not explicitly model-based) argument is that in larger countries wage moderation might lead to a loss of purchasing power in the system.

elaborates on the problems which arise if budgetary equilibrium (over the cycle) is not achieved (as is actually expected by some analysts for a transition period after the introduction of the euro). In this case, in the reading of the Report, letting the automatic stabilisers work will cause the reference value of 3% to be exceeded, with stiff financial penalties according to the Stability Pact as a consequence. The economic and social crisis might thus be further deepened and sharpened because the automatic stabilizer mechanism cannot be used fully.

The (Putative) Case for a Stabilisation Fund

Following the logic of the Report, the central question now is: can countries absorb large shocks if budget deficits remain significantly above their long run desired level (especially in the short term and in bigger member states)? The Report implicitly answers with a clear no, since – in its view – the Maastricht Treaty in principle has anticipated the potential conflict between automatic stabilizers and the Stability Pact. Art. 103a of the EC Treaty makes provision for a stabilisation fund to combat shocks specific to one country. The Council, acting unanimously, may grant financial assistance “where a Member State is in difficulties or is seriously threatened with severe difficulties caused by exceptional occurrences beyond its control”. In cases of natural disasters, the Council may even act by qualified majority.

The Report mentions that a stabilisation fund to combat shocks specific to any one country can be established on a Commission proposal. It urgently demands that the Commission must quickly submit a proposal for such a stabilisation fund to be established, since EMU is imminent to prepare the requisite judicial framework. It becomes even more concrete in proposing two facilities: one facility for macroeconomic assistance, and another facility for assistance in the event of a natural disaster. The first facility would require unanimity in the Council. Conditions would be imposed on the policies to be pursued by the recipient country, and instalments would normally be paid only subject to compliance with them. Taken the latter for granted, the Report concludes that these framework provisions would make a relatively high ceiling level of assistance reasonable. Under these circumstances and following the Report’s proposals, assistance could be granted via loans issued on the capital markets against member state or Union guarantees and/or an interest-rate subsidy charged to the Union budget. The second “natural disaster”

facility could be approved more readily because unanimity of the Council is not required. In the light of current EU practice, interest rate subsidies charged to the Union budget should be the standard instrument in this case.

Competition for the Stability Pact?

The Report claims that the more member state budgets approach their equilibrium values, the more a stability fund would work as a safety net of last resort for “situations of absolute necessity”. But in view of the fact that in the first years of EMU most budgets would still be far away from equilibrium the safety net function of a stability fund would be even more indispensable in the near future. Moreover, it argues that it is unlikely that the existence of a stability fund would *per se* lead to higher deficits. This would run contrary to all agreements and would not at all be in the interest of the potential recipient countries themselves. The reason is that the Council could render the macroeconomic policy conditions underlying the receipt of assistance as tough as it liked. Moreover, the toughest member of the Council would lay down the rules of the game since unanimous approval would be required for loans. As stringent conditions would make recipient member states eager to dispense with the assistance as quickly as possible, the stability fund could be relied upon as a complement to the stability pact.

The Report acknowledges that in the period of transition to balanced budgets paradoxical situations could occur which might lead to a conflict between the stability fund and the stability pact. For example, if member states should experience shocks during the years of transition to budget consolidation, the 3%-reference value for budget deficits would most probably be significantly exceeded. It would be absurd to grant member states Community assistance under Article 103a of the Maastricht Treaty (stability fund) and at the same time require them to pay fines according to the stability pact. However, the Report mentions that the stability pact’s wording (“as a rule”) vests the Council with discretion not to proceed with the imposition of sanctions in order to avoid this kind of contradiction.

The report of the EP concludes with three questions: (1) What properties should the European Stabilization Fund have? Should it only consist of loans, or grants as well? (2) Should structural funds and even the EU budget itself be given a potentially stabilizing role, by creating the option to advance or to

delay payments in cases of asymmetric shocks, extremely high growth or recession? (3) Could the ECB contribute to stabilization of asymmetric shocks by providing additional liquidity to countries hit by such shocks?⁶

We want to discuss only the first issue on which Parliament has taken a strong position by requesting the Commission to make a concrete proposal as soon as possible. Regarding the second issue we would argue that the way the Structural Funds are organised at present makes delaying or advancing payments infeasible. But we see the case for making a reserve in the Cohesion Funds for this purpose (or adapting the Structural Funds, see our proposal below). The third issue raised by the EP makes sense only if one assumes that it is based on an idea by Casella in which a regional effect would operate essentially through rebalancing the composition of the ECB's portfolio of national government liabilities. Voss maintains that his scheme of "co-insurance" would divide the co-insurance objective from the control of the aggregate money stock. By this, money-finance-generated transfers would become possible without any impact on overall anti-inflation policies.⁷ But since the ECB has been barred from holding government paper anyway the Casella effect cannot be used in the case of EMU. Moreover, the general thrust of proposal three demands an excessive regionalization of monetary policy. This is completely out of the question. There seems to be no way to differentiate a monetary policy by region (arbitrage). This is not done in any currency area and would require extensive segmentation of financial/capital markets, exactly the opposite of what EMU is meant to achieve by eliminating separate currencies with the associated currency risks.⁸

Evaluation of the EP Report

The Draft Report by the European Parliament is a careful statement that weighs the evidence in an even-handed manner from its point of view. However,

⁶ As proposed by K. Liebscher, President of the Austrian Central Bank, in: *Financial Times*, 3rd July 1998; and G. Voss: *Monetary Integration, Uncertainty and the Role of Money Finance*, in: *Economica*, Vol. 65, 1997, pp. 231-145.

⁷ See A. Casella: *Participation in a Currency Union*, in: *American Economic Review*, Vol. 82, 1992, pp. 940-963; and G. Voss, *op. cit.*

⁸ See R. Dornbusch, C. Favero, F. Giavazzi: *Immediate Challenges for the European Central Bank*, in: D. Begg, J. von Hagen, C. Wyplosz, K. L. Zimmermann (eds.): *EMU: Prospects and Challenges for the Euro*, Blackwell, 1998, p. 52. However, in the run-up to EMU integrated securities markets emerged.

we are sceptical about the usefulness of any formal large-scale shock absorber mechanism that operates at the national level because we believe that the relevant shocks are at the industry and regional level. We would favour the creation of a shock absorber mechanism that allows regions to deal with large exogenous asymmetric shocks. We will develop a concrete proposal below.

Will asymmetric shocks increase or vanish in the monetary union? We agree broadly with the conclusion that the likelihood of significant asymmetric shocks is low, but that they cannot be excluded altogether. However, we would like to add that this statement should be qualified on at least five counts.

