



Discussion Paper No.7

The Future of Macroeconomic Policy in the European Union

by Christopher Allsopp

External MPC Unit Discussion Paper No. 7*

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February 2002

ISSN: 1748 – 6203
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THE FUTURE OF MACROECONOMIC POLICY IN THE EUROPEAN UNION

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Speech to the Austrian Institute of Economic Research (WIFO)
23 January 2002

* I am extremely grateful to Bill Allen, Andrew Bailey, Nicoletta Batini, Wendy Carlin, Amit Kara, Richard Mash, Edward Nelson, David Vines, and Sushil Wadhvani for their help and comments on this speech. The usual disclaimers apply. The views expressed are personal and should not be interpreted as those of the Bank of England or other members of the Monetary Policy Committee.

The Future of macroeconomic Policy in the European Union

This paper is the text of the key-note speech on macroeconomics given by Christopher Allsopp at the 75th Anniversary Symposium of the Austrian Institute of Economic Research (WIFO) in Vienna on January 23rd 2002^{}. It discusses the role of the European Central Bank, coordination issues between monetary and fiscal policy, and the effects of the interaction of the Stability and Growth Pact with labour market issues, especially on the processes of adjustment between countries in the euro area.*

^{*} This speech was posted on the Bank's website on January 23rd 2002 and can be found at <http://www.bankofengland.co.uk/speeches/speech159.pdf>

I Introduction

It is a great pleasure and honour to be asked to contribute to this symposium celebrating the 75th anniversary of WIFO.

It is, however, a daunting task to make a presentation on the future of macroeconomic policy making in the EU. Until recently, this would have involved analysing macroeconomic developments in 15 countries. With the start of EMU in 1999, and now with the successful launch of the euro itself, the task looks, on the surface, a little easier—since the 12 countries of the euro area begin to look more like a macroeconomic entity: there is, after all, a single currency and a single monetary policy for the twelve, with only three countries (Sweden, Denmark and the United Kingdom) still outside.

But even if one puts aside the position of the ‘outs’, the macroeconomic issues facing Europe are complex and unusual. A centralised monetary policy, determined by a constitutionally independent European Central Bank (the ECB), interacts with twelve different and politically independent fiscal authorities and twelve different labour markets. Even to describe the system in this way suggests that coordination issues, between a centralised monetary policy and national fiscal policies and between different countries’ labour market policies are likely to be at the heart of the European policy debate over the coming years.

I argue below that the coordination issues are indeed important. But there is a prior set of issues about how the system is functioning and, more normatively, about what should be the respective roles of monetary, fiscal and labour market policies in a diverse but rapidly integrating economic area such as Europe? If one could design macroeconomic policy for Europe, taking into account country differences and regional diversity, what would it look like? What would be the role of the central bank, what should be the role of regional (or country) fiscal policies, and where do regional/country labour markets (including labour market policies) fit into the overall picture?

Such a supra-national macroeconomic focus is particularly important at the moment given that the system as a whole is being severely tested by the current synchronised world slowdown. The key question in the short term is whether the euro area’s macroeconomic framework is well designed to respond appropriately to the stresses being put upon it. Most obviously, questions have already been raised about the operation of monetary policy (the ECB’s reaction function) and about the operation of the Stability and Growth Pact (SGP). And, from a longer-term perspective, it is only with some vision of how the system as a whole is supposed to function that the coordination issues posed by national political autonomy and national diversity within the euro area can be put into perspective.

The structure of this presentation is as follows. The next section briefly considers the macroeconomics of Europe as an entity. It is useful to follow the emerging consensus in the literature and think in terms of the euro area as an inflation-targeting regime, with monetary policy summarised by the central bank's *reaction function*. The third Section then considers issues surrounding euro area monetary policy and the central bank's 'reaction function' in more detail, focussing on issues for the future. Section 4 considers fiscal policy, including the operation of the Stability and Growth Pact. Section 5 turns to intercountry adjustment and the crucial question of how the fiscal rules interact with labour market issues. Section 6 concludes by signalling some of the main challenges for European policy makers.

II Macroeconomics of the euro area as a whole

The euro area, like the US and like other inflation-targeting regimes, can be thought of as being controlled by an activist policy for the setting of short-term nominal interest rates—a monetary policy *reaction function*. How the system is likely to function can then be seen as depending on the form of the policy reaction function as well as on other characteristics of the system—such as the fiscal regime in operation, and the way the labour market functions within and between different countries or regions.

Comparison with the US

The comparison of the euro area with the US to bring out similarities and differences is a natural one. In aggregate, the euro area is of approximately comparable size. Moreover, the degree of openness to foreign trade is similar. If eurozone intra-trade activity is netted out, exports and imports are both about 10% of GDP—similar to the figures for the US.

The fiscal policy framework, however, differs importantly between the US and the eurozone. (It also differs between the eurozone taken as an aggregate of countries and the regimes within individual countries.) In the US, the greater part of the fiscal system is centralised under the federal system and it is the federal system that mainly matters for macroeconomic policy. (Lower tier state taxes and expenditures are important, but state budgets, for the most part, tend to be balanced: some states have adopted constitutional rules of budget balance.) The federal system provides longer-term transfers from richer to poorer regions and provides a degree 'automatic' fiscal stabilisation, not just as the economy as an aggregate goes up and down, but also for regions which are differentially affected. The degree of regional fiscal stabilisation was estimated as up to 45 cents in the dollar by Sala-i-Martin and Sachs (1992)—a figure which has been disputed, for example by von Hagen, who estimated the stabilisation element as considerably smaller giving more weight to longer-term inter-regional transfers (von Hagen 1992).

By contrast the centralised budget of the EU is extremely small—about 1.27 percent of aggregate EU output, roughly half of which is expenditure connected with the Common Agricultural Policy (and varies little around this figure). It is not envisaged that the central budget will be increased substantially in the foreseeable future. This means that

in the euro area, there is a minimal amount of fiscal transfers between countries—contrasting sharply both with the situation in the US and with the situation within individual European countries.¹ It also means that the central budget provides almost no automatic stabilisation as countries fluctuate relative to each other.

This does *not* mean, however, that the automatic stabilisers are absent in Europe. Within each country, a reduction (say) in output relative to trend lowers the tax take and increases expenditure on, for example, social security benefits. Each country is stabilised by its own tax and expenditure system—so long as the counterpart movements in the budget surplus or deficit position are tolerated. In fact, the automatic stabilisers are relatively large in Europe—higher than in the US—mainly because average rates of taxation are high and the tax system is more progressive. An (imperfect) indication of the degree of automatic stabilisation is provided by Commission estimates that, on average in Europe, a 1 percentage fall in GDP relative to trend (a one percentage point increase in the output gap) feeds through to a 0.5 percentage point deterioration in the budget position. (See, for example, Buti *et al* 1998). As is well known, the degree of automatic stabilisation and the sensitivity of the budget to movements in GDP is considerably higher than 0.5 in some high tax countries, such as Sweden and the Netherlands (of the order of 0.6 or 0.7).² It is also true that individual countries could provide a higher degree of stabilisation by the use of discretionary fiscal stabilisation. But, of course, the automatic stabilisation would be offset if governments were unwilling to tolerate the counterpart movements in budget positions and were to adjust taxes and expenditures accordingly.

To summarise, the stylised facts about the fiscal system in euro area are that there is a high degree of built-in fiscal stabilisation, for individual countries and for the system as a whole, so long as counterpart swings in budgetary positions are allowed to occur. On the other hand, longer-term intercountry transfers via the fiscal system are very small and are likely to remain that way.

The other main area where a comparative approach may be useful is in looking at the labour market. Most obviously, whereas the US labour market is usually looked at and analysed as an entity, in Europe, labour markets are normally thought of separately, country by country. One reason for this is that, in the US, labour mobility between regions or states is high compared with Europe where intercountry mobility in particular is limited by cultural and language barriers. Another is that wage bargaining systems differ markedly between European countries (eg in the degree of unionisation and of coordination).

¹ Some countries, such as Ireland, have, nevertheless, received substantial longer-term transfers under the EU budget. Within countries, it has been known at least since the MacDougall Report (1977) that regional transfers and regional stabilisation are both very important. In the case of Germany, the only federal state within the EU, transfers from the former West German *Länder* to the former Eastern *Länder* have been running at about 5% of West German GDP since soon after reunification. A substantial part of this flow is due to the standard application of equalisation rules whereby poorer *Länder* gain at the expense of richer.

² Sweden, of course, is currently not a member of the euro area.

One important consequence of this labour market segmentation is that there is a wide variation in wage levels between countries. For example, measured in US dollars, hourly compensation costs for production workers in manufacturing in the year 2000 were \$24 in West Germany, and \$4.75 in Portugal. These are the extremes. But costs were \$16.38 in France, \$14.66 in Italy and \$10.85 in Spain. (In Austria and the Netherlands, both close geographically and economically to Germany, they were about \$19—that is, about 80% of West German levels.) So far at least, wage levels in Europe seem, by and large to reflect country specific factors, including productivity differences. Whilst this continues, and *if* wage levels between countries can change or be changed, the European labour market in aggregate is in one sense relatively flexible between countries, though it may be inflexible, as compared with the US, within countries.

Within Europe there is a rather general policy presumption that labour market reform is key in bringing down the still high rate of unemployment in the euro area. Effectively, this amounts to a presumption that the natural rate of unemployment is high, and that reforms are needed to bring it down. It is notable, however, that there is considerable diversity across countries and rather different views about what reforms are needed. The diversity of national systems means that pinning down the natural rate of unemployment for the group is bound to be difficult—and it remains difficult within individual countries as well.

