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TOWARDS A MORE PERFECT EMU

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ABSTRACT

Towards A More Perfect EMU*

This Paper explores the unfinished business of preparing for an harmonious monetary union, 'more perfect' than the coarse model set up in the Maastricht and Amsterdam Treaties. To start with, the ECB may fear that it has to live up to its stated lexicographic mission for fear of losing credibility in the crucial start-up phase. Next, the ECB will have to re-think its official determination to only care about average European conditions. Some form of 'monetary federalism' is needed and an example is provided, using estimated central bank reaction functions. Finally, the institutional set-up is too unwieldy to deliver a good policy mix and permit adequate accountability. One money is hardly compatible with eleven governments, twelve Central Bank Governors and twelve Parliaments, each of which would be unwilling to share some power. In particular, governments will have to decide whether to allow competition among national institutions, chiefly labour markets, or whether they will look for collusion to protect the least performing ones.

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NON-TECHNICAL SUMMARY

As EMU starts, it is fair to ask: are we ready? Much of the efforts of the last decade have been devoted to delivering a system devoted to the 'culture of stability'. From this standpoint, readiness is indeed complete. The Paper argues first that the ECB's stated lexicographic ordering of policy objectives is unlikely to be optimal for the society as a whole. Estimates of European central bank reaction function confirm earlier findings that central banks do not behave that way. They are found to set short-term interest rates as if they aim at gaps in both output and employment.

It seems that national central banks intend to use their dominating position in the ECB Council to actually conduct policy. A number of implications follow:

- The decision process will be complex. Building up consensus will be difficult among central bank governors fed with information by their own institutions and therefore less likely to agree on a model of the European economy. National central bank governors will be more sensitive to national economic and political conditions than the more remote Executive Board. The outcome can be either instability as majorities come and go or, more likely, slow decision-making.
- It follows that the current arrangement is unlikely to last very long. The Executive Board will need to wrestle control from the national governors, an evolution unlikely to go smoothly, further fragmenting coherence in the Governing Council.
- Less than fully efficient management of monetary affairs will be both a source of concern and an opportunity for member governments to attempt to divide and conquer. Concern about unstable decision-making will make it harder to achieve 'deals' in the area of coordination of monetary and fiscal policies.
- No matter how divided, Governing Council members will share the desire to establish the credibility of the new central bank. It has long been feared that this goal could lead the ECB to adopt an unnecessarily tough stance. Central banks do not need to be blunt to establish and maintain credibility. Much can be achieved through subtle and ambiguous signals. It is unlikely that a Council lacking homogeneity will be able to master its communication with the public (governments, financial markets, the media and other ECB-watchers) with great subtlety, raising once again the spectre of 'brute force'.

The present official view is that the ECB will only consider aggregate (i.e. average) data, leaving national idiosyncrasies to the care of national governments. This immediately raises the issue of coordination between fiscal and monetary policies. Fiscal policies will be constrained by the Stability Pact so that wide divergences may not be easily dealt with as long as a country does not qualify for the exceptional circumstances provided for in the pact. In addition, fiscal policy is far less versatile an instrument than monetary policy. It is subject to considerable decision and implementation lags and to significant risks of political manoeuvring. It is quite likely, therefore, that the ECB will not be able to remove itself from dealing with particular national events. A new form of 'monetary federalism' must be invented.

At times when national economies are reasonably well synchronised, dealing with the average situation is uncontroversial unless views about central banking differ across countries. The Paper looks at past history to test this possibility. Except for Finland and the Netherlands, all other countries seem to display similar aversion to inflation and to output fluctuations. At least among the four largest countries, which probably retained the largest room to manoeuvre during the sample period, there is no indication of a glaring divergence in opinions. Maybe Germany appears more sensitive to the output gap and less sensitive to inflation and to display more steadfastness in its use of the interest rate instrument.

When national situations diverge, though, it is not enough anymore to have similar tastes. An ECB running a federal-oriented policy could proceed as follows. Since smaller countries weigh little in the EMU-wide total, they are unlikely to affect much the ECB policy. Yet, locally, pain may be intense. This is the much-discussed case of asymmetric shocks, the standard argument against EMU. A possible approach is for the ECB to adapt its policy to the needs of a country that is undergoing an *exceptional* deviation from the EMU average. To define such a special circumstance, I consider the case where one country's output gap is more than two standard deviations away from the Euro-11 average. Over the period 1980–98 this would have been declared 4.7% of the time, 9 years out of 19.

In such a situation, the ECB could then drop its focus on EMU-wide aggregates and temporarily replace it with an index giving extra weight to an asymmetric country. For illustrative purposes, I consider that 50% of the weight would be put on the average of Europe and 50% on the country receiving special attention. This is a very generous view of 'special attention'. A good example is the deep recession that Finland underwent over the period 1991–95: during these five years its output gap was more than two standard deviations away from the European average. The Paper presents simulations where the ECB sets its interest rate in response to both inflation and the output gap, following the preferences uncovered for the Bundesbank. The

change in policy is remarkably small, even though the Finnish recession has been spectacular. An ECB that puts a heavy weight on inflation can afford to be seen taking into account depression conditions in one of its member countries.

The unique situation created by the simultaneous involvement of one currency, eleven governments and twelve central bank governors creates the potential for formidable difficulties. In the short run, fiscal and monetary policies may be used interchangeably to affect output and inflation. If there is any cost in using the instruments, the authorities will tend to free ride on each other and, as a result there will not be enough stabilisation activity. What are the costs that hold up the use of macroeconomic instruments? At times of slow growth, the policy mix must be expansionary. The cost of a fiscal expansion is the running up of the public debt. The cost of monetary policy lies in the risk of inflationary consequences in the longer run and the associated loss of central bank credibility. In times of inflation pressure, when the economy is booming, no authority likes to be seen as 'spoiling the party'. The costs there are mainly political. In addition, fiscal policy operates under parliamentary oversight, which implies open and lengthy debates involving all sorts of private interests.

With more than one government facing a single central bank, it is quite possible that the temptation to provide insufficient stabilisation will be exacerbated. Free-riding is encouraged by the multiplication of loci of authority. National governments can blame the ECB and one another. In addition, the Stability Pact can provide an excuse for fiscal inaction. Over time, either the national budgets will be cyclically balanced, or the Stability Pact will have to be amended. Fiscal transfers may also rise, allowing a European version of fiscal federalism yet to be thought through.

1. Introduction

It has taken about two years to negotiate what eventually became the Maastricht Treaty, two more years to complete the inter-governmental conference that produced the Growth and Stability Pact and the Treaty of Amsterdam, and eight years to ever so slowly converge to the union. On the eve of the launch of EMU, it is fair to ask: are we ready?

Much of the efforts of the last decade have been devoted to deliver a system devoted to the "culture of stability". From this standpoint, readiness is indeed complete. Inflation is non-existent throughout the Union, replaced by (mostly unfounded) fears of deflation. The debate that has started on a possible U-shaped growth path reminds that, for public opinions and government, monetary policy cannot be detached from the general economic situation and only devoted to price stability. The contrast between Europe and the US is not just about supply-side economics, it also brings up differences between the Fed and the ECB's initial pronouncements. At least two arguments deserve more attention than they have received so far. First, central bank actions affect the real side of the economy in the short run. Second, lexicographic ordering of preferences is unlikely to be optimal for the society as a whole.