Country-specific Policy Shocks

One has to distinguish between exogenous shocks, i.e. shocks that come from nature or developments in the markets and shocks that are caused by the political system. Examples of the former are oil price shocks or natural disasters as mentioned in the Report. In our view such shocks are very unlikely to be so large that they can affect an entire country (as opposed to particular regions, see below). Political shocks are much more relevant at the country level because politics and large parts of (e.g. labour market) legislation remain national.⁹ Examples might include fiscal policy or an overly rigid 35-hour week or a rise in wages as a result of unions' and employers' expectations that the rise will be accommodated by monetary or – more important under EMU – fiscal expansion, which both would increase labour costs, a politically motivated wage explosion (à la May 1968), problems with the pension system etc. Further examples are "political business cycles" at the national level (with diverging election dates) and, often connected with that, public purchases and the terms of trade. Bayoumi and Eichengreen add that a shock of exogenous origin can be policy-induced: "If domestic policy itself is the source of the disturbances, monetary unification with a group of countries less susceptible to such pressures may imply a welfare improvement".¹⁰ Thus, policy shocks are not

⁹ See A. Belke: *Political Business Cycles in the German Labour Market? Empirical Evidence in the Light of the Lucas-Critique*, 1999, forthcoming in: *Public Choice*; or M. Bergman: *International Evidence on the Sources of Macroeconomic Fluctuations*, in: *European Economic Review*, Vol. 40, 1995, pp. 1237-1258.

¹⁰ T. Bayoumi, B. Eichengreen: *One Money or Many? Analysing the Prospects for Monetary Unification in Various Parts of the World*, Princeton University 1994.

unavoidable and tend to be even mitigated by EMU. This conclusion is corroborated among others by the findings reached by Christodoulakis, Dimelis and Kollintzas indicating that currently observed asymmetric shocks are subject to the Lucas-critique: "... Our findings suggest that observed differences in shocks and business cycles will tend to melt down as common institutions and policies start to emerge". Moreover, it is not always clear that exchange rate adjustment is a desirable consequence in the case of domestic policy shocks from a global point of view.¹¹

The Regional versus the National Dimension

One obvious concern about EMU is that its "one size fits all" monetary policy cannot do justice to such a heterogeneous area as the EMU.¹² There has been considerable theoretical and empirical research on this general issue, but it has usually emphasised differences across countries, assuming implicitly (instead of testing explicitly) that countries are homogeneous entities. It has been shown that the impact upon output of interest rate changes varies between countries, with respect to both timing and magnitude. However, the implicit assumption of homogeneous entities is not warranted for a number of member countries.¹³ The general concern about the cost of having a common policy for a heterogeneous area has two aspects:

The common monetary policy stance might not be optimal for all participants because they might be at different stages of the business cycle.

The common monetary policy might have quite different effects in countries/regions with different financial and real structures.

Different Business Cycles?

A lot of the discussion on this issue is at the superficial level in the sense that it is argued that a country is at present at a different stage of the business cycle than the core EMU (essentially Germany and France) and hence "needs" a different monetary policy. Most of the more in-depth academic research has concentrated on the co-movement in national business cycle indicators and has documented that co-movements have increased in the EMS period. In our view the growth rates or output gaps of most EMU member countries and the dynamic profile of business cycles are now so similar that it is difficult to argue that there are important differences in national business cycles.¹⁴ Moreover, with only a few exceptions, expected and actual inflation rates have converged as well. Some long run differences in growth rates are desirable anyway to allow poorer member countries to catch up. The countries that experience too much growth and/or inflationary pressures always have the possibility of restraining demand through a restrictive fiscal policy, which is desirable anyway in most countries to achieve a budget that is balanced on a cyclically adjusted basis. Finally, Frankel and Rose show empirically that less exchange rate variability is usually associated with more business cycle synchronization. A further reason is that, as EMU leads to further increases in (intra-industrial) trade in the future, synchronized business cycles have to be expected under EMU.¹⁵

The regional dimension has been emphasised more by Viñals and Jimeno as well as Forni and Reichlin. Although these two studies look at two different indicators (unemployment versus GDP), they both find that the regional component is at least as important as the national one in explaining short and long run

¹¹ See A. Belke, D. Gros: Estimating the Costs and Benefits of EMU: The Impact of External Shocks on Labour Markets, CentER for Economic Research Discussion Papers, No. 9795, Tilburg/Netherlands 1997, forthcoming *Weltwirtschaftliches Archiv* 1/1999; N. Christodoulakis, S. P. Dimelis, T. Kollintzas: Comparisons of Business Cycles in the EC: Idiosyncrasies and Regularities, in: *Economica*, Vol. 245, 1995, pp. 1-27; and A. Fatás: Discussion of Blanchard, Peri, in: D. Begg, J. von Hagen, C. Wyplosz, K. L. Zimmermann (eds.), op. cit., p. 253.

¹² Under EMU, there will be a change from a German monetary reaction function linked to the rest of Europe via the EMS and in which European conditions are insignificant, to joint decision-making with European targets. See R. Dornbusch, C. Favero, F. Giavazzi, op. cit., pp. 20 f. In that sense, a "one size fits all" monetary policy for heterogeneous areas has already existed in the past decade.

¹³ "Large" econometric model results are available from the Bank for International Settlements: Financial Structure and the Monetary Policy Transmission Mechanism, Basle 1995; "small" econometric model results from F. Barran, V. Coudert, B. Mojon: La Transmission des Politiques Monétaires Dans les Pays Européens, in: *Revue Française d'Economie*, 1997; E. Britton, J. Whitley: Comparing the Monetary Transmission Mechanism in France, Germany and the United Kingdom: Some Issues and Results, in: *Bank of England Quarterly Bulletin*, Vol. 37, No. 2, 1997; and S. Gerlach, F. Smets: The Monetary Transmission Mechanism: Evidence from the G7-Countries, BIS Discussion Paper, Basle 1995.

¹⁴ See N. Christodoulakis, S. P. Dimelis, T. Kollintzas, op. cit.; and A. K. Rose: Comments on R. Dornbusch, C. Favero and F. Giavazzi: Immediate Challenges for the European Central Bank, in: D. Begg et al. (eds.), op. cit., pp. 57-61. Countries like the UK which are currently out of phase are not likely to enter EMU very soon. Furthermore, it is even open to debate whether different business cycle conditions after the start of EMU will really lead to problems for monetary policy. See the remarks by R. Portes, L. Reichlin in the general discussion on R. Dornbusch, C. Favero, F. Giavazzi, op. cit.

¹⁵ See J. Frankel, A. K. Rose: The Endogeneity of the Optimum Currency Area Criteria, in: *Economic Journal*, Vol. 108, 1998, pp. 1009-1025; and A. K. Rose, op. cit., p. 59.

movements in unemployment. According to Viñals and Jimeno, almost two-thirds of the conditional variance of EU subnational unemployment rates might be explained by region-specific factors. The study by Forni and Reichlin comes out with a somewhat smaller but nevertheless significant impact of the regional shock component on annual real regional growth rates.¹⁶

Differences in Financing Patterns

The research on the differential effects of a common policy has emphasized differences in financing structures *a priori* as the main reason why a common policy might have differential effects.¹⁷ Since qualitative differences in financing structures across countries (the role of banks, the extent of consumer debt, whether borrowing is at fixed or variable interest rates, the role of collateral in the provision of banks etc.) are indeed to be observed, many have concluded that differences in the transmission mechanism of monetary policy should be expected. Their argument is mainly based on the so-called "(broad) credit" and "credit constraint" channel.¹⁸ However, in a Modigliani-Miller world differential impacts of a common policy would not necessarily result from differences in financing structures. Differences in financing structures would just reflect differences in personal and corporate taxes, but decisions about investment could still be independent from the financing structure at the aggregate level.