In the US, the Fed is both instrument-independent and (within generous limits) goal-independent. The comparable institution in the euro area is the ECB (with monetary policy decisions made by the Governing Council), which is also instrument-independent and goal-independent. In both economies the principal policy instrument for macroeconomic stabilisation is the short-term nominal interest rate. In the US, the Fed has multiple objectives: it is mandated to pursue price stability as well growth and employment objectives.³ But since the high inflation of the 1970s and the general recognition that there is no long-term benefit to allowing inflation to get out of control (and considerable costs) the price stability objective is generally regarded as primary. Growth and employment objectives are in effect subject to the overriding requirement to control inflation. In practice, this is not that different from the mandate of the ESCB (the European System of Central Banks) which is to maintain price stability and ‘without prejudice’ to that, ‘to support the general economic policies in the Community as laid down in Article 2.’ Article 2 of the Treaty in turn lays down what these policy objectives are. They include: a high level of employment, ... substantial and non-inflationary growth, a high degree of competitiveness and convergence of economic performance’.⁴

³ The Full Employment and Balanced Growth Act of 1978 requires the Board of Governors and the FOMC to ‘maintain growth of money and credit aggregates commensurate with the economy’s potential to increase production, so as to promote effectively the goals of maximum employment, stable prices and moderate long-term interest rates.’ For further discussion see Cecchetti (2001).

⁴ In the UK, the inflation target is set by the government (currently 2.5% for the RPIX price level measure). The mandate is to meet the target and ‘subject to that’ to support the policies of HM Government for growth and employment.

The reaction function approach

Most consensus models or characterisations of the economy have, in fact, an extremely simple structure. Broadly speaking, these are of the ‘natural-rate’ type, with the path of productive potential unaffected by macroeconomic policy. In the short term, however, output and unemployment are determined by the level of aggregate demand. A non-zero output gap or unemployment gap (e.g. when output is below potential and unemployment is, correspondingly, above the natural rate) implies falling inflation—the Phillips curve relationship. Output above potential or unemployment lower than the equilibrium rate leads to rising inflation. The economy is subject to shocks of various kinds, affecting domestic demand and supply potential—and, in an open economy, it is affected by shocks from abroad as well.

Such a characterisation of the way an economy functions is, however, crucially incomplete. Left to itself following a shock, such a system would spiral out of control, with ever rising inflation, or an implosion of falling prices—deflation. There is in fact, in the system as so far described, nothing to pin down the price level and the rate of inflation and nothing to stabilise the economy. This is where macroeconomic policy comes in.

In general terms there would be agreement that macroeconomic policy has two principal roles which are conceptually distinct, though intertwined in practice. The first is the control of inflation and the price level. This is its role in providing a credible *nominal anchor*. The second is its role in *stabilisation*. Stabilisation here refers both to the stabilisation of output (GDP) to keep it close to potential and unemployment close to its ‘equilibrium’ level and to the stabilisation of the price level and/or inflation—to keep it close to some norm or target. (In practice, there will normally be a trade-off between stabilising output and the variation of inflation—usually captured in theoretical work by positing that the policy makers seek to minimise some loss function. For fuller discussion, see Allsopp and Vines 2000.)

Following the new consensus macroeconomics, it has become standard—perhaps one should say fashionable—to see these two main roles as the responsibility of the central bank and as embodied in the central bank’s *reaction function*. What this terminology is supposed to encapsulate is the dual specification of the central bank’s medium-term objectives (especially for inflation) and the set of procedures and reactions that are called into play when, due to shocks or mistakes, the economy deviates from its desired path—and in particular, when inflation seems likely to deviate from its target. As noted above, the main *instrument* of policy used by modern central banks to meet their target(s) is the short-term nominal interest rate. So the *interest rate reaction function* is a feedback system designed to meet the central bank’s inflation or price level responsibilities in the medium term (the nominal anchor function) at, hopefully, minimum cost in terms of stability (the variability of output around potential) in the short term.

Some reaction functions, or at least aspects of them, are relatively clearly specified, as is the case in the UK where the inflation target (presently 2.5% for the RPIX series) is

determined by the government. Even in this case, there is ‘constrained discretion’. Because of lags in the operation of monetary policy, interest rates are set on the basis of forecasts of inflation and there is some discretion about how quickly inflation should be brought back on track. Another feature of the UK system is that, with the target as a single number, it is *symmetrical* in that anticipated deviations of inflation from target either up or down are equally intended to trigger policy responses to bring it back on track. Other reaction functions are implicit. This is notably the case in the US, where no numbers, even as to what is meant by price stability, have been put forward: thus, the ‘Greenspan reaction function’ has never been explicit even as to target, but has come to be reasonably predictable and transparent. In the US, market operators can predict that short-term interest rates will react to contain inflation and inflation expectations and, subject to that, to stabilise the economy as much as possible in the short term.⁵ In Europe, the ECB has effectively defined its target as an inflation rate between 0 and 2% per annum,⁶ but other aspects of its reaction function are less transparent.

There is much more to be said about the ECB’s reaction function—which I take up below. It would be generally agreed, however, that a central and essential feature of the new euro area system is the establishment of some such reaction function to control inflation and to play a part in stabilisation. It may be helpful to think of this reaction function in terms of an inflation-targeting regime broadly comparable with those in operation in the US and the UK (even though the actual system may appear to diverge in important respects—see next section).

Characteristics of an inflation-targeting regime

A prestigious group of authors, commenting on the role of the ECB, have described inflation targeting as ‘simply a very good idea’ (Alesina *et al* 2001). Under inflation targeting, the central bank targets inflation and, because of lags in the system, this means that they must seek to bring inflation into line with the target some time into the future.⁷ Forecasts are an essential part of the process—whether these are formal or informal. In broad terms, the reaction function is particularly simple and particularly transparent. The

⁵ A particularly simple form of reaction function, which is frequently used in discussions of monetary policy is the so-called Taylor rule—which was developed initially to describe central bank behaviour (and especially US Federal Reserve behaviour in the period since the mid-1980s; see Taylor 1993). The Taylor rule relates the short-term real interest rate to the percentage deviation of inflation from target and to the percentage deviation of output from potential according to the equation:

$$r = r_n + 1/2(p - p^*) + 1/2(y - \bar{y})$$

(Here r is the real interest rate, r_n is the neutral interest rate, $(p - p^*)$ is the deviation of inflation from target and $(y - \bar{y})$ is the deviation of output from potential).

⁶ Originally, the objective of price stability was defined as an inflation rate, measured by the HICP, of less than 2%—an asymmetric target. Later, and apparently somewhat reluctantly, it was admitted that deflation was regarded as undesirable: hence the range 0–2%.

⁷ I concentrate on inflation targeting rather than price level targeting (which could include targeting a price level growing at some (small) steady rate—such as 2½%) since this appears to be the revealed preference of central banks. Under inflation targeting, by-gones are by-gones, so the price level could drift up or down relative to the steady inflation path. See King (1999) and Batini and Yates (2001) for discussion.

task of the central bank is to move short-term interest rates up or down to meet the target over the medium term. It is a bit like steering a boat, which is being buffeted all the time by winds and tide, towards some objective. In the analogy, the feedback system (or guidance system) is provided by the rudder and depends on the behaviour of the helmsman. In the case of monetary policy, the instrument of policy is, as already noted, the short-term interest rate, and the way the reaction function works depends on the procedures and skill of the central bank. It is clear that the most important thing is that there should *be* a reaction function to achieve the medium-term objective. (This is the nominal anchor function of monetary policy.) It is also clear that some reaction functions may be much better than others, just as some yachtsmen are better than others. (This relates to the stabilisation objective.)⁸

It is sometimes suggested that inflation-targeting regimes ignore output and growth. This is not true. (See also Alesina *et al*, 2001, who describe inflation targeting as ‘an employment-friendly monetary policy’.) That such a view should be prevalent is not surprising given that the target is specified entirely in terms of inflation. This contrasts, for example, with the specification of the ‘Taylor rule’ (see above) which gives equal weight to deviations of output from potential and of inflation from target. The differences, however, are largely illusory in a natural-rate framework where deviations in output from potential affect future inflation. (In a simple model of the conventional kind, the output term in the Taylor rule effectively introduces a response to forecast inflation.) Either an inflation target or the Taylor rule should home in on a situation where inflation is on target *and* output is at potential. In the case of the inflation-targeting regime, there is indeed a question about what weight to give, during adjustment, to output *deviations* (relative to potential) as opposed to inflation deviations, but it is certainly not the case that output and employment are ignored.⁹

This leads to an implication which I regard as extremely important. The *successful* institution of an inflation-targeting regime should do three things as far as private sector expectations are concerned:

- 1) It should lead to the expectation that inflation is under control at the target rate.
- 2) It should lead to the anticipation that growth, in the medium term, will be at potential.

⁸ There are some characteristics that any reaction function that would fulfil the nominal anchor function would need to have, such as non-accommodation against deviations of inflation from target. Normally this would mean that *real* interest rates would need to rise as inflation rises (Clarida *et al* 2000). There is a vast and growing literature on optimal reaction functions which depend both on the specification of policy preferences (eg, between output stabilisation and inflation stabilisation) and on the specification of the model of the economy. Taylor (2000) has argued that the Taylor rule is robust against many different specifications of the monetary policy transmission mechanism.

⁹ Bean (1998) has argued that policy is relatively insensitive to variations in preferences between output and inflation variability and that the policy frontier is relatively ‘square’. See also Batini and Haldane (1999).

- 3) It should lead to the anticipation that deviations of output from potential and inflation from target in the short term will be in some sense as small as possible given the shocks hitting the economy.