No central bank denies that monetary policy affects growth and employment. Indeed, massive research efforts have gone into the horizon over which these effects peter out, see e.g. Gerlach and Smets (1999) or Viñals (1998) for a recent appraisal. Sizeable real effects of monetary policy are detected well into the second year of policy action. Two years is a considerable amount of time in democracies where weekly public opinion polls drive governments. Undoubtedly, short-termism may have adverse long-term consequences; indeed, this is the main reason why central banks must be given a high degree of independence. On the other side, long-termism may have adverse short-term consequences in terms of variability of output and associated uncertainty borne by risk-averse agents who cannot diversify away all its consequences. In addition, the likely presence of hysteresis in Europe implies that short-term costs may become permanent.

The view that central banks ought to follow a lexicographic rule is often believed to be enshrined in Article 105.1 of the Maastricht Treaty. There is little theoretical basis and no empirical support for such an approach. Vulgar monetarism, expanding on early Friedmanite writings, emphasised stable monetary rules, forgetting Friedman's longstanding efforts to establish the output effects of monetary policy, now empirically well established. The focus on reputation-building typically rests on Rogoff's conservative central banker whose preferences are explicitly not lexicographic. That literature, instead, explores under which conditions, in a democracy, the central bank has good reasons not to fully abide by social preferences which clearly require output stabilisation. The answer is that the central bank should do *some* output stabilisation. Rigid rules do no better than full discretion.

The arguments presented so far may seem to fly in the face of official pronouncements which have swept Europe during the EMU-building decade. They are fully consistent with the evidence on how European and other central banks have behaved during this period. Clarida et al. (1998) show that all central banks have followed an implicit Taylor rule, i.e. short-term interest rates have been set as if central banks aim at gaps on both output and employment.¹ While public utterances emphasising the primacy of inflation may have been needed to establish a clear constitution of the ECB, we are now moving from the drawing board stage to the implementation stage. The focus is shifting from abstract principles to real life.

Having proclaimed lexicographic preferences will now make it more difficult for the monetary authorities to adjust to the new situation. This paper explores the unfinished business of preparing for an harmonious monetary union, "more perfect" than the coarse model set up in the Maastricht and Amsterdam Treaties. To start with, the ECB may fear that it has to live up to its stated lexicographic mission for fear of losing credibility in the crucial start-up phase. Section 2 looks into this question. Section 3 observes that preparation for reconciling differences of economic conditions

¹ See, however, Svensson (1997) for the view that the output gap is used as a predictor of future inflation.

throughout the union is seriously lacking. Central bank independence is essential, of course, but how to set up the naturally difficult co-ordination of monetary and fiscal policies in the unexplored situation where eleven governments face one central bank? This is the object of Section 4. Finally, Section 5 looks into at the make-or-break issue of unemployment. Europe is unique in facing apparently sclerotic labour markets characterised by stubborn double-digit unemployment rates in most countries. The monetary neutrality principle has been used to shield the ECB from any hint of responsibility in this area. Yet, linkages between monetary policy and unemployment are many and subtle. In the long run, Europe's main challenge is to tackle this problem and the ECB will not be able to distance itself from the task. The last section presents conclusions and policy recommendations.

2. Monetary Federalism

Both the make-up of its Executive Board and the rhythm of biweekly meetings of the Governing Council announced in September 1998 suggest that national central banks shall retain more influence on policy-making than was hitherto assumed. Rather than a coherent body (small, located at the same place and with no other commitment than the ECB), detailed decision-making will be exercised by a large group. This rather unexpected turn of events raises a host of new questions.

2.1. Power sharing

Voting in the key Governing Council is by majority. The majority will be in the hands of the eleven national central bank governors. Had the Council decided instead to meet relatively infrequently, it would have delegated high frequency policy-making to the Board, following the Bundesbank model. Since monetary policy is often conducted at high frequency, the Council would have set general guidelines but decisive action would have been firmly in the hands of the Board. The chosen mode of operation is of significance: it reveals that national central banks intend to use their dominating position in the Council to actually conduct policy. For those who

marvelled at the willingness of powerful institutions to give up their authority, this is a return to normalcy.

A first obvious implication is that the decision process will be far more complex and, most likely, far less efficient. Building up consensus will be more difficult among central bank governors fed with information by their own institutions and therefore less likely to agree on a model of the European economy. The outcome can be either instability as majorities come and go or, more likely, slow decision-making.

The second equally obvious implication is that national central bank governors will be more sensitive to national economic and political conditions than the more remote Executive Board. Thus divergence of opinions will also be the outcome of differing national interests.

Thirdly, because the decision-making process will be lengthy and occasionally conflictual, the solution adopted is unstable and unlikely to last very long. In some respects, it is remindful of the early history of the Federal Reserve Board as told in Eichengreen (1992). Much as in the 1920s in the US, the Executive Board will need to wrestle control from the national governors, an evolution unlikely to go smoothly, further fragmenting coherence in the Governing Council.

Fourth, less than fully efficient management of monetary affairs will be both a source of concern and an opportunity for member governments to attempt to divide and conquer. Concern about unstable decision making will make it harder to achieve "deals" in the area of co-ordination of monetary and fiscal policies. Many governments will also see a golden opportunity to cut down to size what could be *the* towering European institution.

The fifth implication concerns the quest for credibility. No matter how divided, Governing Council members will share the desire to establish credibility of the new central bank. It has long been feared that this goal could lead the ECB to adopt an unnecessarily tough stance. Central banks do not need to be blunt to establish and maintain credibility. Much can be achieved through subtle and ambiguous signals. It is

unlikely that a Council lacking homogeneity will be able to master its communication with the public (governments, financial markets, the media and other ECB-watchers) with great subtlety, raising once again the spectre of "brute force".

In conclusion, the precise distribution of monetary power will not be settled for a while. At one end of the range of possibilities, the ECB's Executive Board might just be like the Federal Reserve of New York: with a permanent presence in the decision-making body (six members out of seventeen while the Fed of New York has one seat out of nine) and mostly executing decisions.² At the other end of the spectrum, the Executive Board will build up strong cohesion among its members and will be able to control a fragmented Governing Council. More likely is a gradual evolution from the earlier to the latter.

2.2. Analysis and national viewpoints

Granted that national central banks will attempt to exercise influence on the ECB, what will this effort lead to? Influence may be related to the country of origin: even though the President of the Bundesbank only holds one vote, his/her views are likely to be more powerfully expressed. Still, influence also stands to be based on information, preparation and quality of the positions taken.

In this respect, it is interesting to examine the support that the different Council members will master. National central bank Governors start with a competitive advantage. Staff transfers to the ECB have been limited. With some 2000 people on its staff, the ECB is one the smallest central banks in Europe. Table 1 reports staff size as of 1996. Per capita, the ECB is less than 10% of the smallest central bank. Most of the analysis and economic monitoring capacity that used to be performed by NCBs to help them design and carry out national monetary policy is still in place. While some central banks carry out many other duties than monetary policy (e.g. supervision of the banking and/or the financial sector) and will remain in charge of open market

² Even the European Governing Council will be less coherent than at the Federal Open Market Committee because of nationalities will be a factor absent in the US where regional Feds' Governors do not have ties to the districts that they represent.

operations as well as cash production and management, it would be natural to expect a significant transfer of staff size towards the centre. In fact, nothing of the sort seems to be happening. Quite to the opposite, national central banks seem intent on building up their capabilities to carry out the kind of quality analysis that may influence decisions in Frankfurt. While more research is always better, this evolution raises intriguing questions.

Table 1

First, different central banks are likely to come up with different analyses. Will they be released to the public? In the US the regional Feds publish the studies that they undertake, but the situation in Europe is radically different. When regional Feds reach differing conclusions, this is generally understood as a debate among different schools of thought, i.e. a reflection of where different models lead the analysis to. This is hardly of any interest to Fed watchers. In Europe, it will be unavoidable that different views will be interpreted as a reflection of national preferences, and thus a potential source of divisiveness.