Empirical work has usually estimated the time profile of the impact of monetary policy (e.g. a change in short term interest rates) on output and prices via some vector autoregression (VAR) or similar econometric technique. This kind of empirical work usually shows that the impact of monetary policy differs across countries, both in terms of the size of the impact on output and prices and the speed with which the transmission takes place. However, all these estimates are rather imprecise. While the point estimates are sometimes clearly different, the

confidence intervals overlap in most cases considerably so that it is rather difficult to make any inference based on them. Most important, no explicit tests of the hypothesis that transmission mechanisms are equal across countries have been conducted.

Moreover, all these estimates are based on past data, often including the much more inflationary 1970s and 1980s, during which nominal interest rates were higher (but real rates often negative) and more variable and the yield curve was quite different from what one would expect in an environment of price stability. In addition, simulations for EMU are often neither run under the adequate assumption of exogenous intra-European exchange rates nor under the assumption of a simultaneous change in monetary policy in all EMU countries. It is thus questionable whether one can use these results to predict how EMU will work.¹⁹

The emphasis placed on differences in financing structures as the main reason for differential effects of a common policy is difficult to understand because financing structures will presumably change in the different environment that comes with the introduction of the euro, and this adjustment (e.g. the development of an EU-wide liquid market for corporate bonds which diminishes the role of banks in the intermediation of savings) should be a lot quicker than changes in the structures of the real economy. Both deregulation of the financial system at the national level and the removal of barriers at EU level are already starting to lead to a convergence of systems. Continuing low inflation and EMU itself should speed up this change.²⁰

Differences in Real Economic Structures

However, differences in the real sphere might be even more important in determining the differential

¹⁶ See M. Forni, L. Reichlin: National Forces and Local Economies: Europe and the United States, CEPR Discussion Paper No. 1632, London 1997. The study by J. Viñals, J. F. Jimeno: Monetary Union and European Unemployment, CEPR Discussion Paper No. 1485, London 1996, suffers a bit from the fact that their econometric procedure does not allow truly idiosyncratic regional shocks to be separated from national or EU shocks that have divergent regional effects. However, M. Obstfeld, G. Peri: Asymmetric Shocks: Regional Non-Adjustment and Fiscal Policy, in: D. Begg et al. (eds.), op. cit., pp. 205-247, argue that the latter should not be too different from each other.

¹⁷ See International Monetary Fund: World Economic Outlook, Washington/DC, October 1996. According to the IMF study, a one hundred basis points growth in the policy rate leads to a change of 45 basis points in Germany, 51 in France and 73 in Italy.

¹⁸ See B. Bernanke, M. Gertler: Inside the Black Box: The Credit Channel of Monetary Transmission Mechanism, in: Journal of Economic Perspectives, Vol. 92, 1995, pp. 27-48; and N. Kiyotaki, J. Moore: Credit Cycles, in: Journal of Political Economy, Vol. 105, 1997, pp. 211-249.

¹⁹ For the latter points see R. Dornbusch, C. Favero, F. Giavazzi, op. cit., pp. 49 ff., who themselves present augmented estimates along these lines. However, if one looks at their survey table 5, the lower part for exogenous intra-ERM exchange rates, impacts of monetary policy appear to be quite similar across EU countries. In their table 9, asymmetric impacts of a common monetary policy result above all for Sweden and the UK, both non-member countries of EMU. See also A. K. Rose, op. cit., p. 58.

²⁰ Cf. e.g. A. K. Rose, op. cit., p. 59 f. Certainly, this process could be speeded up even further, if differential capital adequacy requirements let the corporate bond market and equity finance develop as an alternative to bank lending and if certain legal and tax changes could speed up this process.

effects of a common monetary policy. The two main channels through which monetary policy works in the short run are the interest rate and the exchange rate. There are thus two (measurable) characteristics that should determine differences in the impact of a common monetary policy: (1) openness and (2) the importance of investment.

□ *Openness* indicates to what extent a change in the exchange rate of the euro will influence countries or regions differently.²¹ The differences between member countries are large in this respect, the ratio of exports (of goods and services) to GDP ranges from a low of 26-27% for France and Germany to a high of 82% for Ireland among the EMU10. If one looks only at extra-EMU exports, which constitute the appropriate measure for potential differences in the impact of shifts in the external exchange rate of the euro the numbers are much smaller because a large proportion of the trade of EMU members is within the euro area itself. The euro area is much less open than individual member countries. But there are still important differences. Portugal and Spain stand out as exporting relatively little outside the euro area; their extra-EMU10 exports accounts for about 7% of GDP as compared to over 20% for Ireland. The latter is, however, a special case because of the importance of its trade with the UK. For the other EMU member countries the weight of trade with the UK is much smaller so that the extra-EMU10 trade accounts for less than 20% of GDP for the next most open economy among the EMU10, namely Belgium. It has not been widely noted that similar differences also exist within countries. Within Germany, Italy and Spain there are some regions which practically do not export (export to GDP ratios of about 5%) whereas other regions are heavily dependent on exports (export/GDP ratios above 25%). These groups straddle countries. One would expect that output and unemployment in the highly open regions is more strongly influenced by the exchange rate than in the essentially closed ones. All this is based only on the Eurostat data for trade in goods, which, however, should still reflect 70-80% of all trade except for Spain and Portugal.

□ If one accepts that *investment* is the part of demand that is most sensitive to changes in interest rates, *differences in the importance of investment* ("interest exposure") should be another factor that might lead to differential impacts of a common policy. The differences across countries and regions are less marked in this respect, at least for overall investment. Overall gross fixed capital formation varies only

between about 17.5% (Belgium, Italy) and 24% of GDP (Austria, Portugal) across EMU member countries. The differences across regions within countries like Italy or Germany are somewhat larger. For example, within Italy gross fixed capital formation amounts to less than 15% of regional GDP in several regions, but reaches 24% of GDP or more in others. The differences regarding investment in industry are even larger.²²

Our conclusion would be that there are two basic reasons why a common monetary policy might have differential effects across the euro area: differences in financing structures and differences in real economic structures. We would argue that the differences in real economic structures (essentially the importance of investments and exports) are more important than the differences in financing structures.²³ As these differences in real economic structures are as important across regions within member countries as they are at the national level across member countries, EMU does not add much to the problem. The latter already existed before as monetary policy was always the same for the entire country. Regional impacts of a common monetary policy are less an argument against EMU since regions, i.e. areas with high labour-mobility, are obviously smaller than countries.²⁴ Moreover, recent research on the USA shows that even within the USA the common monetary policy has differential impacts on different states, i.e. significant regional divergences in the response of output to monetary shocks in three of eight regions. These differences can be shown to be linked to differences in real economic structures.²⁵ From this point of view,

²¹ More open countries will tend to suffer more from a loss in international competitiveness caused by tight monetary policy and will profit more from the corresponding terms of trade improvement.

²² For similar conclusions concerning the question as to whether differential regional effects translate into diverging impacts across countries, see R. Dornbusch, C. Favero, F. Giavazzi, op. cit., pp. 28 ff.

²³ By this, we support von Hagen's view in the general discussion on R. Dornbusch, C. Favero, F. Giavazzi, op. cit., that "... the transmission argument could be applied to different regions ... only if there were regional differences in the portfolio of industries". However, von Hagen adds: "The extent to which these regional differences matter depends on the model of decision making on the ECB board".