Inflation targeting, if it works, should stabilise expectations of inflation *and* growth.

The second implication above is not often explicitly stated, for the simple reason, I suspect, that it is already an implication of the natural-rate type of framework that is usually adopted. (Rational individual economic agents would expect, within such a framework, growth at potential more or less whatever was happening to monetary policy.) As a practical matter, however, medium-term growth expectations do swing about, and are important, especially in the investment decision.

The ‘having your cake and eating it’ (Alesina *et al* 2001) aspect of reaction function regimes whereby expectations of both inflation and growth are stabilised is a property of natural-rate type (or Phillips curve type) models. Some further deconstruction of the proposition is needed.

The first point, is that in practical terms, the determination and estimation of output or unemployment gaps is fraught with difficulty, and especially so in the euro area. And the gaps themselves are affected by shocks hitting the economy. One point is that this is an argument in favour of inflation targeting, rather than, say, the adoption of a Taylor rule. Successful inflation targeting should allow the system to *reveal* its potential. Moreover, Orphanides (2000) has noted that incorrect current (real-time) estimates of productive potential (and hence output gaps) may have been an important reason for high inflation in the US in the 1970s¹⁰ and argues therefore against the reliance on output gap terms, such as those embodied in the Taylor rule, in the formulation of monetary policy. More generally, an inflation forecast relies on a much richer set of information than estimates of the current output gap.

The second point is that the proposition itself is threatened in a much more fundamental way if the determinacy of output gaps or unemployment gaps in affecting inflation dynamics is itself doubted. There are many, for example, who have pointed to possible hysteresis type effects in the European labour market which if present would weaken the connection of stable inflation with growth at potential—leading to alternative possible future growth paths consistent with the control of inflation. Were this the case, the subsidiary clauses in central banks mandates of ‘subject to that’, or ‘without prejudice to price stability’ to pursue other economic objectives should come into play. Such reasoning has led some to argue that reaction functions need to embody some bias towards growth—in order to test the system on the upside from time to time. (It is sometimes suggested that the ‘Greenspan reaction function’ in the US, as it developed over the 1990s, embodied such an optimistic bias.)¹¹ There is another possible reason for

¹⁰ For a study of the UK along similar lines, see Nelson and Nikolov (2001).

¹¹ As I understand it, the main reason for describing the US reaction function in this way was that the Fed was publicly prepared to ignore current estimates of the natural rate. This does not imply that the natural rate model ceased to inform policy. It could equally plausibly mean that the estimates available were

laying stress on the growth objective as well as the inflation objective which is that, at low inflation, some evidence points to a rather flat Phillips curve which again would suggest that the neat identification of stable inflation with the promotion of growth at potential would be weakened. (This would mean that it would take a long time for growth below potential to reveal itself by undershooting the inflation target.)

The response to domestic and international shocks in inflation-targeting regimes

It is interesting to consider how an economy with an inflation-targeting regime might respond to the sort of shocks that have hit the world economy recently—and which have apparently generated a synchronous world recession. This is not the place to go into the precise form of the shocks (but see European Commission, 2001, for a characterisation of the causes of the European slowdown). In stylised terms, however, there was a large shock emanating from the US as excessive growth gave way to a major slowdown led by investment, and, related to this, an international ICT shock affecting the ICT sectors (and especially investment) within most advanced countries. Outside the US, this can be roughly characterised as a combination of a large adverse external demand shock (from the US) and an adverse domestic demand shock, concentrated initially in the ICT sectors.¹²

It is useful to start with the domestic shock to investment (thought of a common shock affecting all euro area countries.) A forecast-based inflation-targeting approach would see the shock as affecting future output and therefore future output gaps and unemployment gaps. On the basis of standard models, the shock, unless offset, would imply that future inflation (assuming inflation under control in the starting point) would fall progressively below target. The reaction function approach suggests that the demand shock should be offset via lower interest rates to keep inflation (and output) on track.

As a thought experiment, it is possible to imagine an almost perfect offset to such a shock. I say ‘almost’, since, if the shock affected a particular sector (such as ICT), it is unlikely that resources could be switched in the short term to other uses, implying some fall in potential output due to a mismatch of production and demand in particular sectors. But the impact could be largely offset until adjustments occurred or the shock was reversed.

In practice, however, it is inevitable that offsets would be far less than perfect. It takes time to identify shocks. There are substantial lags in the system. And forecasts may be in error. Nevertheless, the reaction function should limit departures of output from potential and departures of inflation from the target. A private forecaster, forecasting the

regarded as very uncertain, and not much use in forecasting inflation and inflationary pressure. Where an optimistic bias did appear to be present was in views about the ‘new economy’ and the likely effects on future productive potential.

¹² In some European countries it appears that consumption slowed first to be followed by investment and impacts from abroad (European Commission, 2001). Some of this is normally ascribed to the impact of higher oil prices, and the weakness of the euro (as well as a food price shock) all of which affect real disposable incomes. These shocks are of a different type. Some discussion of possible responses to exchange rate changes and oil price movements is provided in the next section.

course of the economy, would be forecasting the behaviour of the system taking account of the reaction function. Effectively the forecaster would be forecasting the effects of the shocks that could not be offset and the effect of policy errors that might be made. It would be odd for such a forecaster to predict anything other than a return of output to potential and inflation to target in the medium term unless it were thought that serious policy errors would be made or that policy had ceased to be effective.¹³

Very similar considerations apply to an adverse external shock due to a cut in exports in response to a reduction in foreign demand. Again, an inflation-targeting regime would act to offset the shock. A consequence in this case would be, *ceteris paribus*, a rise in the trade deficit for the duration of the shock.

Finally, I want to make a point about the world economy. Assuming it is composed of blocs running inflation-targeting regimes of the type described, common world shocks and a synchronised world recession of the type being experienced at the moment should trigger offsetting action in each bloc, in line with their own domestic objectives. Each bloc is stabilised by successful action in the others. Each bloc needs to forecast the degree of success or failure in the others in formulating their domestic policies. But the situation is not strategic. Coordination is not needed, though an understanding of other countries (including an understanding of their reaction functions) is.

In broad terms, this is what has been happening in the world economy. As the scale of the shocks and of the downturns have become apparent, central banks have been cutting interest rates as one would expect. Most obviously, the interest rate cuts in the US have been aggressive, even before the terrorist attacks of September 11th. Fiscal easing has commenced, with a further fiscal package proposed, but is currently delayed by political negotiations (illustrating that reactions are affected by political institutions and legislative delays). Other central banks, including Canada, the UK, Sweden and Australia, have also reacted. The ECB has so far lowered interest rates (its Repo rate) by 1½ percentage points from 4.75 percent at the beginning of 2000 to 3.25 percent now. (The last cut, of half a percentage point, was in November.) As the scale of the slowdown in Europe has become apparent, questions have been raised both about the ECB's policy and about the operation of the Stability and Growth Pact.

III Monetary policy in the euro area and the reaction function of the ECB

It is worth recalling that the ECB is a new institution, which has only been operating for three years, and the same applies to EMU itself. There was, and there still is, huge uncertainty about how the euro area will function economically and even about the meaning to be attached to area-wide statistics, such as those relating to inflation or monetary aggregates. Moreover, three years is a very short time to develop a 'reputation', and it is certainly too short for market operators easily to be able to deduce a behavioural reaction function on the lines of the perceived reaction function in the US, especially as the behaviour of the ECB is developing over time. The fact that the system is up and running is a huge political and economic achievement.

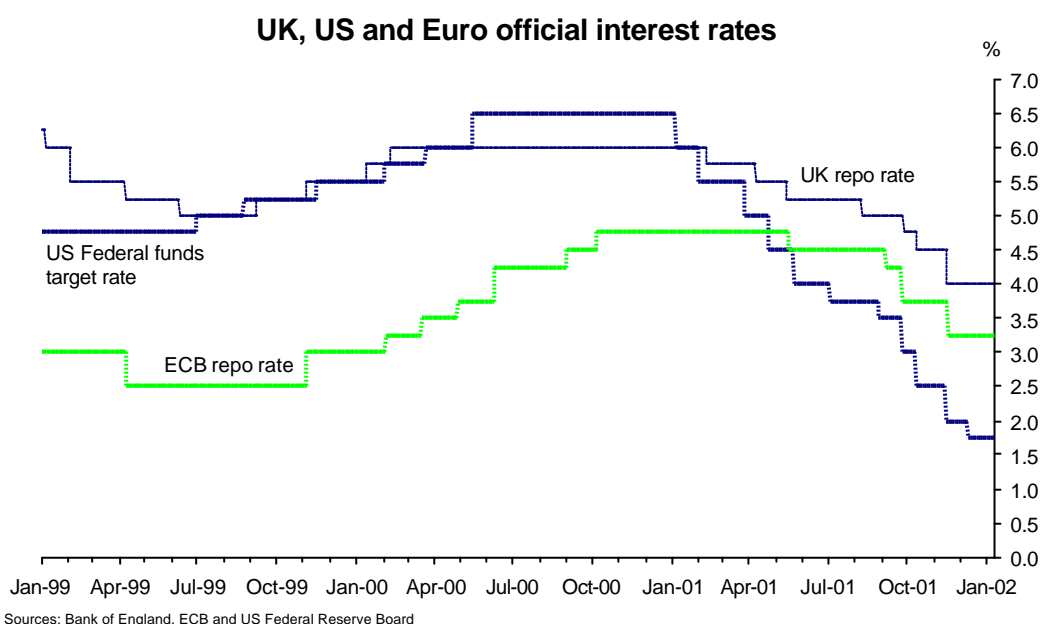
¹³ Cf. Japan.