Second, national central banks have an absolute comparative advantage in analysing national economic conditions. While they are apparently interpreting their mission as not being supposed to concern themselves with “local” economic conditions, this resolve does not seem time consistent. For many obvious reasons, countries will remain the unit of economic analysis in Europe. The main reason to give a role to national central banks in the ESCB is precisely to give an hearing to national preoccupations. Even if NCBs stand by their resolve, governments, media and analysts will focus on national economic conditions and feed another debate: how much should the ECB respond to national versus average conditions in the Union?

The present official view is that the ECB will only consider aggregate (i.e. average) data, leaving national idiosyncrasies to the care of national governments. This immediately raises the issue of co-ordination between fiscal and monetary policies,

and this is the object of Section 3. Yet, some specific aspects are relevant at this juncture. Fiscal policies will be constrained by the Stability Pact so that wide divergences may not be easily dealt with as long as a country does not qualify for the exceptional circumstances provided for in the pact. Looking at past history, Eichengreen and Wyplosz (1997) report that the exception would have been granted in about half of the cases when the budget deficit exceeded 3% over 1955-96. The situation is likely to change because of the very existence of the pact, but it remains definitely possible that the ceiling will often be effectively binding, preventing a proper cushioning of divergent cyclical evolution. More importantly perhaps, fiscal policy is far less versatile an instrument than monetary policy. It is subject to considerable decision and implementation lags and to significant risks of political manoeuvring.

It is quite likely, therefore, that the ECB will not be able to remove itself from dealing with particular national events. Even though national central banks are constitutionally prevented from listening to their national authorities, an interesting paradox remains. It will be in their interest to provide quality and trustworthy analyses of economic conditions in their own countries as a way of buttressing the influence of their representatives in the Governing Council. At the same time, this information will create an obligation to influence the EMU-wide monetary policy stance. In short, a new form of "monetary federalism" must be invented.

2.3. An example of monetary federalism

To explore what monetary federalism could look like, this section offers a counterfactual exercise. As usual, any exploration of this sort is immediately subject to the Lucas critique. For this reason, what follows ought to be seen as purely indicative –the illustration of a general principle based on past data-- and not as a guide to policy making.

An ECB running a federal-oriented policy could proceed as follows. At times when national economies are reasonably well synchronised, dealing with the average situation is uncontroversial. The only remaining issue is the possibility that national

public opinions disagree about the ultimate objectives of monetary policy. Traditions in European central banking seem to differ across countries: it includes the choice of instruments, the weight put on inflation, the role of the exchange rate constraint, etc. Beyond the rhetoric, though, do European central banks have really behaved differently?

One approach to this question is to estimate Taylor reaction functions. Table 2 presents the results for 9 EMU countries (Ireland and Luxembourg are left out) using the approach developed by Clarida *et al.* (1998). These authors look at the response of the policy instrument, the call money interest rate, to deviations in output and inflation from their targets, possibly allowing for other factors. Clarida *et al.* specify two behavioural equations:

$$(1) \quad i_t^* = i_t + \alpha + \beta (E_t(\pi_{t+n}) - \pi^*) + \gamma E_t(y_t) + \delta E_t(z_t)$$

where i_t^* is the central bank's objective for the interest rate instrument, i_t the long run level of the interest rate instrument, π_t is the inflation rate and π^* the inflation target, y_t is the output gap while z_t is any other possible variable influencing monetary policy (e.g. money growth or the real exchange rate).

Next, they assume that the central bank smoothes out the path of the interest rate:

$$(2) \quad i_t = \rho i_{t-1} + (1 - \rho) i_t^* + e_t$$

where i_t is the actual interest rate and e_t is a random error term.³

Estimation results for 9 of the 11 EMU member countries are shown in Table 2, where the coefficients are those shown in (1) and (2), i.e. separating out the autoregressive term (shown in the first line) and the other coefficients α , β , γ and the δ s which correspond to additional potential targets. The table presents the response to a possible money growth target (M2 lagged). For all countries but Germany, the German interest

³ This term is assumed iid. See Clarida et al. for various interpretations.

rate is included to account for the Bundesbank's dominant role in Europe (see Giavazzi and Giovannini (1988)). The real exchange rate vis a vis the US dollar is also included to account for a broader stabilisation objective. The regressions use the current inflation rate instead of $E_t(\pi_{t+n})$. Using the future inflation rate (led by 6 or 12 months) usually yields similar results, although they tend to be sensitive to the chosen specification (the presence of the additional variables z_t).

Table 2: Taylor rule estimates

Several interesting results emerge and are discussed below in context. At this stage, the emphasis is on an illustration of how monetary federalism could be implemented. Given that, over the estimation period, the Bundesbank is known to have worked as the de facto leader in Europe, the first question is: what would have been the ECB's policy, assuming that it already existed during the sample period? The proposed answer is to use the Taylor rule estimated for Germany, i.e. reflecting the Bundesbank's estimated preferences shown in Table 2, and to apply this rule to the average economic condition in Europe (I use GDP weights).⁴

To provide a feel for the experiment that follows, Table 2 displays the average coefficients for the non-German countries. Germany appears more sensitive to the output gap and less sensitive to inflation, although the German interest rate has a strong influence on most countries (for example, unsurprisingly, the coefficient is unity for the Netherlands). Germany also displays more steadfastness in its use of the interest rate instrument since the coefficient on the lagged interest rate is among the highest in the sample.

Figure 1 shows two counterfactual interest rates along with the actual interest rate set by the Bundesbank. Both counterfactuals use the estimates of Bundesbank's preferences estimated in Table 2. One of them takes into account German economic

⁴ This exercise does not imply that central banks actually follow, or should follow, a Taylor rule. The estimates presented here, and the discussion that follows, interpret the Taylor rule as an average reaction function, never actually adopted but representative of what central banks actually see as acceptable behavior, i.e. a revelation of their preferences.

conditions only (so the interest rate "rule" is the actual German interest rate net of estimation error) while the other one takes into account Europe-wide conditions. The figure illustrates the well-known conflict about monetary policy which emerged at the time of German unification in 1990. Had the Bundesbank accepted responsibility for the EU as a whole, it would have conducted a much less tight monetary policy (unrealistically the interest rate turns negative), even if it stuck to its preferences.

Figure 1 (Eviews Figsim)

We can now deal with the most important question: how should the ECB deal with countries which are badly asynchronised? Since smaller countries weigh little in the EMU-wide total, they are unlikely to affect much the ECB policy. Yet, locally, pain may be intense. This is the much-discussed case of asymmetric shocks, the standard argument against EMU. Now that EMU is a fact, and that the usual criteria for an optimum currency area are known not to apply well to Europe⁵, the issue has left the academic debate arena and becomes an issue for the ECB and national authorities.

Figure 2 shows output gaps for the individual EMU countries along with the European average. National cycles have been quite synchronised among the EMU-11 countries: the coefficient of correlation with the average is in excess of 80% for most countries. The strongest exceptions --Finland (60%) and the Netherlands (54%)-- are still much more correlated with Europe than the US is (22%). Note that the U.K. (53%) is the least strongly correlated country with Europe's average, but certainly not an outlier.⁶

Figure 2 (output_gap.xls)

A possible approach is for the ECB to adapt its policy to the needs of a country which is undergoing an *exceptional* deviation from the EMU average. To define such a special circumstance, I consider the case where one country's output gap is more than

⁵ On these points, see the surveys in Bean (1992) and Wyplosz (1997).

