BANK OF ENGLAND

# Speech

## Recent Developments in Central Banking: Some Special Features of the Monetary Policy Committee and of the European System of Central Banks

Speech given by

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## Introduction

Regime changes are always exciting, and grist for analysis by the interested commentator. There have been several such regime changes in Central Banking during the last few years, a most exciting period for someone like myself, not only in my capacity as a professional observer of Central Banking but now also as a participant. The Chancellor's initiatives in his first month in office in 1997, to give the Bank of England operational independence, and then subsequently to centralise all financial supervision, including the supervision of banks, in a Financial Services Authority (FSA), caused the most abrupt changes to the functions and structure of the Bank, probably since its foundation. But, of course, the extent and scale of this regime change, though in my view the most important economic developments of the incoming Labour government, have been dwarfed by the move to a single currency, the euro, with its associated European System of Central Banks within the euro area.

There are, of course, many facets of both these institutional changes that one could discuss, and one can also undertake compare and contrast exercises, not only for the Bank of England and the ESCB, but also for example with the Bank of Japan, which has again recently undergone important institutional changes, several of which are similar to those in the UK. Indeed, there has been a veritable flood of institutional change in the last decade partly carried along on a tide of academic enthusiasm for independent Central Banks and further encouraged by the apparent success of such independent Central Bankers in achieving price stability during a decade in which world growth has, I believe, recovered somewhat from previous decades, despite Asian alarums and excursions.

Perhaps the first main mile stone on this latest voyage was to be found in New Zealand, when the incoming Labour government of Lange and Roger Douglas gave the Reserve Bank under Don Brash its operational independence, with the Reserve Bank of New Zealand Act (1989), reaffirming the commitment to use monetary policy to achieve low inflation. I was an outside consultant to the RBNZ, and it remains now an even more personal disappointment that we failed to get my recommendation passed that those responsible for the monetary decisions should get paid largely by results. I might add that New Zealand also led the way in dismantling totally their agricultural protection system, with results that were far less damaging to the farming community than many had feared. New Zealand’s emergence as a role model is a fascinating feature of political science, but why the ideas developed there were so much more successful in translation elsewhere in some areas than in others would take me well beyond my own area of competence.

Many of the innovations subsequently adopted, such as operational independence for the Central Bank, inflation targeting, monetary policy committees, structural reorganisations of supervisory systems in the financial system, have become quite widely adopted in Europe, e.g. in Sweden and Spain, in the Americas, e.g. in Canada and Chile, in South Africa and in Asia, e.g. in Japan and perhaps now in Thailand, as well as in the Antipodes, Australia and New Zealand. My colleagues in the Deutsche Bundesbank and the Swiss National Bank may, however, at this point demur and claim that the New Zealand reforms were not so much innovations, but more amendments to their own prior practices adopted in the early 1970s. The big exception remains the USA, but the Fed not only shared certain aspects of the new consensus structure, such as independence, but also has achieved under its last two Chairmen, Paul Volcker and Alan Greenspan, its greatest success and status. As they say there, “If it ain’t broke, don’t fix it”.

So what I want to concentrate upon today are those aspects of the MPC and then of the ESCB that are special, perhaps unique, to these particular Central Banks. It will, therefore, be a lecture of two rather separate halves. In both I offer my personal views as an independent academic, but the opening section on the MPC is obviously informed by my personal participation, whereas my comments on the ESCB have no different status than that of any other outside, but interested, observer.

We regularly tend to claim during forecasting meetings at the Bank that current circumstances are uniquely difficult to interpret, but the ESCB is really unique in that it has begun to preside over a single, federal euro-currency area, wherein the vast majority of other economic, fiscal and political competences and powers remain reserved for the member nation states. Moreover its transition, though so far remarkably smooth and successful, is complicated by the fact that it has had no organisational or statistical euro-level history on which to call as a guide to current actions and decisions.