²⁴ See A. K. Rose, op. cit., p. 58. However, further research should be undertaken in order to examine the role of wage-price structures and degrees of indebtedness which as "initial conditions" for monetary policy differ across countries. Cf. A. Belke: EWU, Geldpolitik und Reform der Europäischen Arbeitsmärkte, op. cit.

²⁵ G. A. Carlino, R. De Fina: Monetary Policy and the U.S. States and Regions: Some Implications for Common Currency Areas, Paper Presented at the Conference "A Common Currency, Uncommon Regions", Center for European Integration, July 24-25, Bonn 1998.

one could argue that the USA is too large to be an optimum currency area. However, nobody discusses a split-up of the USA into regional currency zones.

The Regional Dimension of Asymmetric Shocks

The preceding arguments have shown that one has to distinguish between the regional and the national dimension. As industry tends to be concentrated by region, shocks from markets and technology tend to have a regional impact. Most member countries are baskets of several regions so that these micro shocks tend to average out at the national level. Does this apply only to the five larger member states? Not really, even some of the smaller member states show large differences, e.g. Belgium (Flanders, Bruxelles and Wallonia have quite different economic structures) or Portugal (North (textiles), Lisbon (automobiles, finance, government), Alentejo (agriculture, tourism)). The only member countries that are not diversified and thus exposed to shocks are Ireland, Finland and Luxembourg (possibly also Portugal).²⁶

Although a clear-cut judgement is not possible up to now, it seems fair to say that for most member countries industry-specific shocks are more important than country-specific ones.²⁷ The relatively even distribution of industries, as reflected in similar export structures, might be affected by EMU in the spirit of Kenen in the sense that the latter might lead to more capital mobility, to the elimination of trade barriers and to regional agglomeration of specialised industries (more intra-industry trade). Additionally, the elimination of separate currencies might lead to a less even spread of investment between regions since enterprises do not need to set up plants in different currency areas any more in order to hedge the exchange rate risk.²⁸

However, agglomeration would take place at the regional, not the national level. Moreover, a large dispersion of regional growth rates of EU member countries indicates that the primary source of shocks is regional. Empirical research has shown that a high proportion of shocks has been regionally asymmetric, which is likely to continue as "a fact of life" within the euro area as well. Since each country represents a diversified portfolio of regions (with less variability in regional unemployment rates within Northern European countries), the net effect of many different regional shocks is minor at the national level.²⁹ This is not surprising in the light of considerable research which points out that real wage flexibility between regions has been less than that between countries. On the one hand, the possibility of exchange devaluation between countries might have made real wage reductions easier. On the other hand, large economic disparities between regions of the same country (and the corresponding migration) have not been politically acceptable.³⁰ Moreover, if intra-industry trade dominates inter-industry trade under EMU, increased trade will lead to more business cycle synchronization – a constellation compatible with a minor impact of many different regional shocks at the national level. Finally, clusters of regions with a similar industrial structure often extend across national borders. Thus, industry-specific shocks will affect regions from different countries at the same time.³¹

This assessment has a bearing on the proposal for EU shock absorbers. In our view it is extremely unlikely that any of the reasonably diversified member states will be hit by a truly policy independent national shock. The ability to vary national exchange rates or to enact a country-specific monetary policy is of little value in encountering such asymmetric shocks. The main reason for asymmetric shocks are, in our view, differences in national wage-setting procedures. However, they are also, at least partially, policy dependent and could in any case be adjusted by the

²⁶ M. Emerson, D. Gros: Implications for Portugal of Agenda 2000, Enlargement and the Future Financial Perspectives of the European Union, mimeo, Brussels 1998, provide more material on this issue.

²⁷ See R. Helg et al.: How Much (A)symmetry in Europe? Evidence from Industrial Sectors, in: *European Economic Review*, Vol. 39, 1995, pp. 1017-1041; and A. K. Rose, *op. cit.*, p. 59.

²⁸ D. O. Cushman: US Bilateral Trade Flows and Exchange Risk During the Floating Period, in: *Journal of International Economics*, Vol. 24, 1988, pp. 317-330. P. B. Kenen: The Theory of Optimum Currency Areas: An Eclectic View, in: R. A. Mundell, A. K. Swoboda (eds.): *Monetary Problems of the International Economy*, University of Chicago Press, 1969, pp. 41-60. See also J. Frankel, A. Rose, *op. cit.*; P. Krugman: Increasing Returns and Economic Geography, in: *Journal of Political Economy*, Vol. 99, 1991, pp. 483-499; P. Krugman: Lessons from Massachusetts for EMU, in: F. Torres, F. Giavazzi (eds.): *Adjustment and Growth in the European Monetary Union*, Cambridge 1993, pp. 241-260.; T. Peters: *European Monetary Union and Labour Markets: What to Expect?*, in: *International Labour Review*, Vol. 134, pp. 315-332; and A. K. Rose, *op. cit.*, p. 59.

²⁹ P. de Grauwe, W. Vanhaverbeke: Is Europe an Optimum Currency Area? Evidence from Regional Data, in: P. R. Masson, M. P. Taylor (eds.): *Policy Issues in the Operation of Currency Unions*, Cambridge University Press, 1993, pp. 111-130.

³⁰ As M. Obstfeld, G. Peri, *op. cit.*, p. 235, put it, "... large swings in relative regional prices could be politically problematic for integration at the national level...". The ongoing transfers from Western to Eastern Germany and continental wage-setting institutions in general are a good example in that respect.

³¹ See J. Frankel, A. K. Rose, *op. cit.*; and S. de Nardis, A. Goglio, M. Malgarini: *Regional Specialization and Shocks in Europe*, in: *Weltwirtschaftliches Archiv*, Vol. 132, 1994, pp. 197-214.

private sector if they turn out to be unsuitable for EMU. There is a potential need for mechanisms within the euro area to cope with the impacts of asymmetric shocks for relative regional incomes, employment and growth (see below). The latter might even become more severe under EMU. That is to say, capital mobility as a shock-absorber is not costless.

Effect on EU Unemployment

The discussion so far has touched the potential for shocks, taking as the implicit basis the optimum currency area (OCA) approach. This approach starts from the premise that when an external shock hits the economy, it is easier to adjust the exchange rate than domestic prices or wages. Most economists accept the general idea behind this approach, namely that nominal wages are usually sticky in the short run and that it is therefore easier to adjust to external shocks and obtain changes in the real exchange rate or the terms of trade through a movement in the exchange rate. But there is little agreement on how important these "external" shocks have been in reality. Will the loss of the exchange rate instrument lead to massive unemployment because large negative external shocks are likely? Or do external shocks play only a marginal role in the evolution of unemployment? The presumption of most economists would be that external shocks should have a significant impact at least for small countries. Thus, one key question to ask in evaluating the economic case for the necessity of an adjustment mechanism in cases of asymmetric shocks in EMU is: do external shocks (i.e. shocks to exports and/or the exchange rate) have a strong impact on (un)employment in member countries?³²

We find for EU economies that external shocks have little impact on unemployment, especially if these shocks are adjusted for common business cycles. However, they appear to a certain extent to be more important (though in many cases not to the large extent which is usually expected for the tradable sector) in the evolution of manufacturing employment. The results vary from country to country; for about half of the EU member states a significant impact has to be rejected. Taking into account potential shock absorbers (exchange rates, fiscal and monetary policy) leaves the results unchanged. By contrast (and strikingly in spite of a similar share in EU GDP: 30% versus 20% for investment), internal shocks, i.e. to investment, strongly influence (un)em-

ployment. This difference in the results suggests immediately that hysteresis cannot be the reason for the absence of a correlation between export shocks and (un)employment, since more significant results come out with respect to the impact of (comparably variable) investment demand shocks. The loss of the exchange rate instrument will not lead to massive unemployment problems due to asymmetric external shocks.