⁶ The past, of course, is not necessarily a good predictor of the future. In fact, it is likely that the EMU national economies will become even more synchronised than when each of them had its own monetary policy, a source of autonomous business cycles. This is the Lucas critique, yet again.

one or two standard deviations away from the Euro-11 average. Over the period 1980-98 described in Figure 2, the one standard deviation definition would have signalled a special case in 27.9% of the annual observations, nearly every year (18 years out of 19). When the two standard deviation definition is used, instead, a special circumstance would have been declared 4.7% of the time --9 years out of 19-- when. In what follows I adopt the two standard deviation as the working definition.⁷

What remains to be specified is how the ECB could bend its Taylor rule when such circumstances occur. For illustrative purposes, I consider that the ECB would then drop the EMU-wide output aggregate and temporarily replace it with an index giving 50% of the weight to the average and 50% to the country receiving special attention. This is a very generous view of "special attention". A good case is the deep recession that Finland underwent over the period 1991-95: during these five years its output gap was more than two standard deviations away from the European average. Figure 3 reports the result of the simulation under this rule, using the counterfactual of Figure 1 where the ECB only looks at the average situation, in both cases using the Bundesbank preferences. The figure shows that the difference is small even though the Finnish recession has been spectacular (see Figure 1) and the 50% weight put on Finland over the period 1991:01-1994:03 is indeed large. Part of the reason is that the interest rate is smoothed out (the coefficient ρ is 0.95), part of the reason is that the weight on the output gap is small. Both factors justify monetary federalism: an ECB which puts a heavy weight on inflation can afford to take into account depression conditions in one of its member countries as if the whole of the union were in depression. This is readily confirmed in Figure 3 by allowing the weight on Finland to be set at 100% during the period 1991:01-1994:03.

Figure 3: Eviews figsim3a

2.4. External representation

⁷ An alternative could be to adopt the Growth and Stability Pact definition of exceptional circumstances. That definition, however, is based on purely national conditions and is less relevant for the issue at hand than deviations from the average since the Taylor rule implies that the ECB responds to average (or aggregate) conditions.

The last important issue concerns the international co-ordination of monetary policies. Begg *et al.* (1998) argue that the ECB is unlikely to pay great attention to the exchange rate. Yet, as the euro grows to become an international currency, the euro-dollar rate will be too important for the world as a whole to be fully dealt with benign neglect.

Even if the ECB does not use it as a guide for setting its interest rate, the euro-dollar exchange rate will be extensively watched by financial markets and regularly discussed at G7 and other international meetings. At present, the President of the ECB is not expected to attend G7 meetings but the governors of national central banks will. The IMF is ready to establish close contacts with the ECB, but this will *de facto*, not *de jure*. Does it matter at all?

Monetary policy co-ordination is essential at times of crises. In the past, e.g. with the Louvre-Plaza agreements or following the 1987 mini-krach, central banks have been able to co-ordinate their actions. With less central banks around, co-ordination should be easier, not harder.

Discussions about exchange rate regimes formally fall under the responsibility of governments, not central banks. Even if central banks are necessarily involved, these are long-lasting negotiations and there is no reason why the ECB would not be brought into the picture in good time.

In the end, none of these issues seem to be particularly worrisome. The main issue is the risk of the ECB being paralysed by internal disagreements within the ESCB interfere, as already discussed in Section 2.1.

3. Fiscal-Monetary Co-ordination: One Money, Eleven Governments, Twelve Central Bank Governors and Twelve Parliaments

3.1. Principles

The vast literature on co-ordination between the fiscal and monetary authorities conveys a general message: in the absence of binding commitments, co-ordination is not possible and the outcome is socially-inferior outcomes. Binding commitments are hard to achieve in practice because democratic institutions do not provide for the kind of restraint that would be needed (Persson and Tabellini, 1995). These results apply to EMU with a vengeance. The unique situation created by the simultaneous involvement of one currency, eleven governments and twelve central bank governors creates the potential for formidable difficulties. This section briefly reviews the channels that seem to matter most empirically and examines how these channels may play out in the particular case of EMU.

In the short run fiscal and monetary policies are strategic substitutes: they may be used interchangeably to affect output and inflation.⁸ If there is any cost in using the instruments, the authorities will tend to free ride on each other. As a result there is not enough stabilisation activity. What are the relevant costs? At times of slow growth, the policy mix must be expansionary. The cost of a fiscal expansion is the running up of the public debt. The cost of monetary policy lies in the risk of inflationary consequences in the longer run and the associated loss of central bank credibility. In times of inflation pressure, when the economy is booming, no authority likes to be seen as "spoiling the party". The costs there are mainly political. In addition, fiscal policy operates under parliamentary oversight which implies open and lengthy debates involving all sorts of private interests.

Among open and integrated economies, to some degree, national fiscal authorities are also strategic substitutes when economic conditions are similar. One country's cyclical conditions tend to be transmitted through trade (given that "exchange rates" will not change any more). Here again, insufficient action results. In the case of asymmetric conditions, on the other side, there is less need for policy action since one country's expansion helps another country in recession. Policies are now likely to be excessive.

⁸ For some evidence and a more detailed discussion, see Debrun and Wyplosz (1999).

3.2. EMU

EMU offers the particularity of a three-level game: between the ESCB and national governments, within the ESCB between the ECB and national central banks, and among governments. The analysis of this set-up has barely started (see e.g. Debrun, 1998) and is, unsurprisingly, messy. What follows is therefore highly tentative. It deals with the case more frequent case of similar cyclical conditions.

What difference does it make to have more than one government facing a single central bank? It is quite possible that the temptation to provide insufficient stabilisation activity will be exacerbated. Free-riding is encouraged by the multiplication of loci of authority. National governments can blame the ECB and one another. In addition, the Stability Pact will provide an excuse for fiscal inaction. The labour market implications are discussed in Section 5 below.

What difference does it make to have twelve governors and a single currency? The case of asymmetric conditions has been examined above. When conditions are similar, in principle, little is lost. The most delicate question concerns the politically dangerous mix of different nationalities and different paradigms. The recent openness of the Bank of England reveals a fascinating debate where traditional distinctions between hawks and doves fade away, revealing instead difference in Policy Committee member views of what is “the right model”. Transposed to EMU, this debate is more dangerous. National public opinions hold different views on the role of monetary policy. This opens up the possibility of misinterpreting debates within the ESCB and triggering mistaken but bruising conflicts of national interests artificially fuelled by the media.

How differently have national central banks actually behaved? Table 2 sheds some light on the issue. Two caveats are required beforehand, though. First, once again the Lucas critique must be kept in mind to interpret past behaviour as a prediction of future behaviour. Second the estimates in Table 2 cover the EMS period which has

evolved towards an asymmetric arrangement where the Bundesbank has progressively assumed a leadership position.⁹

Figure 4 shows estimates of how central banks respond to inflation and the output gap. Finland is a clear outlier, most likely a consequence of its unique experience discussed above (and an indication of the force of the Lucas critique). Similarly the Netherlands stands apart, a further confirmation of its commitment to the DM peg since the early 1980s. The other countries seem to display similar aversion to inflation and to output fluctuations. At least among the four largest countries, which probably retained the largest room for manoeuvre during the sample period, there is no indication of a glaring divergence in opinions.