By contrast, the features that particularly distinguish the Bank of England's Monetary Policy Committee are less dramatic. Perhaps the most important of these is that the Inflation Forecast is not only published, but is also the signed responsibility of the Committee members of the MPC, including the fan charts with their estimates of variances and uncertainties, skews and risks, though as noted in one of the Tables to the last August Report, differences of view between MPC members can, and do, occur. In virtually all other cases of which I am aware, the internal economic forecasts, whether published or not, are strictly treated as the work of that Bank's staff, not of its decision-making body, or staffs in the case of the USA, where the Regional Feds also publish forecasts, in some cases based on rather differing views of macro-economic inter-relationships. While such an internal staff forecast is likely to be treated much more seriously by the decision-makers than outside forecasts, it still leaves the latter free to disassociate themselves from such forecasts, and to reach their decision on the basis of whatever judgment about the future, quantitative forecast-based or intuitive, that he, or she, may prefer.

What consequences arise from this difference in operation? Let me start with what may seem to you, but not to us in the MPC, a minor matter, which is our own work schedule.

During the non-forecast months, we have three regular meetings connected with the interest rate decision itself, an all-day briefing session with the staff, and two half-day meetings for discussion on the conjuncture and thence to the decision itself. In addition there will be a brief meeting to clear the draft of the Minutes, and often one, or two, other meetings on an ad hoc basis to discuss relevant background research or procedural issues. With the associated reading, and so on, the core work of the MPC requires perhaps about one week in such a non-forecast month, or a bit more if one adds in such other duties as visiting regional agents and other out-reach exercises outside the Bank.

By contrast in a forecast month, there will be approximately about another ten meetings in addition to the regular ones, with some four, or so, to discuss starting assumptions and issues already identified as needing discussion; some two, or three, to consider the evolution of the forecast; and a final couple to discuss the drafting of the Inflation Report itself. Although the staff do the bulk of the process of running the equations and drafting the results, nevertheless the actual burden on the members of the MPC during such forecast months rises by nearly a factor of three, from taking up one week in the month to approximately three weeks. Given that the meetings have to be scheduled to fit the crowded diaries of the Governor and his two Deputies, during these months all other members have to be ready to reschedule any other obligations they may have on a ‘catch-as-catch-can’ basis. This strictly limits the kinds of other outside activities that the so-called external members of the MPC can undertake. I am currently the only ‘external’ member also holding down a second outside academic job, and on the two months of the year when MPC forecasts and term coincide, this is not comfortable.

Besides the question of how many meetings, and how much prior work and involvement, a Committee should have before each decision, there is also a question of how frequently a Committee should regularly meet to make its policy decision. The Bank of England Act requires us to do so once a month, including August; but there was no public discussion of the pros and cons of this choice of periodicity. One obvious advantage of a monthly meeting is that it can be fitted into the monthly cycle of the flow of economic data; one disadvantage is the burden on staff, who need to make full reports, even in August and during the Christmas/New Year season. The FOMC meets eight times a year; the Governing Council of the ESCB twice a month, but will, I believe, normally only review its interest rate decision at its second monthly meeting. It also may be the case that the conventional minimum size of change to official rates could be a function of the frequency of meeting, with smaller step changes accompanying more frequent decisions. The current convention around the world appears to be to have monthly meetings, (or slightly less frequently), with minimum step changes of 25 b.p., unless rates are very low, e.g. below 1% or very high, in double figures, when the step change size is equivalently lowered, or raised. But I do not know of much published work seeking to address whether these conventions are optimal; they just seem to have evolved without much discussion or serious consideration.

So our procedures make a considerably greater demand on Committee members' time than is the case, I believe, in most other countries in a roughly similar situation. What do we get in return? Do the benefits exceed the costs in effort? Let me set out five potential benefits. First, engaging personally in a forecasting exercise emphasizes and underlines to all involved how restricted is our ability to peer into the future; how little we really know and how uncertain are our estimates. The MPC is sometimes criticized for relying too much on forecasts; in my experience it is exactly those same critics without forecasting ability or experience who tend to ask for simple, single-point forecasts, and place far too much weight on them. Given then the huge range of impermeable uncertainties, how has a Committee comprised of self-confident individuals, (one unkind journalist even once described me as ‘opinionated’), managed so far to agree quantitative fan projections? One partial answer is that some members have on occasions expressed reservations which have been noted in the text, and in the case of our last August forecast in a special Table, [6C]. Perhaps another partial answer is that when the independent staff crank out certain numbers, that very same uncertainty often makes it hard to justify demanding some alternative number without sufficient analytical argumentation to sway colleagues. Such economic arguments by members of the MPC are, indeed, regularly made, some in the staff might think far too often, and by the same token cause adjustments to the forecasts.