My task in this presentation, however, is to look forward, to identify potential problems and point to possible future directions of change. This demands a critical stance – which is intended to be constructive.

The reaction function of the ECB

At the start of EMU at the beginning of 1999, the ECB's repo rate was 3%. It was cut by ½ percent in April and raised by ½% in November 1999. Interest rates rose in stages to 4.75% on 5 October 2000. With deteriorating world and European prospects, the ECB was under considerable pressure to cut rates,¹⁴ which they did in May 2001. There was a further small cut of ¼ in August and a ½% cut after September 11th and again another ½ in November. The reduction since the November 2000 to April 2001 peak has been 1½ percentage points.

Chart 1



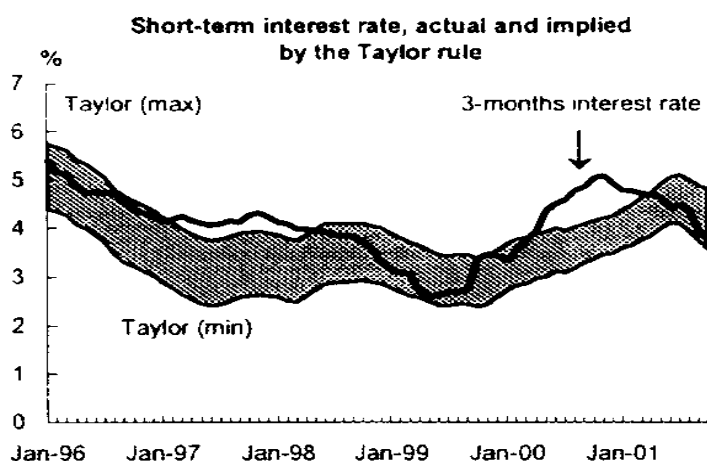
In broad terms, this resembles a reaction function of the general type that I have been describing. Interest rates were raised as recovery (from a low inflation and rather stagnant starting point) developed, and they have come down in response to world shocks and the deteriorating prospect. The rise also corresponded with rising inflation—with headline HICP inflation substantially exceeding the upper bound of the 0–2% range until recently. (Inflation peaked at 3.4% per annum in May 2001. The latest data at the time of writing suggest a figure of 2.4% for October. The flash estimate for November is 2.1%.) Interest rates have been cut as forecasts of future inflation have fallen. Much of the rise in headline inflation was, however, a consequence of rising oil and other energy prices, compounded by the weakness of the euro over the period (and by exceptional food price rises)—factors which tend to drop out of the inflation picture over time. But core

¹⁴There were calls for easing, not only in the press, but from places like the US Treasury and the IMF.

inflation (excluding unprocessed food and energy prices) also rose, though by much less, and core inflation too should moderate with the slowdown in output and demand. A notable feature of the period since the inception of EMU is that wage trends have been very moderate, (European Commission, 2001, suggests that wage trends have been and are consistent with HICP inflation at less than 2% in the medium term.)

There have been attempts to pin down the ECB reaction function, in terms of simple inflation-targeting rules—such as variants of the Taylor rule. The study by Alesina *et al* (2001), which was limited to the period from 1999 to November 2000—ie, before the downward adjustments of interest rates started—found that for aggregate or headline inflation, neither a simple rule based on current inflation, nor a Taylor rule fitted the behaviour at all well—both rules suggesting that interest rates should have risen further. Rules based on core inflation tended by contrast, to suggest interest rates should have risen less. Their preferred variant suggested a hybrid policy of reacting to current and forecast inflation. The Commission (2001) compares actual interest rates with a Taylor rule (or rather a band of Taylor rules, reflecting different plausible assumptions) where the Taylor rule in this study is based on *core* inflation (see Chart 2). There are substantial problems with comparing actual policies with hypothetical rules in this way, but it does give the plausible impression that policy was relatively expansionary at the start of EMU in 1999, that it became relatively restrictive in 2000, and that the moves since have amounted to a substantial relaxation. (But recall that the Taylor comparisons are based on core inflation.) Surprisingly perhaps, given the public perception of the ECB, the comparison suggests the ECB has been relatively active and symmetrical in its interest rate policy.

Chart 2



Note: Taylor rule based on core inflation, monthly figures.

Source: European Commission (2001).

Recently, the ECB has started to publish staff forecasts, expressed as ranges to reflect uncertainty, on a biennial basis. (See Table 1.) Clearly the output forecasts were subject to a very substantial degree of revision between June and December. The ECB comments that this ‘is principally the result of the downward revision to exports’. There is a much smaller revision downwards in the inflation forecast for this year—the decline from last year largely reflects the dropping out of oil price and exchange rate effects (though the ECB notes that the oil price assumption has been lowered.) They comment that the similarity (despite the reduction in the growth forecast) ‘mirrors unchanged assumptions for wage contracts, reflecting substantial nominal inertia...’ Presumably this means that wage behaviour (and hence inflation) is not regarded as sensitive (over the period considered) to the output slowdown.

Table 1

ECB Forecasts (average annual percent changes)			
	2001	2002	2003
HICP Dec 2001	2.6–2.8	1.1–2.1	0.9–2.1
HICP Jun 2001	2.3–2.7	1.2–2.4	NA
Real GDP Dec 2001	1.3–1.7	0.7–1.7	2.0–3.0
Real GDP Jun 2001	2.2–2.8	2.1–3.1	NA

Source: ECB Monthly Bulletin, December 2001.

The publication of forecasts, which is greatly to be welcomed, can be taken as a further indication that the ECB’s reaction function can be seen as, or at least can be seen as moving towards, some sort of inflation forecast targeting regime. It needs to be stressed, however, and it has been stressed by the ECB itself, that the forecasts are only one input into the decision making process. Even in the Bank of England, where the forecasts (expressed as fan charts) are ‘owned’ by the MPC itself, it has been necessary to stress from time to time that there is no one-to-one relationship between the forecasts and the decision on interest rates.¹⁵

The main issue: the perceived monetary policy reaction function for the euro area

I am not a fan of elaborate attempts to describe central bank behaviour in terms of simple algorithmic rules—though such comparisons can be suggestive. This is partly because it seems inevitable, given the uncertainties, that judgement will remain a large part of the system. More importantly, it is because the reaction function is not likely to be simple: the term refers to a set of contingent rules and behaviours in the face of different conditions and different possible shocks hitting the economy. Moreover, it is the reaction function that is perceived by private sector agents that is likely to be important, for example in affecting financial market behaviour, or expectations more generally. What is important is that the objectives of the monetary authority should be clearly specified (or

¹⁵ The position of the forecasts in the overall processes of the Bank of England were described and assessed by Kohn (2000).

at least clearly understood)¹⁶ and that the likely response of the system (economy plus reaction function) can be anticipated in a wide variety of circumstances. As Mervyn King famously suggested, with a well-understood reaction function, monetary policy should be boring, in that there should be little ‘news’ in interest rate changes (King 1997). At least as far as timing is concerned, ECB policy has, on a number of occasions, failed the boringness test.

From this wider viewpoint, there are aspects of the ECB reaction function that appear to be well understood. The nominal anchor function appears well understood, in the sense that just about everyone would expect the ECB to react to signs of rising inflation by raising interest rates—and to go on raising them if necessary until the threat goes away. (And I expect that almost no-one thinks that the ECB Governing Council would feel tempted to produce surprise inflation to bring unemployment down temporarily below the natural rate.)¹⁷ And, as far as inflation is concerned, interest rate moves to date appear roughly appropriate given the serious difficulties posed by the special factors of oil price increases and exchange rate depreciation. A common assessment would be that, judged by actions, the interest rate reaction function seems appropriate, but that public relations and rhetoric left something to be desired.

I want to argue here that this is only half the picture.¹⁸ Recall that inflation targeting, according to the standard paradigm, should stabilise inflation expectations *and* that it should stabilise medium-term expectation of growth for the euro area (and that real fluctuations, subject to meeting the inflation objective should be small).¹⁹ There is, it may be argued, confidence that the inflation objective will be met. It may also be argued that there is much less confidence in the corollary that the economy will be stabilised around potential.

Consider what happens in the US when there is news that recession is worse, or that the expected recovery is delayed. There is an immediate anticipation that official interest rates will be lowered—so market rates react. There is also a contingent belief that if things get worse than presently anticipated, then action will follow. No-one can know how events will unfold, but the perception that action will be taken contingent on how things develop, stabilises expectations of growth (and inflation). This aspect of the monetary policy reaction function seems much less well established in the euro area than in the US.

Does it matter? My view is that it does. Anticipations affect consumer and investment expenditure as well as financial market prices. An economy which embodies the belief that contingent action will be taken (and will succeed) will be more stable and more

¹⁶ The qualification is necessary because the reaction function in the US appears to be clearly understood, even though, in formal terms, it is hardly specified at all.

¹⁷ The vast literature, starting with Kydland and Prescott (1977), on the inflation bias seems, therefore, somewhat beside the point in looking at the ECB. Bean (1998) suggests that delegation to an independent central bank should eliminate the ‘bias’. See also Vickers (1998).

¹⁸ The ECB’s own response to criticisms of its strategy is provided in Issing *et al* (2001, esp. Chapter 7).

¹⁹ Strictly speaking, the authorities should be perceived to be minimising some loss function defined over variations in the deviation of output from potential and deviations of inflation from target.

resilient that one where the resolution of the authorities is doubted, or where the efficacy of policy action is called into question.

And there is another point. I argue in the next section that the perception of a stability-oriented reaction function for monetary policy is crucial in affecting the way in which the decentralised fiscal system is likely to work.