Figure 4. (Taylor.xls)

3.3. Policy implications

Still, with political sensitivity at stake, the unavoidable solution is to limit the information available to the public. This is why the ECB's decision not to publish the minutes of deliberations is understandable. Yet, there is a cost in terms of accountability and it may turn into a source of uncertainty. To compensate, the ECB will have to develop original communication channels to the public. Begg *et al.* (1998) suggest that the ECB should reveal its expectations (inflation, growth, unemployment) and present a baseline for its intervention rate along with contingency plans for likely scenarios.

Another implication of this complex multi-level game is that the eleven governments and the ECB must develop procedures for co-ordination. It is not enough to rely on repeated informal contacts, as is traditionally done in the presence of one central bank and one government. The Euro-11 council was initially dreamed up as an attempt to curb the ECB's independence. Despite this birth defect, the council could profitably be

⁹ Further tests on subperiods are carried out in Debrun and Wyplosz (1999). They do not alter the conclusions that follow.

developed into a body where a repeated game reduces the scope for inefficient policy mix.

The Maastricht Treaty gives the European Parliament the key responsibility of bringing the ECB into accountability. Hopefully, the Parliament will soon establish its authority. Eventually, the Parliament should also monitor the policy mix. This opens up a fourth level in the game: a conflict between the European and national Parliaments which hold control over national budgets. Some day, perhaps, the single currency will be matched with a more unified budgetary process. Mrs. Thatcher's nightmare will come true, for the benefit of all of Europe.

4. Supervision

Currently, bank supervision is entirely carried out at the national level. A first reason is that the ECB does not want to be dragged into any commitment as lender of last resort for fear of the customary moral hazard. Another reason is the application of the subsidiarity principle which rests, in this case, on a comparative information advantage at the local level. Both arguments are flawed.

Starting with subsidiarity, nothing prevents information from being collected and analysed by the local supervisory authority and then systematically centralised at the EMU level. In addition, if the current trend of transborder mergers continues, "local" information will be increasingly less relevant. National level supervision will have to rely on banks and financial institutions own centralisation of information at headquarters. Experience with large multinational banks suggests that this is risky; Barings is a case in point.

Nor is it convincing that the ECB is shielded from its implicit lender of last resort commitment. Increasingly deep connections among banks and financial institution, further encouraged by the elimination of exchange risk within the union, implies that a crisis is unlikely to remain local i.e. within national boundaries. When several national central banks are simultaneously facing a crisis, the ECB will necessarily be involved.

Within EMU, there will be two sources moral hazard. The first one is traditional: it concerns excessive risk-taking by banks and will be unaffected by the creation of a single currency. The ECB will simply have to accept its responsibility of lender of last resort, as any central bank does. Another, new, moral hazard originates in the danger that each national authority will be tempted to pass onto the ECB, and therefore to the other national authorities, as much of the costs of a rescue as possible. Current official thinking seems to pretend to ignore the problem and to unconvincingly deny that the ECB is prepared to act as lender of last resort. The fiction that systemic bank failures will be a national fiscal policy problem is just that, a fiction. Rescue operations must be conducted in a matter of hours while fiscal policy actions take months. It is urgently needed to work out how a bank crisis will be dealt with step by step: who will intervene and where? how will the costs be eventually apportioned among governments?

More importantly perhaps, is the ECB's position vis a vis the payment system. Begg et al. (1998) argue that too much reliance is put on the TARGET system's ability to protect the ECB. Immediate clearing indeed implies that payments going through targets will not affect the ECB in case of counterpart default. However, TARGET is an expensive system so that many banks are likely to adopt other, cheaper, systems which are unsupervised. While the ECB bears no commitment to these systems, it will not be able to wash its hands in presence of a systemic collapse. Once again, denial is unlikely to be the best approach.

5. Labour market reform: make or break

EMU starts without an inflation problem but with seriously high and protracted unemployment. Myopically perhaps, public opinion care little about inflation nowadays. The Commission's Eurobarometer reports that 92% of EU-15 citizens put "fighting unemployment" at the top of a list of twelve policy priority items, among which inflation is conspicuously absent. While Europeans are obviously highly focused on employment, they might not see it as a matter for collective Union policy

making. In fact they do. When asked why should the European Parliament concern itself with, employment comes on top again, mentioned by 64% of the respondents. Thus it is reasonable to expect that, over the first few years of its existence, whether EMU will come to be seen as a success or a failure will hinge on whether the unemployment problem is improved. A continuation of the trend of the 1990s is the most serious threat to the single currency. While much effort has been dedicated to explore the macroeconomic implications of EMU, work has barely started regarding labour markets. For this reason, what follows must therefore be considered as highly tentative.

5.1. Competition effects

One of the expected effects of EMU is to further deepen trade within Europe: the elimination of currency conversion costs, greater price transparency and the end to exchange rate uncertainty (within EMU) should heighten competition on the good markets. As firms respond to the opportunities and threats inherent to stepped-up competition, they will seek all possible means of reducing costs and boosting efficiency. The strength of this channel remains to be determined. The Common Market has been taking hold for so long that there might not be much left to be gained. Yet, even small gains can generate significant competitive pressure.

There probably remain very few pockets of untapped productivity gains regarding equipment, technology and management of physical resources and know-how. Labour costs, considered broadly, are likely to offer the last remaining opportunity. Labour costs not only include wages and taxes, but also flexibility in adapting the use of manpower to changing cyclical or permanent changes. Thus the first implication is that labour market reform is becoming more urgent.

5.2. Discipline effects

The abandonment of exchange rates within Europe and the existence of a single central bank is expected to change the nature of labour negotiations. Two main channels have been identified so far.¹⁰

First, any slippage in wage increases will affect either firms' competitiveness or their profitability and hence their survival. In the past, wage increases in excess of productivity gains (e.g., France in 1968, Italy in the 1970s, Italy and the UK in the early 1990s) could be corrected by a subsequent devaluation. This safety valve will be lost. Put differently, national trade unions will lose influence in shaping monetary policy. This is expected to increase trade union discipline.

The second channel works in the opposite direction. Calmfors (1998) starts from the assumption that trade unions care about inflation, for example because wage-earners typically suffer disproportionately from rising prices. This effect is stronger where there is no mechanism, formal or informal, for indexing wages to the cost of living. The result is some moderating influence on large wage increases which, unions know, are inflationary and ultimately self-defeating. The wider is the zone under a single currency, the more there exist trade unions and wage negotiations. Each union feels less responsible for the overall inflation rate throughout EMU. This weakens discipline.

It is too early to pass judgement on this issue. Other channels may be identified as research is progressing. It is also unclear which of the two channels is stronger, and indeed whether any of them is quantitatively important. Intuition suggests that trade unions care little about inflation, so that the overall impact of EMU could be more wage discipline.

5.3. Competition among welfare systems

Europe's extensive welfare system is often largely financed through taxes levied on labour. As seen from Figure 5, the situation varies considerably across countries, with

¹⁰ Recent contributions are Calmfors (1998) and Cukierman and Lippi (1998).

no labour taxes in Denmark and a tax in excess of 40% of taxes on average in Italy. The figure also shows total taxes borne by wage-earners, the sum of payroll, personal income and consumption (chiefly VAT) taxes. While there is less diversity, the total tax burden is high, often upwards of 50%.

Figure 5 (labtax.xls)

Does the tax structure matter and how does it affect wages and employment?

Employers care about total labour costs, wages *plus* payroll taxes. Employees care about their disposable income, i.e. wages *net* of payroll taxes and also of all other taxes associated with earned income. It would seem that the cost of labour taxes should be borne by both sides. In fact, it is more likely that all taxes are borne by wage earners, both direct labour taxes and indirect ones such as VAT and personal income taxes. For the tax burden to be shared, firms should absorb part of the burden through a combination of higher prices and reduced profitability. The closer we are to perfect competition on the good markets, the less this is possible for prices in the short run and for profitability in the long run.