This has a clear bearing on the proposal for EU shock absorbers: the macroeconomic welfare of the member states in terms of increasing involuntary unemployment is reduced in EMU by less than previously expected even if these countries are hit by asymmetric export demand shocks. Moreover, under EMU over 60% of member states' external trade will become domestic transactions. External trade will then only account for 10-15% of GDP (depending upon whether all 15 economies participate in the end). As a consequence, the exposure to external shocks will be very low (i.e. comparable to that of the more autarkic US economy) compared to the past vulnerability of the separate countries.³³

Asymmetric Shocks and Intra-ERM Exchange Rate Variability

The OCA approach usually asks the question: what does a country lose by giving up the exchange rate as an adjustment instrument? Implicit in this approach is the view that the alternative to participating in a monetary union is a world in which exchange rates move only in response to shocks and offset them automatically. But this might not be the alternative that is available in reality. Politicians have always asserted that exchange rates often do not move along with fundamentals and that their variability is costly. Recent research has shown that the variability that one observes in foreign exchange markets cannot be explained consistently by the behaviour of fundamentals and asymmetric shocks.³⁴ If one accepts the

³² This is an empirical issue that has not been addressed in the literature up to now and has only recently been tackled by A. Belke, D. Gros: Estimating the Costs and Benefits of EMU: The Impact of External Shocks on Labour Markets, op. cit.

³³ G. S. Tavlas: The International Use of the US Dollar: An Optimum Currency Area Perspective, Blackwell 1997.

³⁴ For one of the most recent contributions see R. P. Flood, A. K. Rose: Understanding Exchange Rate Volatility Without the Contrivance of Macroeconomics, CEPR Discussion Paper No. 1944, London 1998. See also A. Fatás: Discussion of Blanchard, Peri, op. cit., p. 252.

finding that actual exchange rate variability is – at least to a certain extent – excessive, one should ask whether it is just a nuisance or whether it has a negative impact on the real sector.³⁵

Research by Belke and Gros³⁶ finds that intra-European exchange rate variability has a statistically strong and economically non-negligible positive impact on unemployment and a negative effect on employment and investment for most EU member countries (incl. France and Germany). Investment seems to play the dominant role in the transmission mechanism from exchange rate volatility to (un)employment via profitability (pricing to market). This is not limited to the short term. Their evidence is less consistent for dollar variability. Robustness tests show that this result holds up in the presence of policy instruments (e.g. level of real effective exchange rate, interest rate spread) and cyclical variables (e.g. GDP growth) that might also have an impact on exchange rate variability. A reverse causality is rejected. A simple model of the “option value of waiting” suggests that even short term spikes in volatility can have a strong impact on investment and employment. The main implication for the proposal of EU shock-absorbers is: macroeconomic welfare of member states in terms of significantly shrinking involuntary unemployment will increase in EMU since these countries should not be hit by asymmetric exchange rate variability shocks any more. The relative unimportance of external trade will render a policy of “benign neglect” with respect to the variability of the euro vis-à-vis the dollar possible, even if the latter should increase because intra-ERM variability will be suppressed under EMU.

Integration of Central and Eastern European Economies

What does the integration of the Central and Eastern European economies imply with respect to the probability of asymmetric shocks? The integration of the Central European applicants into the EU does not necessarily mean a medium or long term asymmetric shock for the EMU members. Most of the trade integration has already taken place as the EU no longer has any significant barriers against imports from the associated states (and most of them have also eliminated their barriers against EU exports). The catching up of these countries would, of course, mean that their exports tend to grow faster than trade in general and if this growth is concentrated in certain industries this could cause adjustment problems.

However, these would be industry-specific, not country-specific (see above). There is little evidence so far that exports from the associated states are concentrated only in labour-intensive industries and that they would tend to displace more than proportionally exports from poorer member states. Although there is a certain correlation between the export patterns of the associated states and that of Portugal there is no evidence that the doubling of EU imports from the associated states has displaced Portuguese exports to any significant extent. The basic reason for this is that in many of the products that constitute the main exports of the Central European countries there is a world market in which the main suppliers are China, India or some of the Asian ex-dragons.

While the continuing integration of the candidate countries in the world trading system and the expansion of their trade with the EU does not constitute a shock (or a serious source of future shocks) the current upheaval in world financial markets could constitute a shock for the countries that trade relatively more with the Central European countries (e.g. Austria and Germany). The danger is now that financial markets attack the currencies of some candidate countries. Poland is certainly in a vulnerable position given its current account deficit and the unresolved structural problems in its banking system. Moreover, it should not be forgotten that without EMU there might have been a recurrence of the intra-European crisis of 1995. In that year some tensions in the EMS resulted from both internal (Jacques Chirac's election campaign promises of more expansionary policies) and external factors (significant weakness of some of the currencies which had broken their links in 1992 (lira, Swedish kronor)) and led to a “growth pause” in Europe. Compared to this alternative the asymmetric shocks from a collapse of the candidate countries are a small cost to bear. If anything, turbulence in the world economy (e.g. Russia's collapse) has strengthened the case for

³⁵ See A. Belke: Wechselkursfixierung und Beschäftigung: Die Kosten und Nutzen einer EWU, in: R. Hasse, W. Schäfer (eds.): Die ökonomischen Außenbeziehungen der EWU: währungs- und handelspolitische Aspekte, Göttingen 1997, pp. 259-295; A. Belke, D. Gros: Evidence on the Costs of Intra-European Exchange Rate Variability, Center for Economic Research Discussion Paper No. 9814, Tilburg/Netherlands 1998; and A. Belke, D. Gros: How Costly Is Intra-European Exchange Rate Variability? Paper Presented at the IMF Staff Seminar, August 28th, Washington/DC 1998.

³⁶ A. Belke, D. Gros: Evidence on the Costs of Intra-European Exchange Rate Variability, op. cit.; A. Belke, D. Gros: How Costly Is Intra-European Exchange Rate Variability?, op. cit.