What would help?

Reasons why the linkages between the growth and inflation sides of the picture might be weak in the euro area are not hard to find. The asymmetric definition of price stability as less than 2% generates an uncertainty about reactions on the downside—though not on the upside. And attempts to implement the natural-rate model empirically may be rather unreliable in the European context. (Though one should not make too much of it, I have already noted that the output forecasts were revised down substantially between June and December 2001 whilst there was remarkably little change in the forecast ranges for inflation.) There were parallel problems with the natural rate in the US, where unemployment was allowed to fall substantially below existing estimates. It has also been a feature of UK experience where unemployment has fallen remarkably with little change in the direction of wage growth.

If it were accepted that a greater perceived role in supporting growth was desirable (and I am well aware that a focus on this aspect of the reaction function may seem to some to be a rather Anglo-Saxon way of looking at things), then there are several things that could be done to promote such a change in perceptions. The following suggestions are not exhaustive.

1. Greater symmetry in the target. Stress on the symmetrical target in the UK has proved extremely important in developing public acceptance of the role of the MPC. Whilst there are probably good reasons for not changing the specification of objectives for a new institution, there is much that could be done short of that to promote the idea that policy is being operated symmetrically.
2. Further down-playing of, or abolition of the ‘first pillar’—the reference growth rate of 4.5% per annum for M3. Interest rate reaction functions could give, as they have given in the past, weight to intermediate indicators such as broad money. As I read the record, they have not been very successful, and in the UK, were destabilising. The meaning to be given to developments in this aggregate in the euro area is obscure, and so far, much of the rhetoric has been to explain why the signal from this indicator should be ignored. To be sure, it is one indicator which should continue to be used in assessing inflationary pressure and future developments—but so should many other indicators within an inflation-targeting regime. I thus concur with the argument in Alesina *et al* (2001) and Svensson (2000) that this pillar makes policy and the reaction function less transparent than it could be.

3. Greater focus on and attention to the hierarchical (or lexicographical) ordering of objectives in the mandate, which as I would read it, demands attention to growth and output stabilisation when inflation is within target and would not be threatened by such policies.

If perceptions about how the reaction function is supposed to work in the face of contingencies are important, the claim that policy implementation has, in practice, worked better than its presentation is not much comfort. An essential aspect of the way the system is supposed to work is that processes and procedures should be clear and transparent and that the reaction function (broadly interpreted) should be fully understood.

IV Fiscal issues

I turn now to fiscal policy. Clearly this involves the Stability and Growth Pact and the pressures which are presently upon it.

Fiscal issues for the area as a whole

There is a medium-term worry over deficits and debt which would apply to a single country but which is particularly important within Europe with decentralised fiscal authorities. There is widespread agreement that, at the minimum, explosive rises in national debt ratios need to be avoided. For Europe, the context is important and it is worth recalling that the debt ratio for Europe as a whole more or less doubled from 40% of GDP to about 80% of GDP in the fifteen years from 1980s to the mid 1990s. To all intents and purposes, the debt trend was explosive and needed to be contained in the run up to EMU. The fiscal convergence criteria (3% for government deficits and 60% for debt ratios) in the Maastricht process were a response to that history. And the constraint on fiscal policy has been carried forward and tightened in the objectives and provisions of the Stability and Growth Pact requiring that countries should aim for government deficits to be 'close to balance or in surplus'. Whatever may be thought of the Pact itself, it is hard to deny, in the European context, that some medium-term fiscal rules were needed. Nevertheless, the change from the past is very great: whether one looks at actual or structurally-adjusted deficits, there was only a single year in the period 1980–95 when Europe as a whole would have met the Maastricht 3% limit (and that was the boom year 1989), let alone the much more stringent limits imposed by the SGP (Allsopp and Vines 1996).

Putting aside the longer-term issues, this still leaves an obvious role for fiscal policy in *stabilisation*. As noted in Section II, over the business cycle, the tax and expenditure systems in Europe provide a high degree of automatic stabilisation—so long as deficits and surpluses (which should cancel out over the longer term) are allowed to emerge. One of the worries about the Stability and Growth Pact is that it may limit the operation of the fiscal stabilisers. Buti *et al* (1998) turned the rhetoric on its head, arguing that that the medium-term provisions of the pact, over the cycle, if met, would allow the fiscal stabilisers to operate as they should. This way of looking at the issues is now,

effectively, EU policy—see, for example, European Commission (2001)—and is built into the rhetoric of the ECB which accepts that in the current slowdown, countries that have succeeded in consolidating their fiscal position should allow the fiscal stabilisers to operate (within the asymmetric 3% upper limit): other countries with relatively large deficits or with high debt ratios, should not give up on attaining the objectives of the SGP.

Now, to make an obvious point, the fiscal system in operation (the degree of fiscal stabilisation it provides) should affect the optimal reaction function of the central bank. The point is most obvious in the case of demand shocks affecting the area as a whole in a situation where inflation is under control. (It is a standard result that such shocks should be offset as far as possible.) Clearly, the more that is done by fiscal policy the less needs to be done by monetary policy. In the absence of fiscal stabilisation, interest rates would need to fluctuate more than otherwise as (system-wide) demand shocks occur. The logic is inescapable. The more the system is constrained to offset the fiscal stabilisers by the SGP, the more active the ECB should be in offsetting demand shocks with its interest rate strategy.²⁰ More generally, there is some trade-off in the system, in the face of common demand shocks, between the degree fiscal stabilisation (built-in or discretionary) and the degree of interest rate activism.

But suppose the central bank does not react, or that the fiscal authorities do not think it will react.

The coordination of fiscal and monetary policy

Alesina *et al* (2001) argue that, if the system is working well, coordination between the monetary and fiscal authorities is not necessary, and, even if it is not working well, is generally speaking undesirable. Given the increasing political tensions about just this issue, some deconstruction of their arguments is called for.

By working well, they mean that the central bank operates an inflation-targeting type reaction function and the fiscal authorities ‘keep their house in order’ which they take to mean that they maintain a cyclically adjusted balanced budget. (I note in passing that this is unlikely to be an optimal fiscal rule—an objective of stabilising debt ratios, similar to the debt sustainability rule in operation in the UK—has more to recommend it, though it would probably not be optimal either. Nor is there in theory anything in any way sacrosanct about debt ratios at 60%. The cyclically-adjusted budget rule, is, however, in line with the objectives of the Stability and Growth Pact.) Crucially, they assume that the system is of the natural-rate type and working well: they state if output is above potential, inflation will show a tendency to increase, and the ECB will raise interest rates (and vice versa). Under such circumstances, their argument is correct and there is little coordination can achieve. In particular, the fiscal authorities will take into account the monetary policy reaction function in formulating their policy. (In the context of the UK, Bean, 1998, has described the fiscal authorities as being in the position of a Stackelberg

²⁰ It would simply be taken for granted in a US or UK context that if more stabilisation were provided by fiscal policy this would be taken into account in the interest rate reaction function.

leader, taking account of the reaction of the monetary authorities.) Alesina *et al* go on to give the example of a fiscal contraction, where they argue that explicit coordination is not needed since, if the fiscal contraction were to lead to a downturn, this would trigger a monetary policy response in the direction of easing.

There is nothing wrong with their argument. It is how the system should function. The very real danger I want to raise is that the central bank may not react as it should, or that the perceived reaction function of the monetary authorities may not be so neatly offsetting. In the hypothetical case where the reaction function is wrong (interest rates do not ease, in the example) you get bad policy. What is more, one might well get a worse result than if fiscal policy had not been tightened. And, in terms of perceptions, fiscal policy might well not be eased if the perceived or expected reactions were wrong—even if they would in fact materialise.

This is not about coordination. There is no necessary conflict of objectives, and no coordination problem *per se*. What there is disagreement about is what good policy should be (for the same objectives). Nevertheless the disagreement may well look like a coordination issue. The actual issue is about the appropriateness or otherwise of the central bank's reaction function.

The seriousness of the issue should not be underestimated. At worst, fiscal policy will be distorted by the wrong monetary policy reaction function, and the credibility of the central bank (and its legitimacy will come to be questioned). If on the other hand, the central bank is right in its views about how the system works and how it should work, then the situation is perhaps less serious. It is absolutely crucial for the euro area that the central bank reaction function, the lynch pin of the system, be well designed and well understood. And that in turn means that the system should be transparent and accountable.

It may be helpful to sketch out a little more fully the way the institutions in the UK work. As noted, the monetary policy reaction function is symmetric and quite closely defined. The MPC has no responsibility for fiscal policy (and it is not the role of the MPC to say what fiscal policy should be). If, say, the fiscal authority decides to tighten policy, the Treasury would be taking into account the likely monetary policy response. In particular, if inflation were under control and the assessment was that the fiscal tightening would lower demand in the short term, a monetary easing by the MPC would be anticipated (since this would be consistent with meeting the inflation target). And, in terms of information, the fiscal plans would be communicated to the MPC, which in turn would be in a position to take them into account in its monetary policy decision. The division of roles and responsibilities is rather clear cut. The system is generally thought to work well and it has been argued that information exchange and coordination work efficiently and indeed better than in the past before monetary and fiscal roles were separated (Balls 2001, O'Donnell 2001). Indeed, it is a practical example of the kind of interactions described by Alesina *et al* (2001) where formal coordination is not necessary. Note that it is the fiscal authorities in this example who have the overall responsibility for getting

macroeconomic policy right—which, in my view, is appropriate given that they are the democratically responsible and accountable body.