The increase in competition expected from EMU, following the Single Act, brings Europe one step closer to perfect competition. As is well known, intra-industry trade dominates across EU countries. Intra-industry trade is predicated upon the existence of local monopoly power, so it would seem that the perfect competition paradigm is the wrong place to start. There is no inconsistency between monopolistic competition and the view that tax incidence is likely to mostly hit labour. If firms bear some of the burden, the established goods market equilibrium will change, reducing demand for the more expensive goods, eventually reducing profitability and therefore employment. More generally, wage resistance must backfire and affect labour, either through wages or employment.

This observation is confirmed by studies which have attempted to estimate the effect of taxation on the labour market.¹¹ Typically, direct labour taxes are not found to play

¹¹ For an excellent and recent survey, see Nickell (1997).

a significant role, but total taxes, as depicted in Figure 5, have a measurable effect on employment. For example Nickell (1997) finds that a 10% increase in total taxes raises European unemployment by 25%. If anything, EMU will increase this response.

Thus, at least to a first order of approximation¹², the various categories of taxes are substitutable. This result establishes a fundamental link between welfare systems on one side, and employment and competitiveness on the other side. Taxes that are used to finance productivity-enhancing expenditures (e.g. infrastructure, education, law and order, etc.) pay for themselves, at least as long as the corresponding service is produced efficiently. Welfare programs, on the other side, do not provide firms with direct competitiveness advantage. Viewed this way, welfare systems directly affect a country's ability to compete internationally.

Figure 5 shows that the average tax burden is high in Europe and differs quite significantly across countries. As competition rises when the single currency eliminates currency costs and increases price transparency, high tax countries will be at a competitive disadvantage vis a vis low tax countries. Welfare systems are, indirectly, in competition against each other.

Cuts in welfare and public spending are politically unpalatable; the current situation reflects each country's political and social balance. Those countries which can reform their welfare systems and cut spending and taxes will gain in competitiveness and alter the political and social balance elsewhere in Europe. Competition between national welfare systems will grow and upset existing political and social equilibria.¹³ This idea is pursued in the next section.

5.4. EMU and labour market reforms

¹² In particular, tax progressivity complicates the matter and are ignored. For the question at hand, the effect is second order, even if it is important in terms of income distribution.

¹³ For an extensive analysis on the implications and calls to add a "social dimension" to the Maastricht Treaty, see Bean et al. (1998).

This section asks what will be the effect of EMU on efforts to reform European labour markets. The analysis starts from where the previous section ends: political equilibrium prevents a frontal attack on those labour market institutions which lead to insufficient flexibility and are a major source of unemployment.

Measures that reduce labour market rigidities require that currently employed workers give up a number of benefits: restrictions to firing, minimum wages, cosy negotiations, and other components of the welfare system. In addition, to reduce unemployment, they would also have to accept a lowering in their wages. Logically therefore, reforms are opposed by those who stand to lose from them. Fortunately, the overwhelming majority of the working age population is employed. In a democracy, it is the majority that drives decisions. Reform is stalled.¹⁴

Yet, labour market reform would not only reduce unemployment. It would also make the economy more dynamic and raise the country's overall income, eventually benefiting the majority which made the initial sacrifices. In principle, therefore, reform should be popular. This is clearly not the case, for good reasons. First, the notion that future gains justify sacrifices today is hard to sell because scepticism is the rule. Second, as noted by Grüner (1998), labour market flexibility would clearly reduce the protection that currently employed workers enjoy. To be acceptable, labour market reforms have to promise large enough gains to compensate currently working employees for accepting a dose of uncertainty which they clearly dislike. Third, reforms weaken unions, especially where there exist regulations which give them a right to intervene, e.g., regarding wage settlements or even corporate management (e.g. in Germany's codetermination system).

These conflicting forces result in a particular outcome which characterises each country. Will EMU modify the situation? Recent research has barely started to explore this issue.¹⁵ Two factors could make reform politically palatable. First, as the ECB

¹⁴ This point has been developed *inter alia* by Saint-Paul (1993).

¹⁵ This part draws on Bean *et al.* (1998) and Calmfors (1998).

establishes a strong reputation as inflation-fighter unwilling to deal with unemployment, labour market flexibility will be at a premium. Second and related, the loss of the exchange rate means that any shock that affect a country's competitiveness cannot be accommodated through an exchange rate depreciation. Competitiveness will have to be re-established the hard way, through wage and price moderation. The more flexible is the labour market, the faster and the less painful will the process be.

EMU could slow down labour market reform for reasons associated with the discipline effect presented in Section 5.2. Trade unions know that high labour costs (direct or indirect) are eventually compensated for by price increases. Insofar as unions fear inflation, this mechanism exerts a moderating influence. Once in EMU, with a central bank dedicated to keep inflation low at all costs, unions may feel less pressure towards moderation and reforms.

Finally comes the Calmfors-Driffill effect. *De facto* all labour negotiations become more decentralised as we move from the national level to EMU as a whole. Two effects may follow. If initially labour bargaining was rather decentralised, EMU improves the situation. The labour market becomes more efficient. If however we start from a situation where bargaining at the national level is very centralised, EMU represents a move away from a good extreme towards the inefficient middle, where unions have more incentives to free-ride. This line of reasoning suggests that the ability to undertake reforms will vary across EMU member countries depending on their initial positions. Paradoxically, yesterday's winners could be tomorrow's losers, and conversely.

In response, national trade unions could establish EMU-wide associations. This would position the whole of EMU in the low efficiency area. This adverse effect would be magnified if employers would react and form their own centralised bargaining structures. Such a move would increase the power of large firms at the expense of small and medium-sized enterprises which deliver much of the impetus for competition and reform. An evolution towards EMU-wide negotiations is unlikely,

however, because of the diversity of labour costs throughout Europe. For example, labour costs are almost five times as large in Germany as in Portugal. Such major differences are likely to make union solidarity difficult to achieve.

6. Conclusion

As could have been expected, as EMU starts many important issues have not been fully dealt with. Europe has embarked on a historical experiment and will have to discover and solve new problems one by one as we go. There is nothing wrong with less than complete preparedness as long as the authorities are sensitive to the main risks and have developed some understanding on how to deal with them.

Some of the issues are really novel. This includes the simultaneous presence of a large number of fiscal and monetary authorities. During the decade of the Maastricht convergence years, much analytical attention has been focused on the degree to which Europe was an optimum currency area. Less thought has been devoted to the way asymmetric shocks will be dealt with in practice. Fiscal transfers are small in Europe and national fiscal policies will have to operate, initially at least, within the straightjacket of the Stability Pact. Over time, either the national budgets will be cyclically balanced, or the Stability Pact will have to be amended. Fiscal transfers may also rise, allowing a European version of fiscal federalism yet to be thought through.

The ESCB will not be able to dissociate itself from serious asymmetric shocks either. This paper has explored how a form of monetary federalism could emerge. The results presented here show that the central bank can occasionally focus on particularly adverse conditions in one member country without seriously deviating from its customary pan-European outlook.

Yet, the more difficult issue is not new. Unfortunately, unemployment remains the dominant economic problem in most Euro-11 countries. The dominant view is that unemployment is not a monetary phenomenon in the long run. Real life policy operates in the short run, though. In addition, hysteresis remains a plausible feature of

the European unemployment problem. For these reasons, EMU will be largely seen by the public opinion through the prism of unemployment.