A second possible benefit of engaging MPC members personally in the forecast is, therefore, that the resultant forecast will itself be better. Several of our members have great expertise in forecasting methods, and can probe whether the underlying equations need reconsideration. Others have practical and professional experience of macro-economic developments both at home and internationally, and can assess whether certain input assumptions and output forecast numbers do, or do not, make sense. It will probably never be possible to test the counter-factual whether the forecasts were themselves improved by the closer, direct involvement of the MPC. There is, however, a reasonable prima facie case for believing that this is likely to be so.

The third potential benefit is that this public process imposes a greater discipline on the MPC. The academic literature from Kydland-Prescott, via Barro-Gordon and onwards, is full of models in which the monetary decision makers want, for a variety of reasons, to be more expansionary than would be consistent with long-term stable inflation. But if an MPC is given a primary objective to hit an inflation target, it is extremely difficult to publish an inflation forecast without adjusting interest rates so as to show publicly that the target should be approximately achieved, given our best assessment of the future evolution of all other economic factors. The cynics will say that forecasts can be manipulated. The process of interaction among numerous staff and individually accountable MPC members means that the only arguments used to amend the Inflation Forecast will be purely economic ones.

How important is such a discipline? This is a matter of judgment. Personally I have felt that attributing much of the inflation of recent decades to an in-built expansionary bias of the monetary policy decision makers at the time was far off the mark. There is little, or no, empirical evidence that monetary policy follows a political business cycle; though there has been more empirical support for fiscal policies to have done so in some countries. By the same token I have no scintilla of suspicion that, simply because the Governing Council of the ESCB does not publish its own inflation forecasts, its policies would consequently be biassed on the expansionary side. At present, the sudden and sharp regime change caused by the adoption of the euro and the lack of euro-area coherent time-series data would in any case make it difficult for them to construct a reasonably reliable forecasting model. Nevertheless my own experience and conviction is that the discipline of a published forecast is useful and important.

The next potential benefit is one of greater accountability. As my erstwhile colleague, Sir Alan Budd, wrote in his excellent paper for the LBS Economic Outlook earlier in July (1999), because of lags in the transmission mechanism of monetary policy, the MPC "is in effect targeting the expected value of future inflation". If shocks, unanticipated events, occur subsequently, then those same lags will mean that the MPC cannot offset their effects on current inflation, or only do so at the expense of unacceptable short term fluctuations in interest rates, exchange rates and output.

If I may quote Sir Alan at some length:-

> "These issues were discussed by Bean in his evidence to the Treasury Committee (TCSC (1997)). His proposed solution to the problem was to examine forecasts made at the time of the policy decisions. 'To the extent that the Bank can only really affect inflation two years or so into the future, it is in essence targeting *expected* inflation two years hence. Thus in holding the Bank accountable for its interest rate decisions, the Committee should ask whether the chosen path of interest rates is consistent with inflation being *forecast* to be 2½ per cent (or whatever the target is) in two years time.' This procedure should largely overcome the problems both of lags (provided the forecasts have a sufficiently long horizon) and of subsequent shocks.
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> He proposed that the inflation projection reported in the Bank's Quarterly *Inflation Report* and the justification behind it should be the main focus of the Treasury Committee's scrutiny of the Bank's decisions. This might imply that the Bank should use forecasts of inflation as its intermediate target - i.e. that it should set interest rates so that expected inflation is equal to the target. Apart from the problem of selecting forecasts, discussed below, Bean agreed that it is reasonable for the Bank to have its own views about the future path of inflation; but it should explain why they differ from those of the market and should expect to be criticised if the market turned out to be right.
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> It is possible to use published forecasts or to derive forecast expectations from the differences between interest rates on index-linked and conventional gilts. Neither is straightforward..... Finally independent forecasters tend to publish point forecasts [of future inflation]. Despite [various] difficulties, the use of contemporary forecasts remains the best way of evaluating the MPC's actions.