EMU. Currency turmoil in Denmark, Sweden and Norway – outside the Euro bloc – is far greater than the recent mild tremor in Italy.³⁷

As stressed by the theory of OCAs, members of a common currency area should have efficient mechanisms at their disposal to cope with asymmetric shocks. These mechanisms are usually divided into two categories: market-based adjustment mechanisms and institutional mechanisms of government intervention, mainly fiscal transfers.³⁸

Market-based Adjustment Mechanisms

It is often argued that international labour mobility as a market-based adjustment mechanism becomes a key adjustment parameter when the exchange rate disappears as an adjustment instrument. It is well known that many empirical studies point to low international mobility in Europe compared with the USA.³⁹ However, these studies have to be qualified. First, Greenwood rejects the hypothesis that unemployment is a significant factor in explaining migration flows in the USA. Second, it has not been examined yet to what extent the single currency has facilitated labour mobility within the USA. Third, with new technologies, occupational mobility (i.e. employability) instead of geographical mobility might become more important.⁴⁰ Fourth, the lack of international mobility is irrelevant as there is also little inter-regional labour mobility in existing "monetary unions"

which coincide with existing EU nations.⁴¹ International labour movements (in Europe) have now increased to a point where they are of an order of magnitude comparable to inter-regional migration within member countries. The problems which the already existing monetary unions such as Germany, Italy, Spain and Belgium face because there is little inter-regional mobility are not affected by EMU.⁴²

Differences in labour mobility might simply reflect a divergent incidence of asymmetric shocks.⁴³ But the most commonly accepted explanation is that barriers to migration (as e.g. non-transferability of pension rights, restrictions on the right to social security etc.) are higher in the EU than in the USA. However, the main problem with this kind of explanation is that it mainly refers to migration *between* member countries but does not take into account that labour mobility seems to be equally low *within* those countries, as indicated above.

A further question is whether EMU provides incentives to reduce some of the relative price rigidities that exist. Indeed the desirability of more flexibility of relative regional prices (as spelled out clearly by Obstfeld and Peri as well as by Fatás⁴⁴) as compared to relative international prices remains. We could include reform of the housing market as a key element to making labour more flexible as some studies reveal a negative relationship between the private rental housing stock and unemployment for EU countries.⁴⁵ However, the literature has not come to any clear-cut solution regarding the impact of EMU on the likelihood of labour market reforms. At the moment, the EU labour markets do not seem to be sufficiently flexible to lead to more occupational mobility and to cope with shocks under EMU more efficiently than

³⁷ See Financial Times: The Challenge for the ECB, Comment & Analysis, Wednesday, September 2nd, 1998, p. 11. In the last week of August there was minor speculation against the lira. Spreads between German and both French and Italian bonds have widened following Russia's default and devaluation.

³⁸ See e.g. D. Begg et al., op. cit., p. 11.

³⁹ See the seminal study by O. J. Blanchard, L. F. Katz: Regional Evolutions, Brookings Papers on Economic Activity 1, Washington, DC 1992, pp. 1-75; and, based on the same methodology, J. Decressin, A. Fatás: Regional Labour Market Dynamics in Europe, in: European Economic Review, Vol. 39, 1995, pp. 1627-1655. Some later studies seem to confirm these results. B. Eichengreen: Labour Markets and European Monetary Unification, in: P. R. Masson, M. P. Taylor (eds.): Policy Issues in the Operation of Currency Unions, Cambridge University Press 1993, shows that the elasticity of interregional migratory flows with respect to internal wages and employment differentials is smaller in the UK and Italy than in the USA. According to results based on Eurostat data by T. Peladigis: Optimum Currency Area Approach and the Third Stage of EMU: A Review of Recent Evidence, in: Rivista Internazionale di Scienze Economiche e Commerciali, Vol. 43, 1996, pp. 759-789, migration within the EU as a percent of total population was less than 1% on average in 1995 compared to about 3% in the USA.

⁴⁰ See M. J. Greenwood: Research on Internal Migration in the United States: A Survey, in: Journal of Economic Literature, Vol. 13, 1975, pp. 397-344; M. J. Greenwood: Human Migration: Theory, Models and Empirical Studies, in: Journal of Regional Science, Vol. 25, 1985, pp. 521-544; and B. Patterson, S. Amati: Adjustment within the Single Currency Area in Response to Asymmetric Shocks, Economic Affairs Series ECON-104, Working Paper, EP, Directorate-General for Research, August, Brussels 1998.

⁴¹ This points to the fact that linguistic, cultural, legal (tax and social security system, residence restrictions) and other differences only play a limited role in explaining low geographical labour mobility in Europe. The latter is thus unlikely to be an important adjustment mechanism under EMU. See B. Patterson, S. Amati, op. cit., pp. 18 ff., on the importance of another market-based mechanism, i.e. capital mobility.

⁴² See D. Gros, N. Thygesen: European Monetary Integration, 2nd ed., Longman, Harlow 1998, pp. 284 f.; M. Obstfeld, G. Peri, op. cit.; and B. Patterson, S. Amati, op. cit., pp. 41 ff.

⁴³ This hypothesis is finally rejected by M. Obstfeld, G. Peri, op. cit., pp. 223 ff. A reason for the rejection of this hypothesis is that macroeconomic events (e.g. oil price changes, real depreciations) display different impacts on different regions and that common shocks may be transmitted to unemployment by means of regionally diverging persistence mechanisms. See M. Forni, L. Reichlin, op. cit.

⁴⁴ See M. Obstfeld, G. Peri, op. cit.; A. Fatás: Discussion of Blanchard, Peri, op. cit.

⁴⁵ See A. Oswald: A Conjecture on the Explanation for High Unemployment in Industrialised Countries: Part I, Paper presented at the EALE Conference, Aarhus/Denmark, September 1997.

before.⁴⁶ However, much of the debate on the need for more labour market flexibility under EMU might be besides the point since the effectiveness of exchange-rate flexibility is (and has been for decades) itself open to debate.⁴⁷

There is one country where the importance of increasing wage flexibility under EMU has been recognised. We would argue that the Finnish example with its fund for bad times is something that other countries should also consider. However, Finland is unique among the EU members in being almost a "one product economy" (it was not until the early nineties that high-tech goods complemented its mainly wood-based export structure). As argued above, other member countries might consider similar insurance mechanisms at the industry or regional level, but not necessarily at the national level. But the political willingness or – even more promising in that respect – market pressure to use these instruments is an important precondition in that respect.

Institutional Adjustment Mechanisms

To what extent are market mechanisms other than the above necessary and available in an optimum currency area? The answer depends on the character of the shocks (short- or long-term, cyclical or structural) and on the incentives embodied in additional institutional mechanisms. Institutional mechanisms for the transfer of resources can be automatic or discretionary. An important question related to both automatic and discretionary mechanisms is much discussed in the literature: does the EU already have a mechanism for autonomous fiscal adjustments at its disposal? Since national budgets in the EU account for between 43% (UK) and 66% (Sweden) of GDP as compared with the EU budget/GDP ratio "capped" at 1.27%, a high degree

of fiscal redistribution between regions seems to be available already within member states by means of national fiscal policies.

However, according to Fatás it is still open to debate whether this mechanism for encountering asymmetric shocks within a member country is also suited to deal with asymmetries between the regions of the euro as a whole. On the one hand, he concludes that national systems provide at least 50% of the inter-regional "fiscal insurance" that would be delivered by a US-level federal budget. On the other hand, regions of some countries do not profit as much as others from relying on national budgets as compared to a large EU budget.⁴⁸ Finally, it seems to be clear that the current EU budget (1.27% of EU-GDP) cannot provide automatic transfers and cannot therefore form an adjustment mechanism similar to that of the USA. According to some recent studies motivated by the McDougall Report,⁴⁹ the US federal fiscal system offsets 30-40% of the difference across states in the *level* of income per capita automatically (slightly less than insinuated by the McDougall Report) in spite of its mobile labour force.⁵⁰ Consequently, a system of "fiscal federalism" does not seem to be realistic and politically feasible under EMU.