What is new in this area is the extent to which EMU will help to solve the unemployment problem. Much has been said of the deflationary bias imposed by the combination of the ECB's lexicographic preferences and the Stability Pact. On the other side, attention is now shifting to the political economy of unemployment. It is well-understood that the inability to make progress is deeply rooted in the unwillingness of the employed insiders to accept sacrifices that will open up the job markets to the unemployed outsiders. What is not known is whether and how EMU will affect the existing political equilibrium. The paper has presented both optimistic and pessimistic views.

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Table 1. Staff Size of European Central Banks

Country	Staff size	
	Total	per million inhabitants
Austria	1,194	149
Belgium	2,980	295
Finland	883	173
France	16,917	292
Germany	17,632	216
Ireland	583	162
Italy	9,307	163
Luxembourg	100	250
Netherlands	1,611	105
Portugal	1,757	177
Spain	3,269	83
Total EU-11	56,233	195
ECB	500	2

Source: Gros (1999)

Table 2. Taylor Rule Estimates

	Austria	Belgium	Finland	France	Germany	Italy	Nether.	Spain	Portugal	Average (excl. Germany)
Lagged interest rate	0.84	0.47	0.96	0.94	0.95	0.87	0.36	0.82	0.69	0.74
Constant	(22.03) 14.86	(12.75) -7.90	(47.26) 47.25	(48.9) 1.95	(76.87) 5.73	(52.01) -5.79	(9.49) -11.26	(35.86) -3.33	(31.26) 29.65	8.18
Inflation	(1.92) 0.39	(-2.30) 0.42	(1.76) 4.19	(0.31) 0.82	(2.74) 0.43	(-2.99) 0.99	(-14.82) -0.22	(-0.64) 0.97	(8.94) 0.22	0.97
Output gap	(3.20) 0.08	(10.77) -0.06	(2.71) -0.40	(5.98) 0.38	(-1.97) 0.42	(18.83) 0.13	(-10.45) 0.08	(9.54) 0.49	(5.42) -0.03	0.08
M2(t-1)	(3.10) -0.03	(-3.21) -0.01	(-1.97) -0.03	(1.76) 0.15	(4.57) 0.07	(2.19) 0.02	(6.43) -0.01	(3.76) 0.01	(-0.52) -0.01	0.01
German interest rate	(-1.27) 0.87	(-2.19) 0.65	(-0.46) -4.48	(2.34) 0.53	(2.52)	(1.41) -0.23	(-7.66) 1.06	(0.39) -0.03	(-0.52) 0.82	
Real exchange rate vis a vis US\$	(11.90) -15.48	(12.95) 10.29	(-2.47) -40.55	(3.84) -1.4	-2.48	(-2.41) 13.43	(62.98) 11.74	(-0.15) 9.25	(6.51) -24.59	-4.66
Adjusted R2	0.96	0.75	0.96	0.94	0.99	0.98	0.97	0.81	0.79	
SEE	0.95	1.11	0.81	0.72	0.30	0.57	0.43	1.63	2.03	
J-statistic	0.13	0.14	0.12	0.14	0.13	0.13	0.15	0.11	0.13	
Sample	80:2-97:6	81:4-94:11	80:2-97:6	81:4-95:2	80:2-97:6	80:2-97:6	80:2-97:6	81:2-97:6	84:1-97:6	

Source: *International Financial Statistics* (CD-ROM)

Notes: Estimation: GMM. T-stats in brackets. All variables are expressed in percent except for the effective real exchange rate index (1990=1.0).
Instruments:Lags 1 to 6, 9 and 12 months of: output gap, inflation, interest rates, inflation in the US, M2 growth, real DM/\$ exchange rate.

Figure 1. Interest rate according to EU-11 or German conditions

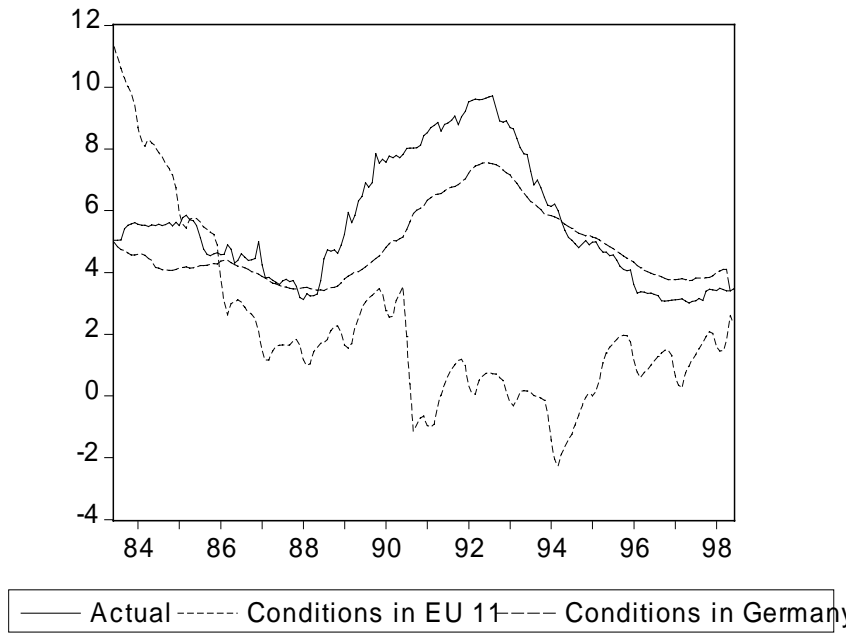
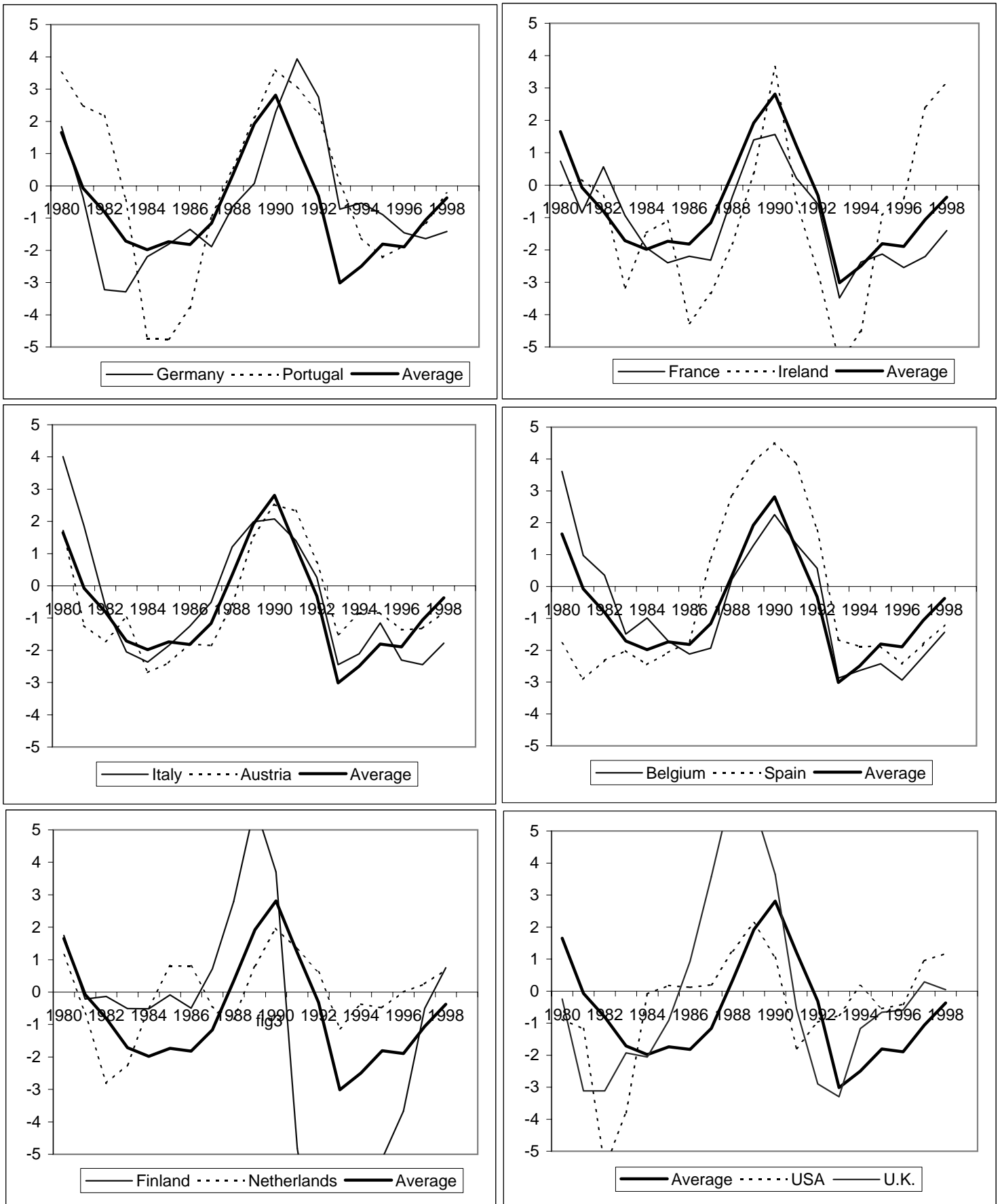