> The Treasury Committee did not appear to be completely convinced by Professor Bean’s conclusions but said ‘We agree that outside forecasts may well be useful as benchmarks in probing the Bank on its inflation projections and on the interest rate decisions it takes.’ It said it would also explore the usefulness of rules such as the Taylor rule in providing benchmarks.
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> ‘The Committee intends to hold the MPC accountable both ex post and ex ante. We believe that the focus for our inquiries should not lie exclusively in using the Inflation Report to examine the Bank's recent and planned monetary stance but that a degree of *past accountability* is also called for. Once the arrangements are established, we will be examining the inflation outturn in relation to the inflation target. If inflation deviates substantially from the target, we will seek a comprehensive explanation from the Bank.’”

As it happens, I personally think that the need to publish inflation forecasts in order to obtain accountability can be overstated. Let me again take the case of the ECB. I, and most other observers, assume that the ECB will wholeheartedly try to carry out its remit of achieving price stability, defined as achieving an outcome of between zero, or perhaps slightly more to take account of quality and other biasses in the statistical price indices, and 2% in the harmonised index of consumer prices (HICP). Should the external forecasts of future inflation in the euro-zone, whether market-based or by independent forecasters, suggest that this objective might not be achieved, then the European Parliament, and other commentators may probe for reasons behind the discrepancies between such forecasts and the implicit expectations of the ECB, whether, or not, these latter are published. It is the judgment of markets, and of respected independent forecasters, whether, or not, the monetary authorities have got it right that really provides the ex ante accountability, not so much the publication of internal forecasts. And, of course, ex post accountability is driven by events, not by forecasts.

Finally, though I do not claim that my listing is exhaustive or complete, let me turn to the point that the publication of the Inflation Forecast adds to transparency. This enables us to explain, and to attempt to justify, our actions in the context of a comprehensive, quantitative assessment of all the determinants of output and inflation. This is particularly important because lags in the transmission mechanism, whereby monetary policy affects output and then inflation, mean that our target has to be future, i.e. forecast, inflation, and not current, today's, inflation. We have recently issued a short paper on the time profile of The Transmission of Monetary Policy, which includes discussion of lags. Given such lags, the optimal target has to be forecast, not current, inflation, as Professor Lars Svensson has explained in a whole series of excellent academic papers. But without published forecasts of future inflation, how could we explain coherently what we in the MPC think that we are doing?

By the same token repeated publicly-exposed relationships between forecasts and policy-reaction should allow outside commentators to come to understand more clearly our policy-reaction function, and therefore partly to do our work for us by adjusting market rates appropriately to 'news' in advance of our own actions. As Mervyn King nicely put it, we aim to be 'boring'. In order to be 'boring', you have to be predictable; and the publication of Inflation Forecasts is an essential element in making us predictable. I believe that the publication of the Inflation Forecast does make the MPC more transparent than other central banks that do not do so.

Let me conclude this first Section of the paper by reminding you of the five arguments for having a published Inflation forecast which is the responsibility of the MPC itself. These are (1) a better informed MPC, (2) a better forecast, (3) more discipline, (4) accountability and (5) greater transparency. My own purely subjective ordinal ranking of the benefits would be, (with 5 most and 1 least important):-

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|---|---|
| 5 | Transparency |
| 4 | Discipline |
| 3 | Better informed MPC |
| 2 | Better forecasts |

## 1 Accountability

Of course, all these putative benefits have to be weighed against the considerable costs in time and effort that goes into the process. One colleague mentioned that the labour costs of doing the forecast are tiny compared to the benefits if the forecasts should improve the resulting policy decisions by a tiny fraction. No doubt this is correct, but exactly how can one factor that thought into the administrative decisions about budgets, staffing resources and frequency of forecasts at the Bank? I cannot answer that myself. I hope that others may be able to do so. Whether it is possible to base decisions on an inflation forecast adopted by a monetary policy committee would also depend on the make-up of the membership of such Committees, if they exist at all in other countries. The membership in the UK has been chosen to facilitate such a procedure; in other central banks the nature of membership may effectively preclude such a procedure.