However, key potential adjustment instruments would be discretionary national fiscal policy and discretionary transfers from the EU budget. With respect to the former, the main problem is a practical one, namely, that in theory this is a flexible instrument, but in reality the instrument is much less flexible and subject to immense political pressures. Ireland is a good case in point. The overheating of its economy would call for urgent action on the fiscal front, but this is difficult, not only because it is generally difficult to

⁴⁸ Commission of the European Communities: Report of the Study Group on the Role of Public Finance in European Integration, Economic and Financial Series No. A13, Brussels 1977.

⁴⁶ A. Belke: Maastricht – Implications of a Centralised Currency and Monetary Policy for European Labour Markets, in: J. T. Addison, P. J. J. Welfens (eds.): Labor Markets and Social Security – Wage Costs, Social Security Financing and Labor Market Reforms in Europe, Berlin et al. 1998, pp. 195-247; L. Calmfors, op. cit.; and A. K. Rose, op. cit.

⁴⁷ See A. Belke, D. Gros: Evidence on the Costs of Intra-European Exchange Rate Variability, op. cit.; A. Belke, D. Gros: How Costly Is Intra-European Exchange Rate Variability?, op. cit.; and D. Gros, N. Thygesen, op. cit., pp. 223 ff. For example, M. Obstfeld: Floating Exchange Rates: Experience and Prospects, Brookings Papers on Economic Activity, Vol. 2, 1985, pp. 369-464, doubts whether in the light of real wage stickiness in the EU the conclusion is warranted that devaluations are the more effective mechanism to counter asymmetric shocks.

⁴⁸ See A. Fatás: Does EMU Need a Fiscal Federation?, in: D. Begg et al. (eds.), op. cit., 1998, pp. 163-192.

⁴⁹ However, A. Fatás: Does EMU Need a Fiscal Federation?, op. cit., and J. von Hagen: Fiscal Arrangements in a Monetary Union: Evidence from the U.S., in: D. Fair, C. de Boissieu (eds.): Fiscal Policy, Taxes, and the Financial System in an Increasingly Integrated Europe, Kluwer, London 1992, pp. 337-360, challenge the extent to which "fiscal federalism" in the US has provided "interstate insurance" and correct the results gained by X. Sala-i-Martin, J. D. Sachs: Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States, in: M. B. Canzoneri et al. (eds.): Establishing a Central Bank: Issues in Europe and Lessons from the US, Cambridge 1992, pp. 195-219; and T. Bayoumi, P. R. Masson: Fiscal Flows in the United States and Canada: Lessons for Monetary Union in Europe, in: European Economic Review, Vol. 39, 1995, pp. 253-274, downwards by a factor of three. Moreover, this result does not imply that "fiscal federalism" in the USA has provided insurance against shocks (i.e. changes in relative incomes across states). See D. Gros, N. Thygesen, op. cit., p. 361.

raise taxes or to cut public expenditures even during good times, but also because of government commitments towards the trade unions. The second instrument, discretionary transfers from the EU, might from a technical (as opposed to a Public Choice) point of view play a certain role in meeting asymmetric shocks. Specific transfers to regions in the event of specific shocks might take the form of payments of cash based on some key, transfers linked to special projects, or grants/loans administered by the European Investment Bank (which might include interest subsidies from the EU budget because the credit of a depressed regional authority is rated lower than that of the central authority). Thus, funding can come either from taxation or from borrowing.

Why not include automatic stabilizers in the set of shock-absorbing instruments already available in the member countries? Calculations by Gros and Thygesen⁵¹ clearly show that automatic stabilisers – which are emphasized throughout the Report by Metten⁵² – can explain only a small fraction of variability of fiscal policy with respect to EU countries. Therefore, Metten's criticism that the Pact for Stability does not allow room for automatic stabilizers seems to be grossly exaggerated. Moreover, research by Méltitz strongly indicates that automatic stabilizers are not important in reality. In a sample of 19 OECD countries (incl. EU countries) current public expenditure has been strongly procyclical over the last decades: large deteriorations in deficits often occurred when income grew faster than average.⁵³

In sum, many seem ready to conclude that the EU is not prepared well for asymmetric shocks because of the lack of labour mobility, the missing relative price flexibility and the absence of an adequate system of European fiscal transfers. However, recent literature on optimum currency areas emphasizes the regional character of the deficiencies enumerated above. As a consequence, the ability of EMU to absorb asymmetric shocks has to be judged against the background of the fact that existing currency areas which consist of European regions have been sustainable even though relative regional prices are inflexible, there is scarce evidence of interregional labour mobility and fiscal transfers tend to redistribute rather than to stabilise regions in cases of asymmetric shocks.⁵⁴

Are Additional Instruments Necessary?

At first some general remarks: would it still be useful to make provisions for a truly policy-inde-

pendent national shock as a remote possibility? In our view there is no need to set up an elaborate mechanism. The existence of any formal mechanism with rules for funding, etc., would suggest that it should be used regularly and would thus invite moral hazard in the sense that countries would take more risks.⁵⁵ The proposal, for example, for a 30-hour working week might not encounter much opposition because it is thought to be economically acceptable when the business cycle is extraordinarily strong and because it is believed that the EU would help out if this were not the case.

This scepticism concerning a formal mechanism for automatic (or semi-automatic) fiscal shock absorbers does not imply that nothing should be done. The case of natural disasters is a clear case for discretionary help decided ad hoc by the Council. The exceptional large asymmetric shock that hits only one country (German unification) might also be dealt with in the same manner since it should be as rare and as unpredictable as natural disasters.

Finally a question of detail: should the proposed system be EU-wide or EMU-wide? The Stability Pact is not the decisive criterion if one follows the argument of the EP Report that the fines can be lifted at the discretion of the Council. Would the ability to devalue be of much help? One could argue to the contrary: in many circumstances a national currency might actually pose a problem because the country (assumed to be hit by a negative shock) would probably have to have higher interest rates than the euro area because the confidence of markets would not be the same. Our inclination is to make the system EU-wide given the limited importance we attach to fixing exchange rates if the main sources of shocks are regional.

A New Proposal

In order to be more constructive, we would like to conclude with a positive proposal of our own:⁵⁶ we

⁵¹ See D. Gros, N. Thygesen, *op. cit.*

⁵² See A. Metten, *op. cit.*

⁵³ See J. Méltitz: *Some Cross-Country Evidence About Debt, Deficits and the Behaviour of Monetary and Fiscal Authorities*, CEPR Discussion Paper, No. 1653, London 1997.

⁵⁴ See A. Fatás: *Discussion of Blanchard, Peri, op. cit.*, pp. 253 ff.

⁵⁵ See A. Fatás: *Discussion of Blanchard, Peri, op. cit.*, p. 252; for further details see A. Belke, D. Gros: *Asymmetric Shocks and EMU: On a Stability Fund*, IEW, Diskussionsbeiträge No. 24, Ruhr-Universität Bochum, 1998, section 6.

would favour the creation of a *regional* shock absorber mechanism. The mechanism would come into play if an exogenous shock hit a particular region. The likely source of the shock will often be industry-specific: for example a devaluation of the Chinese renminbi might unleash a flood of cheap shoes onto the EU market. The resulting problems would be concentrated on a limited number of regions and should be dealt with at that level. The sudden appearance of cheap electrical batteries that make internal combustion engines superfluous would be another type of shock that would hit specific regions.