Figure 2. Synchronisation of business cycles in Europe
(Output gaps, % of GDP)



**Figure 3. An Example of Monetary Federalism
The Case of Finland's Recession (1991-95)**

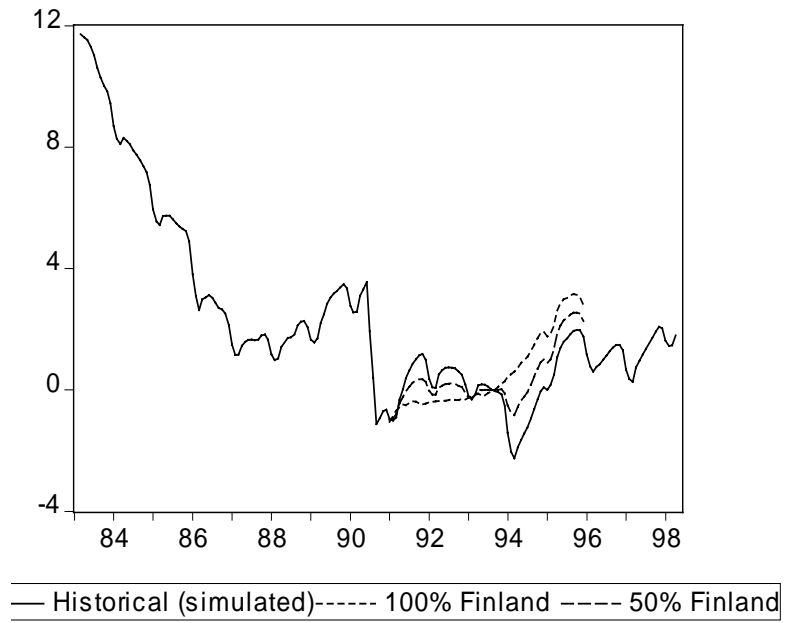


Figure 4. Estimated Central Bank Preferences
Interest rate response to inflation and the output gap

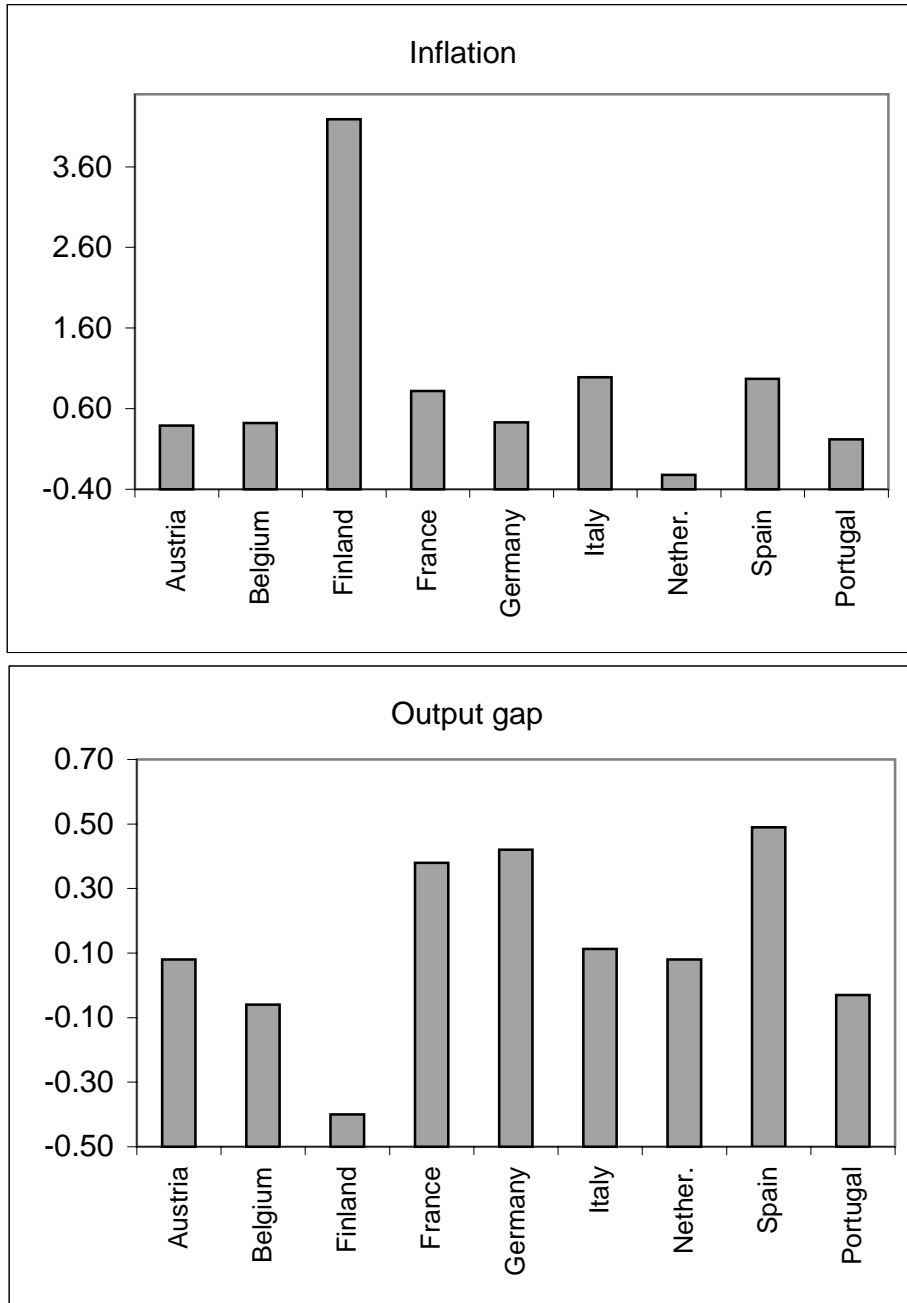


Figure 5. Taxes levied on labour income
(% of net average wage)