Let me turn now, as is appropriate in a Monnet lecture, from navel-gazing concern with UK monetary policy procedures to some thoughts about wider European developments, the ESCB and the Euro. Here the unique feature of such European developments is that the monetary system is federal, covering the Euro-11 countries now and prospectively an even more expanded euro-zone, whereas within the EU most other economic, fiscal and political competences and powers remain at the level of the nation state, at least for the foreseeable future.

I have already taken the opportunity to comment on certain theoretical and conceptual issues that this may cause in my paper on ‘The Two Concepts of Money’ in the European Journal of Political Economy. Here I want to discuss three more practical, policy-oriented considerations. I should, however, first add here that whereas my comments on the forecasting process of the MPC are obviously informed by my own membership on that Committee, my comments on my chosen aspects of the working of the ESCB are personal, made as an independent academic, and are in no way representative necessarily of anyone else on the MPC or in the Bank. Anyhow, the first of my considerations concerns the role of the ECB as a crisis manager and Lender of Last Resort. Recently (July 13, 1999), I organized a Conference at LSE on the general subject of the Lender of Last Resort. One of the three sessions of this was on the topic of ‘The ECB and Systemic Stability in the Eurozone’. There were three papers, authored by three senior expert European professors, Aglietta, Bruni and de Boissieu, and two IMF research workers, Prati and Schinasi. All three papers were unanimously of the view that the prospective integration of the euro-zone financial system carried with it a commensurate need for much greater centralisation of the euro-zone supervisory system - though opinion was divided on whether that should be located within the ECB, or kept separate - and the speedy and conscious adoption of a central LOLR role by the ECB.

Much the same message was given by the recent CEPR monograph on The Future of European Banking by Danthine, et al (January 1999). Let me quote directly from this, pp 98/99:-

> “To sum up, the advent of cross-border banking, the likely emergence of pan-European universal banks, and, more generally, the new competitive climate of European banking, confront national supervisors with delicate coordination issues. In the face of these challenges, we doubt that the simple coordination among independent national authorities - as provided for by the Second Banking Directive - will be a safe arrangement.
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> The past European experience with national supervision has not always been satisfactory..... It is ironic that while the international financial community - precisely .... to avoid local capture - is studying the possibility of setting up a ‘world financial regulator’, petty national jealousies appear to be preventing this from happening at the

> European level, thus putting the stability of European financial markets at risk.
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> Building a centralized supervisory body is a possibility already foreseen in the Maastricht Treaty. Article 105(6) leaves open the possibility of a change in the assignment of responsibilities..... Article 105(6), however, appears only to allow centralization of supervisory responsibilities inside the ECB. While a clear improvement of the current situation, this may not be the optimal arrangement. First, the ECB is already being perceived as accumulating too much power, and issues of accountability have been raised. It seems difficult therefore to envision that the ECB might also be entrusted with regulatory and supervisory responsibilities. An independent European-wide regulatory agency, distinct from the ECB, may generate less concerns in this respect while at the same time facilitating accountability.
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> Thinking about a new European agency would also allow one to think afresh about the desirability of combining the supervision of banks and markets..... [T]he likely emergence of large universal banks will make it increasingly difficult to distinguish between market risk and the risk of the bank. Moreover, while banks increase their exposure to market risk, markets have become more vulnerable to a liquidity crisis arising from the failure of a large intermediary - the role of derivatives in this process is central, as the cases of Barings and LTCM demonstrate. The argument for combining the two functions in a supranational EU independent agency seems overwhelming."

But there is a problem confronting this approach that most of these authors have missed. As I, and others, e.g. Giannini (1999) have emphasized, it has become increasingly difficult for a Central Bank to distinguish between illiquidity and insolvency. With a few minor exceptions, one such being the well-known Bank of New York computer problem in 1985, the efficient, broad, interbank, wholesale, short-term money markets are able to iron out any liquidity problems that occasion no whiff of suspicion about insolvency. Normally a commercial bank will only turn to a Central Bank for LOLR services, at a higher penalty cost in terms of both interest and reputation, if it has been effectively turned away by other banks in the interbank wholesale money market. That implies that there must be some doubts about solvency in such cases.