As a matter of fact, major steps towards economic and monetary union in the past have tended to be accompanied by budgetary initiatives, aimed at helping the weakest regions (such was the case upon creation of the European Monetary System in 1978, as well as with the Cohesion Fund which accompanied the single market programme). Moreover it is well known that all existing monetary unions among the advanced industrialised economies have powerful redistributive and shock-absorbing mechanisms operating between regions.

The practical problem for EU policy is that it is often impossible, due to their nature, to forecast economic "shocks". This problem is overcome in mature federations, where the size of federal taxation and social security makes for automatic inter-regional compensation. But this valuable property is in itself quite insufficient, according to subsidiarity criteria, to justify the creation of an enormous EU budget. The EU can therefore adopt either one or both of two approaches. The first would be to rely on national shock-absorbing mechanisms. Large countries, especially the Federal Republic of Germany, may have well developed mechanisms. A smaller country, Finland, is currently making an interesting attempt to set up a national insurance mechanism for dealing with shocks which would formerly have been handled by an exchange rate change. A second approach would be for the Cohesion Fund to acquire a new reserve facility, for responding to acute, localised economic shocks in euro-area countries. This facility might be reserved for use in regions in the euro area that have a below average GDP per capita.

Using the Cohesion Fund to help poorer member countries deal with asymmetric shocks comes

naturally if one considers that the official justification for the Cohesion Fund was that poorer member countries would find it more difficult to achieve the final adjustment required for EMU. The economic rationale behind this is that poorer countries need to spend more on public investment and have less efficient capital markets. But these two characteristics also make it more difficult for cohesion countries to adjust to asymmetric shocks. Moreover, they might be more subject to asymmetric shocks than richer countries with a more mature and diversified industrial size. There is thus a strictly economic rationale for providing cohesion countries with a special shock absorbing mechanism that richer countries would not need given their deeper capital markets and their stronger background in terms of infrastructure. In brief: the Cohesion Fund should be increased by – or transformed into – a window for asymmetric shocks hitting regions of euro-area countries with a sub-average GDP per capita.

As presently organized, the regional and structural funds of the EU are not adapted to respond quickly to intense and narrowly localised shocks of this type. The ethos of these funds has been to deal with problems of long-term backwardness, or peripherality or structural decline of old industrial regions. However, the opportunity exists to adapt the funds to handle sharp localised shocks, both for procedural reasons, since the structural funds are due for revision by 1999, and because there is a model instrument already at hand in the workings of the European Coal and Steel Community (ECSC), which could be given general application for any sector through reform of the structural funds. Even the criteria and language of the ECSC Treaty in its Article 56 could be copied, for example "if fundamental changes in the ... industry should compel some undertakings to discontinue, curtail or change their activities", or if restructuring "should lead to exceptionally large reduction in labour requirements in the ...industry, making it particularly difficult in one or more areas to re-employ redundant workers", then the executive would be empowered to use both grant and loan finance "for the creation of new and economically sound activities". To serve these needs the structural funds should be endowed with larger financial reserves, to be held available for such eventualities. These grant funds would, according to Emerson and Gros,⁵⁶ be used together with loan

⁵⁶ See similarly M. Emerson, D. Gros, op. cit.

⁵⁷ See M. Emerson, D. Gros, op. cit.

capital from the European Investment Bank or from the Commission.

Outlook

Much further work is, of course, needed to hammer out the details of such a regional adjustment facility. At this point we would propose basing it on a revamped regulation from the ECSC that provides adjustment aid for regions hit by a sudden decline in production in a particular industry. Other issues to be resolved would be the link with regional policy in general (whose purpose has so far been long-term income convergence, not shock absorption). The perhaps most important issue would be to explicitly address the question as to how moral hazard problems, which are the main subject of Public Choice theory, can be avoided by this new proposal for a regional fund.

Does our solution incorporate the same moral hazard problems as the solution proposed in the draft by the EP? All inter-country or inter-regional insurance mechanisms carry a moral hazard problem. As a consequence, "... the implementation of an EMU transfer mechanism to help regions absorb asymmetric shocks might reduce rather than strengthen the monetary union's ability to cope with such shocks".⁵⁸ However, as economic policies remain national, not regional, a mechanism that insures regions is less subject to this problem. Of course, a policy that exposes a country more to shocks, e.g. less flexible labour markets, would make it also more difficult to react to regional shocks. But if one of the criteria for assistance is that the shock is really region specific, i.e. asymmetric, one would have a further element to distinguish problems that are country-wide and may be caused by national policies, such as wage and social policies, from problems that are region specific and more probably caused by some shift in demand or technology at the industry level.

Transfers which are strictly related to unanticipated regional shocks might less easily be anticipated and incorporated into contracts (as compared to country-wide transfers) by wage-negotiating parties and will less probably be used in wage claim strategies because it is more difficult for interest groups to organise themselves if wage policy (like social policy) is still organised at the national and not at the regional level which may extend across national borders. In

other words, the sphere of influence of wage-negotiating parties and the regional impact area of asymmetric shocks and thus of the regional transfers proposed here are not identical. If regional transfers along the lines described above were granted through the EU-budget and could, by construction, not be used to compensate for inappropriate national policies, the credibility of the Maastricht national fiscal rules – as a precondition for convergence and a common currency area – might be enhanced. The advantages of general debt limits could be internalized while at the same time – as an exception to the rule – specific reactions on a regional level would not be excluded. An enhanced regional transfer facility would be beneficial if it contributed to an otherwise not available risk pooling among EMU countries.⁵⁹

By this property, our proposal for a regional fund differs significantly from the proposals of a European system of fiscal equalization and European financial policy which in the run-up to EMU have often been brought forward as instruments to cope with the loss of the exchange rate instrument and the ongoing country-specific shocks "as a fact of life" under EMU. Nevertheless, these debates may give us some lessons on how to judge the proposal of a nation- (instead of region-) oriented stability fund made in the Report by the EP. These discussions have already been led in terms of unemployment impacts of fiscal insurance mechanisms under EMU.⁶⁰ In a discussion paper version of this article these discussions are reconsidered briefly in order to serve as a platform for potential additional criticism of the proposals developed by the rapporteur to the EP.⁶¹ Implicit in our statements is that this stability fund proposal has to be interpreted as the outflow of the striving for more "Political Union" under EMU. Insofar, the proposal for a stability fund principally shares all the strengths and weaknesses of the proposals made with respect to "Political Union" in the run-up to EMU.

⁵⁸ D. Begg et al.; *op. cit.*, p. 12. See also M. Obstfeld, G. Peri, *op. cit.*, p. 245.

⁵⁹ See C. Folkers: Finanz- und Haushaltspolitik, in: P. Klemmer (ed.): *Handbuch Europäische Wirtschaftspolitik*, München 1998, p. 650; and M. Obstfeld, G. Peri, *op. cit.*, p. 245.

⁶⁰ See A. Belke: *Maastricht – Implications of a Centralised Currency and Monetary Policy for European Labour Markets*, *op. cit.*

⁶¹ See A. Belke, D. Gros: *Asymmetric Shocks and EMU: On a Stability Fund*, *op. cit.*, section 6.