But suppose, purely as a thought experiment, it did not work well. If the MPC sat on its hands, and did not cut interest rates, demand would fall—overall, policy would not be as good as it should be—though eventually, the effect on inflation as it came through would, in effect force a belated reaction in the appropriate direction. And, if the fiscal authorities thought that the MPC would not react (even though they should) they might well be discouraged from making the fiscal tightening (assumed desirable) and the system would end up with an inappropriate mix with fiscal policy too loose and monetary policy too tight.

The reverse situation—again put forward as a thought experiment—would be if the monetary side of the picture were working well, but the fiscal authority was behaving irresponsibly (or was seen as likely to behave irresponsibly). The reaction function approach suggests that there is nothing much that the central bank can or should do other than make clear what the interest rate consequences would be. Thus, inappropriate fiscal relaxation would lead to higher interest rates than otherwise. I would add that it would be desirable to make clear that the reason for this was exclusively the likely consequences for inflation (so that there was no danger of any statements being construed as some sort of threat strategy—see Allsopp and Vines 1998), and that it would be desirable to stress the symmetry of the reaction function consequences, that is, that, conversely, a fiscal tightening would lead to lower interest rates than otherwise.

Multiple fiscal authorities

With multiple fiscal authorities, as in the euro area, the situation is more complex. Here, there is a potential coordination problem between the fiscal authorities. Consider the comparison between a single authority, outside EMU, and the situation in EMU. Outside EMU, fiscal consolidation (say) would be combined with monetary relaxation, either because there was a single macroeconomic authority or because there was in place a well functioning monetary policy reaction function. Within EMU, fiscal consolidation by one authority alone would not trigger the monetary reaction since the central bank is concerned with the aggregate effect of the fiscal action for the twelve authorities. Only if all fiscal authorities consolidated together would the offsetting monetary reaction come through. (Allsopp and Vines 1998, Alesina *et al* 2001).

There is thus a collective action problem that needs to be solved in ensuring the desirable degree of fiscal consolidation—which could be of a Prisoners' Dilemma type or of the pure coordination type (Gatti and van Wijnbergen 2002).²¹ The Maastricht fiscal convergence process and the subsequent Stability and Growth Pact can be seen as ways of solving the collective action problem.²²

²¹ Gatti and van Wijnbergen analyse the issues in terms of a coordination game where the equilibrium is selected according to the 'risk dominance' criterion.

²² The Maastricht process and the SGP are more often seen as a discipline device (to prevent free riding) rather than as a coordination device.

The key point I want to make here is that the game between the fiscal authorities is not independent of the perceived reaction function of the monetary authorities. In particular, if the central bank were not expected to react, even to coordinated, collective consolidation, an agreement to consolidate would be much harder to negotiate—and indeed, just as in the single fiscal authority case, might lead to a worse outcome at least in the short term.

The practical political economy point is that if the ECB's reaction function were perceived to be 'wrong'—in the sense of not implying an appropriate offsetting monetary reaction to fiscal consolidation—this would not just lead to poor policies (as in the single fiscal authority case) but could also, in the worst case, threaten the Stability and Growth Pact.

V Intercountry adjustment, the Stability and Growth Pact and labour markets

'National budgetary policies are ... in the front line when it comes to dealing with country-specific shocks to real output' (European Commission, 2001, p. 64). I have already noted that the medium-term objective (for each country) of the Stability and Growth Pact is that government budgets should be close to balance or in surplus, but that it is recognised that the fiscal stabilisers are extremely important within Europe in offsetting country-specific, or asymmetric, shocks of a temporary nature.²³

The Stability and Growth Pact imposes 'a one-size-fits-all' fiscal policy on euro area countries and the fiscal policy reaction function—like the monetary policy reaction function—can be described as asymmetric, in that deficits of more than 3% of GDP are forbidden whereas there is no equivalent limitation on surpluses. Given that the Pact can be seen as imposing the double duty of medium-term fiscal restraint and short-term fiscal stabilisation on each country, it was always quite likely that stresses and strains would emerge, especially if growth in the euro area were weak.

One problem is that the one-size-fits-all stabilisation rules may not seem fair; countries with high shares of taxation, such as Sweden or the Netherlands, seem more likely to breach the three percent deficit limit for a given size of shock than those where the stabilisers are smaller. (Calmfors, 1998, argues that the limit should be greater for countries like Sweden.) Given that agreement on any medium-term fiscal rule is likely to be difficult, such 'burden-sharing' issues (here concerned with stabilisation) are likely to loom large in political discussions.

But the stabilisation issues are probably small as compared with establishing and maintaining agreement on the medium-term objectives of the Stability Pact—which can be seen as effectively imposing a fiscal closure rule for the euro area as a whole by imposing a similar rule for each country. The fact that countries signed up to the

²³ They are not, however, the only stabiliser or shock absorber: variations in current account positions as countries (or, for that matter, regions) fluctuate relative to each other have rather similar offsetting effects (Allsopp, Davies, and Vines 1995).

Stability Pact, apparently with a degree of enthusiasm, suggests that need for responsible longer-term fiscal policies was indeed well recognised *within* individual countries. (Allsopp and Vines, 1996, 1998, analyse the coordination and incentive issues and suggest that the Maastricht process and the Stability and Growth Pact are better seen as cooperative devices, working in line with national objectives, rather than as disciplinary measures imposed by some to prevent anticipated irresponsibility by others. This view is supported by the fact that countries outside the formal provisions of EMU membership, such as the UK, have also adopted medium-term fiscal frameworks.) But to adopt effectively the same fiscal rule for all euro area countries, given large differences in institutional and financial structure, is a stringent requirement with important implications for the way in which intercountry adjustments can occur.

Now, it can be argued that, for the euro area (or for an individual country) with a monetary policy reaction function, the form of the fiscal rule (so long as it is of the appropriate general type) does not matter greatly. A tighter or looser medium-term or long-term fiscal requirement would be compensated for by the monetary policy reaction function, and so would a greater or smaller degree of built-in or discretionary fiscal stabilisation.²⁴ As far as the monetary policy reaction function is concerned, longer-term fiscal restraint would go with a lower ‘equilibrium’ or ‘neutral’ real interest rate.²⁵ For an individual country within EMU, however, the situation looks very different.

An individual country faces given nominal interest and exchange rates. If a requirement (say) of fiscal balance is also imposed, there is certainly a possibility that this will not be consistent with domestic macroeconomic balance—at least for a time until adjustments come through. But what *are* these adjustments which are supposed to reconcile the medium-term fiscal requirement with an externally-given interest rate and exchange rate?

There are two, which interact macroeconomically. The first is the degree of competitiveness of the economy—in effect, the real wage level in relation to productivity. The second is the external current account position, which, as a matter of identity, matches any surplus or deficit of domestic private sector savings over private sector investment. The bottom line is that regional or country real wages need to adjust (relative to other countries) to allow output to be at potential (and, preferably output growing through time at potential) given the externally-given interest rate and domestic fiscal balance. The balance of payments is then endogenous and functions, in effect, to pick up

²⁴ I have argued on a number of occasions that longer-term fiscal tightening in Europe was necessary and that it would lead to a change in the longer-term monetary/fiscal mix of a desirable kind, towards lower equilibrium real interest rates in Europe.

²⁵ This line of argument would suggest a relatively ‘low’ real interest rate in the euro area in the wake of the Maastricht fiscal consolidation process. There is a question as to whether, within the world economy, capital market integration would allow a longer-run interest rate divergence of this type. If real interest rates are subject to arbitrage, then an alternative would be for the euro area to run a persistent balance of payments surplus (which would normally go with a relatively lower real exchange rate than otherwise). In the longer run, asset stock effects, particularly relating to FDI, would need to be taken into account.

any divergence, positive or negative, between equilibrium domestic private sector savings and investment.²⁶

These economic implications of adopting similar fiscal objectives for the different countries of the euro area are conventional but the ramifications are not always appreciated. They come down to the familiar prescription of ‘wage flexibility’, here *between* countries, with the added (macroeconomic) rider that endogenous movements in balance of payments surpluses or deficits are very much part of the process.²⁷ In practice, this means that the burden of intercountry adjustment is put on relative competitiveness changes—especially changes in relative wage levels—which need to adjust to ensure that each individual country can achieve macroeconomic balance and grow at its potential rate. In particular, the analysis suggests that overheating countries need to adjust via higher nominal wages (relative to others) and that countries that experience sluggish domestic demand trends and have incipient difficulties in meeting the objectives of the Stability and Growth Pact need to improve their competitiveness, for example by lowering their wage costs within the euro area.

By contrast, a more flexible or differentiated fiscal framework would mitigate some of the need—at least over the medium term—for supply side adjustments, including relative wage changes, but, perhaps, at the expense of postponing the needed longer-term adaptations.

This suggests a complex series of trade-offs which are important in the political economy of intercountry adjustment within the euro area. First, as argued, there is a trade-off between the degree of fiscal flexibility (in the sense of allowing different fiscal positions between countries) and the degree to which adjustment needs to fall on a combination of relative wage and balance of payments adjustments. Second, there is a time dimension in that achieving macroeconomic balance in an individual country via the alternative of fiscal policy may delay needed supply side adjustments (including wage level adjustments) between regions and countries. Third, if individual countries are allowed fiscal flexibility, this may threaten, or may be seen as threatening, the longer-term objective of fiscal consolidation and control for the area as a whole. And to make everything more difficult, the degree of fiscal flexibility available to a country depends on their overall macroeconomic situation and may operate asymmetrically. Countries that are competitive and whose budgetary positions meet the objectives of the Pact have

²⁶ The two sides of the adjustment picture, sectoral savings and investment flows on the one hand, and cost competitiveness, on the other, can be seen as relating to the ‘absorption’ and ‘elasticities’ approaches to the balance of payments. Again, stock/flow interactions would need to be taken into account in a fuller model.