So almost any use of LOLR, in the form of lending to a particular financial institution, rather than of generalised open market operations, by a Central Bank could involve some risk of loss. It is not clear whether the ECB has the powers under its statutes to undertake such operations, see Lastra `The Role of the ECB with regard to Financial Stability and LOLR', (1999). Moreover, if it becomes involved in direct lending to a troubled institution(s), and the scale of potential loss became at all significant, there would then be a question of who might bear that loss, as well as the issue of whether any such bail-out was consistent with EC regulations, e.g. on state aid. If the ECB became financially involved in crisis management which might involve any sizeable funding, what sources could it approach? Its own capital is limited, and it might face a legal claim of ultra vires if it sought to use its own capital to support a commercial institution. The EU's budget is strictly limited, and whether a request for subventions to finance such a bail-out would get past the European Commission, Council and Parliament is doubtful in the extreme. Any request to the member states to divide up the fiscal cost between them would tend to run into enormous complications. Perhaps it might apply to its constituent national Central Banks (the NCBs) for an injection of additional capital, but even here there might be difficulties, for example what would be the position of those central banks whose countries were in the EU, but not in the euro-zone, i.e. the out, or to be politically correct, the pre-in countries?

In standard cases where both the key monetary and fiscal policy institutions are centralised at the national level, any major financial crisis, involving the potentiality for loss, will need to be resolved by agreement and crisis management amongst the Central Bank and Ministry of Finance. It cannot nowadays really be done otherwise, as recent examples in Asia demonstrate. But in the euro-zone the ECB has no fiscal counterpart. This is a strong argument for leaving LOLR actions at the national level, subject preferably to ECB oversight and co-ordination. This judgment is made easier currently by the fact that retail financial activities remain nationally segmented, despite the advent of the Single Market and the Euro. This may well change over time, but so also may the balance of fiscal competences between the member nation states and the federal euro centre.

The second topic that I want to cover briefly concerns the relationship between monetary and fiscal policies. There are those who argue that delegation of operational independence for setting interest rates to the Central Bank adversely affects the potentiality for appropriate co-operation between monetary and fiscal policy. I do not agree. Once the political authorities have given the objective for achieving price stability to the Central Bank, the Central Bank's reaction function is, or should be, transparent to the fiscal authorities. Given that reaction function, the fiscal authorities can then, in principle, choose any set of fiscal measures, and hence consequentially interest rates, consistent with price stability. Put more simply the fiscal authorities know that by choosing a smaller fiscal deficit, they will encourage the Central Bank to set a lower level of interest rates in its pursuit of price stability. Claims that Central Bank independence prevent policy co-operation are either analytically invalid or, more likely, represent a coded attack on the primacy to be attached by nominal demand management to the goal of price stability.

The situation is, of course, quite different in the euro-zone where the fiscal outcome is the result of separate decisions by eleven independent fiscal authorities, with the central EU budget being both too small and too inflexible to count. Despite the establishment of the Euro 11 Council, decisions will ultimately depend on national self-interest.

It is certainly arguable that the translation of monetary policy to the federal level in the EU could act to reduce the incentives to maintain prudent and tight fiscal policies at the national level, because the implications of local fiscal expansion for EU wide interest rates and exchange rates would, most of the time, be muted. To reduce the perceived danger of the imbalance between national fiscal policies and federal monetary policies leading the EU towards a scenario of ever expanding fiscal policies and ever increasing interest rates, the Stability and Growth Pact adopted at the Amsterdam European Council in 1997, and drawing on the previous Waigel plan and Dublin Council meeting agreement, imposed limits on current fiscal deficits.

In several respects these constraints are crudely designed. For example, they give no more latitude for current fiscal flexibility to nations with very low debt ratios than to countries with worryingly high ratios; they only make extremely restricted allowance for cyclical factors. Be that as it may, the constraints imposed need not have adverse effects should member countries have reached a long-run steady state equilibrium, with current deficits averaging zero. But we are not at such an equilibrium yet. We start with many countries having deficits quite close to the upper limit, and with the prospect of coping with an ageing population with currently generous, but unfunded, pensions.