²⁷ In well established currency areas, such as the US, regional (or State) level budget balance is consistent with macroeconomic balance for the region so long as regional wages adjust appropriately and so long as any resulting regional balance of payments surpluses or deficits are tolerated. Indeed, within established currency areas, regional balance of payments surpluses and deficits may not even be computed. In practice there are other interactions to take into account. Obviously, regional labour and capital mobility are other adjustment channels to take into account. Also, regional transfers via the federal budget may support some poorer areas. The transfers can be thought of as allowing the gaining region to run a payments deficit on other transactions.

considerable fiscal freedom: those with difficulties meeting the conditions of the Pact have less, especially if the area as a whole is facing recessionary conditions.

Intercountry adjustment in practice

There are some notable examples of countries in the euro area where the processes of fiscal consolidation and adjustment appear to fit in with the paradigm outlined. The Netherlands, for example, has effectively coordinated wages and wage changes to be consistent with fiscal consolidation according to the Stability and Growth Pact and with output growing roughly in line with potential. The consequence of this strategy, given private sector domestic savings and investment behaviour, has been a persistent current account balance of payments surplus which has been running at about 4% of GDP and is expected to continue at about that level over the medium term.²⁸ (Naturally, they have been accused by some of competitive or ‘beggar-thy-neighbour’ real exchange rate devaluation, especially *vis a vis* Germany.) Belgium, too, has its public finances roughly on track and is running a large balance of payments surplus. In Austria there is a long tradition of paying attention to the importance of competitiveness in achieving macroeconomic balance given the maintenance of a relatively fixed rate of exchange in relation to Germany. Austria has typically had a balance of payments deficit in recent years.

As is well known however, the process has worked rather differently in Ireland. At the beginning of 1999, Ireland was already enjoying extremely rapid growth, which was further boosted by the fall in interest rates at the start of EMU. One way of describing the Irish situation is that it was an extremely competitive region within the EU benefiting from inward investment and ‘catch up’. Potential overheating and wage inflation were in part mitigated by (a) their incomes policy and (b) allowing the stabilisers to work on the budget, which moved to a surplus of about 4.6% of GDP in the year 2000. (The situation is now markedly different, since Ireland is particularly adversely affected by the ICT slowdown.) A year ago, the talk was of overheating, despite the large budget surplus. (Alesina *et al* 2001, writing a year ago, favoured the wages/real exchange rate route for the case of Ireland, on the grounds that this would take them towards macroeconomic balance in the longer term.)

I want to make a general point. First, if overheating is a problem and the country concerned has a structural budget surplus, such a country faces a choice between adjusting via restrictive fiscal policy, or allowing a real exchange rate change to come through via relatively fast rises in wages. The logic of a common fiscal policy—such as structural balance in the medium term for each country—would clearly suggest the real exchange rate route for the longer term.²⁹ But it might not look that way in the shorter

²⁸ Consider the difficulties that would arise in the Netherlands if they were a closed economy, or, if they faced an additional requirement of external balance under EU rules. Then private investment would have to rise relative to domestic savings by 4% of GDP.

²⁹ I am not suggesting that this is how the Growth and Stability Pact should be interpreted. As noted, it is asymmetric, and structural budget surpluses and declining debt ratios are allowed.

term for the country concerned or for the other countries in the euro area concerned about how the system as a whole is operating.

For the country concerned, maintaining competitiveness via a tighter fiscal policy might well look like an attractive option, especially if there is an objective of promoting growth and ‘catch up’. The point can be put the other way around: to meet an objective of budget balance in the medium term, starting from a position of structural surplus, would require tax cuts and/or expenditure increases which would exacerbate the ‘overheating problem’ with the intention of generating inflation to make the economy less internationally competitive. It does not look like an attractive option.

Moreover, it may not look like an attractive option to other countries either. Overheating and inflation would be seen as raising inflationary pressure in the euro area as a whole, and trigger, via the central bank’s reaction function, a higher interest rate than otherwise. The political pressure is likely to be towards fiscal restraint.

So far, the euro area as a system has been fortunate in that divergences have, on the whole, been on the upside—towards overheating—and the countries concerned have been relatively small. In such circumstances, there is considerable scope for adjustment, either via wages or via restrictive fiscal policy. I have suggested that the economic and political logic points towards the use of fiscal policy to curtail overheating pressures, even where the objectives of the Stability and Growth Pact are met. But the implication of this asymmetric fiscal flexibility is that upward adjustment of relative wage levels and competitiveness is likely to be curtailed.

This in turn means that it is uncompetitive countries which are finding it hard to meet the objectives of the Stability and Growth Pact who are likely to have to do much of the adjusting if adjustment is necessary. This suggests considering countries like Germany, the highest wage-cost large country in the world, which also appears to be having difficulty in meeting the objectives of the Stability and Growth Pact.

The adjustment problem for high wage savings-surplus areas within the euro area

It is not my intention to discuss the macroeconomic policy issues relating to Germany in any detail. But it is useful to think of ‘Germany’ as an example of a large country with high wage costs and with, traditionally at least, a high rate of private saving—which may be high in relation to the amount of private domestic investment that is going on. My contention is that such a country may face particular problems with the operation of the Stability and Growth Pact and labour market interactions within the euro area.

It is useful to start, however, by considering the problems that are likely to arise for a country within the euro area which needs to adjust its wages downwards relative to other countries. (Of course, it would prefer to adjust its productivity up, rather than its wages down—but assume that the scope for that is limited). Arguments similar to those above would suggest that such an uncompetitive country would face difficulties in meeting the

objectives of the Stability and Growth Pact. Growth would tend to be sluggish, and there would be pressure to compensate by fiscal relaxation. In this case, however, fiscal compensation for a lack of competitiveness is ruled out, since it is not compatible with meeting the objectives of the Pact. The adjustment mechanism that is called into play is that low demand and unemployment within the country concerned should lower nominal wage growth (relative to other countries) and bring about a real change in relative competitiveness. With the process complete, wages should have adjusted, the economy should be at full potential output, there should be budget balance and the balance of payments position should reflect, as discussed above, the equilibrium savings and investment propensities of the domestic private sector. It all comes down to the basic point that with fiscal policy constrained by the Pact, intercountry adjustment needs to occur via relative wage changes and associated balance of payments changes.

Such an adjustment looks difficult. It may look particularly difficult for large countries which typically run savings surpluses relative to investment when they are at full potential. Then budget balance would require a balance of payments surplus to match the private sector surplus of savings over investment. Since in the starting point, the country might well have a healthy balance of payments position, the need for an adjustment of its wage level relative to other countries might well be obscured. And needless to say, if it occurred, a reduction in wages and move to balance of payments surplus by a large country might well pose problems within the euro area.

The question of course, is whether any large euro area countries fit this characterisation of needing to improve competitiveness and run a balance of payments surplus in order to meet the requirements of the Stability and Growth Pact. The best candidate is Germany.

Since the 1970s slowdown in growth, Germany has typically achieved macroeconomic balance with *either* a large budget deficit *or* a large current account balance of payments surplus. Thus, in the early 1980s, the budget deficit was of the order of 3% of GDP. Over the course of the 1980s, the budget deficit was eliminated, but the external surplus rose to nearly 5% of GDP. Basically, this shows that the savings/investment balance of the private sector was a substantial surplus over the 1980s, averaging about 4% of GDP. It is certainly true that West Germany, like Japan, used to be described as having a structural savings surplus. In such a country, meeting the objectives of the SGP in the medium term would imply running a substantial external surplus.

Unfortunately, comparisons of the situation in the last decade with the 1980s may not be very informative, since much changes with German reunification and the data are not really comparable. The external surplus position was eliminated (and the German economy has been in rough external balance since). Despite this, Germany has been relatively successful in achieving fiscal consolidation. These two changes imply that the actual private sector savings surplus has been much reduced. The key question is whether there really has been a change in equilibrium savings/investment behaviour (in which case a medium-term position of external balance and approximate budget balance would appear sustainable) or whether the tendency towards excess savings in relation to investment persists. If it does, then the implication would be that attempts to meet the

objectives of the Stability and Growth Pact would tend to go with weak domestic demand trends, especially for consumption, and incipient problems in meeting the deficit target. As a rough calibration of the German economy in recent years, this characterisation does not fare too badly.

Suppose this characterisation is correct. What it would mean is that 'Germany' would find macroeconomic management more straightforward, and macroeconomic balance at potential growth easier to achieve, if it were, like its neighbours Belgium and the Netherlands, running a substantial balance of payments surplus in the medium term. If Germany is a savings surplus area, this would, in fact be optimal, and the surpluses 'should' be exported to higher return areas with savings deficits within and outside the euro area. But to get into that position it is likely that competitiveness, relative to other countries, would need to improve.

But assume, for a moment, that the surplus-savings area cannot achieve a current account surplus to square the circle because its wages are too high. What would the policy pressures look like? They are rather obvious. First, the common monetary policy would not look appropriate for our notional 'Germany'. Lower interest rates would help to stimulate growth and investment, reducing the incipient savings surplus and making the fiscal position easier. The logic would suggest that such a country might be tempted to pressurise the ECB towards lower interest rates and more policy activism in the face of adverse shocks—and, in fact, would, from a national point of view, like lower interest rates than justified by consideration of the euro area as a whole.