The prospect is then one either of continuing tight fiscal policies, whatever the cyclical conjuncture, or of relaxations that may appear to put the Treaty agreement at some risk. The markets and the news media appeared flustered in response to the marginal easing in the Italian budget target, though the pattern of that seeming response, i.e. to lower the foreign exchange value of the euro but <u>not</u> to shift the spread between Italian and German bonds was hard for me to comprehend.

Quite what would happen if the US economy should weaken, and the euro rise sharply, is difficult to envisage. The dichotomy between international (especially US) calls for Japan to undertake ever further fiscal expansions, with a deficit near 10% of GDP and a debt ratio escalating into (what seems to me to be) dangerous territory, and the concerns expressed about a minor increase in the Italian deficit from 2.0 to 2.4% are remarkable. Admittedly the concern in the case of Italy related more to the likelihood of adherence to prior agreed `rules of the game' than to a few decimal points, but even so the episode highlighted for me the differences in the ground-rules that seemed appropriate in the two situations. Yet few seemed to remark on that comparison.

With European fiscal policy flexibility constrained, and the ECB focussed on price stability, is nominal and real demand likely to remain on a satisfactory track in the euro-area? Yes, if the international conjuncture remains benign, as it has looked so far in 1999. The combination of continuing strength in the USA, recovery in Asia, the cut of euro-interest rates to 2½%, reduction in the euro exchange rate and steady growth in the monetary and credit aggregates has been just about perfect. But how much room for manoeuvre remains for the policy mix if the international horizon should cloud?

My final concern relates to the issue that is usually described by the phrase ‘one size fits all’. No matter how small is the area of any single monetary zone, it remains, however, unlikely that the preferred policy will be optimal for all sectors and regions. In the UK, for example, the tradeable goods, largely manufacturing, sector has been under quite severe deflationary pressure, while the non-tradeable, mostly services sector has been buoyant. It is, at least, arguable that asymmetric, i.e. differential, shocks are more likely in smaller, more open economies, especially given the wayward and volatile nature of exchange markets. The great advantage of the euro-zone is precisely that exchange rate volatility does not now impact on such a large proportion of their trade. By exactly the same token one could certainly suggest that the UK has been more affected by asymmetric (essentially exchange rate) shocks in the last few years than has the wider euro-area.

But even if it should be the case that the problem of such differential shocks does become somewhat worse the larger is the geographic size of the monetary union, (and the jury is still out on this question), the extent of any such extra disadvantage is clearly small, at least under normal circumstances. Measures of inequality tend to be less within, than between, countries, though this is not universally true, with political events such as the reunification of Germany occasionally going in the opposite direction. There have been few indications that states and provinces within vast countries such as Australia, Brazil, Canada, China, India or the USA would do better with separate monetary institutions. Wherever there are calls for such separation, as in Quebec, Montenegro and Scotland, it is invariably driven primarily by politics, not by economics.

Within countries with their single monetary systems, there are natural defence mechanisms to contain the effects of asymmetric shocks. These equilibrating mechanisms include factor mobility, e.g. labour migration, market adjustment, notably of relative wages, and fiscal transfers. Several of these are, however, effectively non-operative within the euro-area, and others may be less effective than is the case in most other country-wide monetary systems.

What may then happen if certain constituent parts of the euro-area economy should come to feel themselves disadvantaged by the combination of federal monetary policy and constrained national fiscal policy? With luck and good management, this may never happen. Within most countries such disadvantaged regions as occur generally consider the benefits of nationality sufficiently strong to resign themselves to their relative weakness. Will the perceived benefits of belonging to the euro-area continue to convince voters who may, perhaps, be led to believe, rightly or wrongly, that their current macro-economic difficulties could be resolved by a more nationalistic policy? Time will no doubt tell, but it must remain a worry.

The lesson of history has been that political moves towards unification, or separation, precede and dominate the process of currency unification or separation. There are examples all around. Perhaps, unlike some other countries whose unification was achieved by force, or by international agreements imposed by ‘great powers’, the process of integration in the European Union has been sufficiently more gradual, voluntary, peaceful and balanced between participants to be more enduring. Moreover the European Union is an exercise in trying to learn from history in order to change the course of history. How feasible is it then to reverse the course of history, and go for monetary unification in advance of political unification? It is what was described in the series ‘Yes Minister’ as a ‘brave policy’.