A useful indication of this potential pressure is provided by Commission estimates of the Taylor rule for Germany and for other euro zone countries. A mechanical application of the rule indicates that, in 2001, Germany needed interest rates $\frac{1}{2}\%$ lower than the average for Europe, whereas most of the periphery needed interest rates higher than the average. (The figure for Ireland was + 3%, for the Netherlands, + $1\frac{1}{2}\%$. France was also $-\frac{1}{2}\%$. See European Commission, 2001, Table 10, p. 79). But, of course, there can only be one interest rate for the euro area, and it needs to be based on the aggregate of inflationary and deflationary pressure over the area as a whole.

Another obvious political pressure would be on the overheating countries, since if they were to restrict demand, interest rates for the euro area would be lower, via the central bank's reaction function. That, however, is highly paradoxical politically, since it is typically just these countries that would be finding it easy to meet the requirements of the Pact.

Whilst such pressures are all too likely, they in fact miss the point. If the situation is as described, then the high-wage, high-saving country, which we have called Germany, would need to find some way of lowering its relative wages or improving its productivity performance within the euro area and move towards running a balance of payments surplus.

Relative wage and cost adjustments

I have suggested that upward movements in wages in countries that find it easy to meet the objectives of the Stability and Growth Pact are likely to be attenuated by fiscal policy. The problem is that a competitive real exchange rate, even if held in place by a restrictive fiscal policy, may be an attractive option for an individual country. And there is little in the rules to stop it.

This puts the burden of adjustment of relative wage levels in the euro area on those countries that find it hard to meet the Pact's objectives. The traditional answer is that slow growth and mounting unemployment would lead to relative real wage reductions. But if wage flexibility actually means a real devaluation in Germany, which is still arguably the hegemon of the euro system, the difficulties begin to look large.

Importantly, wage restraint in Germany might not be enough. Increasingly, wage bargaining in Europe factors in wage developments in Germany. It is easy to paint a scenario where German wage restraint leads to lower wage rises elsewhere as well, leaving relativities little changed. The result would be lower inflation in the entire euro area, hopefully leading to lower interest rates. This at least would help to keep growth up, easing the burdens generally, but do little to bring about longer-term adjustments in relative competitiveness.

The system as a whole

There is an objective that, in tranquil times, all countries in the euro area should grow at their potential rate and that inflation, on average for the area as a whole, should be in line with the objectives of the ECB. In achieving the appropriate potential growth in each country there is a trade-off between using differential fiscal policy and relying on the adjustment of wages between different areas to do the job, which would also involve appropriate balance of payments positions. If the same fiscal rule (such as budget balance over the cycle) is imposed on each country, the traditional mechanism of adjustment is via wage flexibility, whilst balance of payments positions look after themselves (with, for example savings surplus areas running current account surpluses).

The analysis here suggests that the ideal may be hard to achieve. Uncompetitive regions or countries may find it hard to lower nominal wages relative to the rest and suffer below potential growth and difficulties in meeting the fiscal objectives of the Stability and Growth Pact. Over-competitive regions may be unwilling to see competitive advantage eroded and prefer restrictive fiscal policies as a way of ensuring growth at potential. In practice, the Pact is likely to operate asymmetrically.

Possible ways forward include making the Pact operate more symmetrically—which in practice would mean that countries running fiscal surpluses would have to allow upward wage adjustments, or widening the degree of fiscal discretion to allow those countries

experiencing difficulties in meeting the objectives of the Pact to run deficits in the medium term.

With a greater degree of fiscal flexibility, there would be a need to establish fiscal rules for the euro area as a whole whilst relative fiscal positions were directed towards maintaining potential growth in each country. Needless to say, this might be hard to achieve. And there is a further problem that the degree of fiscal flexibility would delay needed longer run adjustments of relative competitive positions.

These issues, concerning the way in which the Stability and Growth Pact interacts with labour market and balance of payments adjustments, pose perhaps the biggest challenge for policymakers in the euro area over the coming years.

VI Conclusions

My brief has been to focus on potential macroeconomic problems for Europe—challenges for the future. The achievements to date have been very great. But there are indeed challenges, many of which have come into prominence with the present synchronised slowdown.

The challenges can be grouped in two main areas: those relating to the system as a whole and those relating to interactions between its parts. Issues relating to the monetary policy of the central bank are concerned with the system as a whole. The Stability and Growth Pact relates both to the macro aggregate and to intercountry interactions. And intercountry adjustments depend crucially on the interaction of the Stability and Growth Pact with national labour markets.

For the euro system as a whole, the way monetary policy works is absolutely key. What I have called the monetary policy reaction function not only needs to work well but to be seen to be working well. A successful inflation target regime should stabilise not only expectations of inflation, but also expectations of growth over the medium term. The anticipation of growth at or around potential, via effects on confidence and expectations, would do much to help bring it about.

The reaction function of the ECB, to the extent that it can be inferred from behaviour so far, seems to be of the appropriate general type. If I were being prescriptive, I would say that it needs to be seen as symmetrical and that there should be an optimism bias in the sense that the non-inflationary growth potential of the system should be tested from time to time. Since I am not, I will say that there is a challenge for the ECB in ensuring that its reaction function is well understood, and that its role in stabilising the economy and in underpinning the anticipation of medium-term growth at potential is fully appreciated.

Public understanding of the reaction function needs to include appreciation of the implication that there is some trade-off between fiscal stabilisation (though the automatic stabilisers, for example) and the degree of interest rate activism. Even more importantly,

it needs to be understood by the fiscal authorities, that any downward pressure on aggregate demand and inflation from fiscal restraint would, reliably, be offset by reductions in interest rates—not because of policy coordination or bargaining, but simply because that is the way the system works. In the absence of such a reaction function, the result would be bad policy. Even the perception that policy might not react in the right way could lead to the wrong monetary/fiscal mix, and this could occur even if the reaction function were, in fact, of the appropriate type. This reinforces the message that the right sort of monetary policy is essential for the economic and political health of the euro area.

With twelve different fiscal authorities, the importance of the central bank's reaction function becomes even greater. Institutions such as the Stability and Growth Pact depend upon forging agreement on the desirability of fiscal consolidation and restraint, for the area as a whole and within individual countries. It is important that the payoff in terms of interest rate offsets be well understood. Without the payoff, that is, without the appropriate reaction function, agreement would be hard to negotiate and maintain. The Stability and Growth Pact would come under increasing strain.

Intercountry interactions pose the most serious challenges of all. Contrary to some often heard views, there is a high degree of built-in fiscal stabilisation in the euro area, implicit in national tax and expenditure systems—so long as counterpart movements in national budget deficits and surpluses are allowed to come through. Variations in national budgetary positions are an important shock absorber limiting the impact of country specific shocks. (There is, however, effectively no system to provide longer-term intercountry transfers between rich and poorer regions.) Clearly, there is a worry that this, important, shock absorber function of national tax and expenditure systems might be limited by the provisions of the Stability and Growth Pact.

But I have laid most stress on the longer-term implications of the Stability and Growth Pact. Clearly, its provisions can be seen as imposing a one-size-fits-all medium-term fiscal policy on a system which already has a one-size-fits-all monetary policy. If countries have different requirements for the overall stance of macroeconomic policy in the medium term, there is not much let-out via a common fiscal policy. (And if fiscal policy has no longer-term effect, as some believe, there is no let-out either!) In practice, however, the system has operated, until recently, in an asymmetric way, with relatively fast growing, relatively low wage economies, showing a tendency, at least according to the Commission, towards overheating (the extreme case has been Ireland). These countries have had little trouble in meeting the provisions of the SGP and have freedom under the asymmetric rules of the Pact to use fiscal policy as they wish. In particular, if they want to design longer-term rules for fiscal policy, they can design them with their own country circumstances in mind (so long as they are more restrictive than the Stability Pact). But since overheating and inflationary pressure in one country imposes externalities (through the central bank's reaction function) other countries do have a legitimate interest in finding some way of persuading or cajoling overheating countries into policies which are appropriate for the system as a whole. The natural tendency is

towards some sort of system of multilateral surveillance and cooperation—but the potential strains are all too obvious.

With the synchronised slowdown, the pressure is on those countries that have found it hard to meet the medium-term fiscal aims. In these countries, the Stability and Growth Pact may be genuinely constraining. There is a risk in present circumstances that the Pact could limit the operation of the stabilisers in the countries that most need them, whilst allowing fiscal offsets elsewhere. (This is, in fact, close to official policy.) The fiscal offsets elsewhere, working through the central bank's reaction function, would then lead to a smaller interest rate adjustment than otherwise, possibly compounding the problem.

The longer-term solution to a one-size-fits-all macroeconomic policy is wage flexibility with structural differences in private sector savings/investment balances showing up in balance of payments surpluses and deficits between different regions. The prescription of wage flexibility, however, may conceal a multitude of problems. I have suggested that Germany in particular may need lower wages and a balance of payments surplus within the euro area. If this is what wage flexibility means in practice, it is hardly a small issue. Other countries may be tempted to lock in competitive advantage (and may be in a position to do this without inflationary consequences by running relatively tight fiscal policies—which are not limited under the Stability and Growth Pact). And, increasingly, wage systems take developments in other countries, especially Germany, into account. Pay restraint in Germany, if followed elsewhere, could lead to low inflation and, presumably, low (real) interest rates. Whilst good for growth, wage differentials between countries might end up being little affected.

Despite the many problems on the agenda for European macroeconomic policy, I am optimistic about the prospects for the euro area. Economies in practice usually work much better than they do in theory. It is a safe bet that issues surrounding the operation of the Stability and Growth Pact and intercountry adjustment will be high on the political agenda and raise large issues of system design and coordination. The job of the ECB is arguably much simpler: to run an appropriate and predictable monetary policy for the system as a whole.

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