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# 1

## Introduction

*David Cobham*

The European Central Bank (ECB) was established in June 1998, European Monetary Union (EMU) came into operation in January 1999, Greece joined the 11 original members of EMU in January 2001 and euro notes and coin were introduced in January 2002. While all of these operations have arguably been carried out with considerable success, the economic performance of the eurozone has been less than outstanding and attitudes towards the ECB and EMU, especially in countries outside the eurozone, have become less favourable. In particular, the eurozone is generally considered to be experiencing poor economic growth: there was a strong recovery in 1999–2000, but the slowdown of 2001–03 was succeeded by only a weak recovery in 2004–05 (though it seems that a stronger pickup in growth is coming through now). At the same time, both the operation of monetary policy and the coordination (or lack of it) between monetary and fiscal policy have been subjected to a variety of criticisms. This book is designed to examine economic developments in the eurozone since 1999 and to assess the criticisms commonly made of the ECB and the EMU project. It brings together leading European and American macroeconomists to discuss issues in monetary policy, fiscal policy and structural reform, and a number of other questions which are important for the evolution of the eurozone.

It is useful to start by looking at some data. Figures 1.1–1.4 show real GDP growth, consumer price inflation, standardized unemployment and long-term government bond yields in the eurozone as a whole, other members of the EU15 (Denmark, Sweden and the UK), other Western European countries (Norway and Switzerland) and the USA from 1996 to 2005. Table 1.1 gives the averages for 1999–2005. What comes out of these comparisons is straightforward. First, economic growth in the eurozone has been slower than in the USA or the other EU15, but more or less the same as in the other Western European countries, while the cycles of all of these have been broadly in line, particularly since 1999. Second, eurozone inflation has been lower than in the US but higher than in the two other

European groups. Third, eurozone unemployment has remained, as it has been since the mid-1990s, consistently much higher than in the US and the other EU15, which in turn have had higher unemployment than the other Western European countries. And fourth, the credibility of monetary policy as measured simply by government bond yields has been broadly comparable with that in the two other European groups, and often better than that of the US. The large difference here is therefore unemployment rather than economic growth (or inflation or credibility): the main problem in the eurozone (as a whole) seems to be that growth has not been enough to bring unemployment down into line with other countries, rather than that growth has been very poor in itself.

While there is scope for a more detailed examination of these issues, including a disaggregation of the eurozone into its member countries, these data provide a useful background perspective to the substantial chapters of the book, of which the first three discuss monetary policy, the next two fiscal policy and the Stability and Growth Pact (SGP), the next two macro-economic policy and structural reform, and the four others discuss financial integration, the notes and coin changeover, the new accession countries and the dollar/euro exchange rate.

The strongest criticism levelled at monetary policy in the eurozone has been that the ECB's monetary policy strategy is an unsatisfactory mix of monetary targeting and inflation targeting, with too much attention paid to monetary growth. In this book, Katrin Assenmacher-Wesche and Stefan Gerlach present a model in which trend monetary growth affects inflation in the long term while the output gap and cost-push shocks affect shorter term inflation. They use band spectrum regressions to test the model, and succeed in identifying the different frequencies of these various effects. Their chapter therefore provides a rationale for the ECB's emphasis on the

*Table 1.1* Basic data for the eurozone, 1999–2005

	<i>Real GDP growth</i>	<i>Consumer price inflation</i>	<i>Standardized unemployment<sup>c</sup></i>	<i>Government bond yields</i>
Eurozone	1.9	2.1	8.5	4.5
Other EU15 <sup>a</sup>	2.5	1.6	5.2	4.5 <sup>d</sup>
Other Western Europe <sup>b</sup>	1.8	1.5	3.6	4.0
USA	3.0	2.6	5.0	4.8

*Notes:* <sup>a</sup> Other EU15 = Denmark, Sweden, UK (unweighted average); <sup>b</sup> Other Western Europe = Norway, Switzerland (unweighted average); <sup>c</sup> 1999–2004; <sup>d</sup> Denmark and UK only.

*Sources:* growth from Eurostat (website); consumer price inflation and standardized unemployment from OECD *Economic Outlook*, December 2005; bond yields from *International Financial Statistics*.

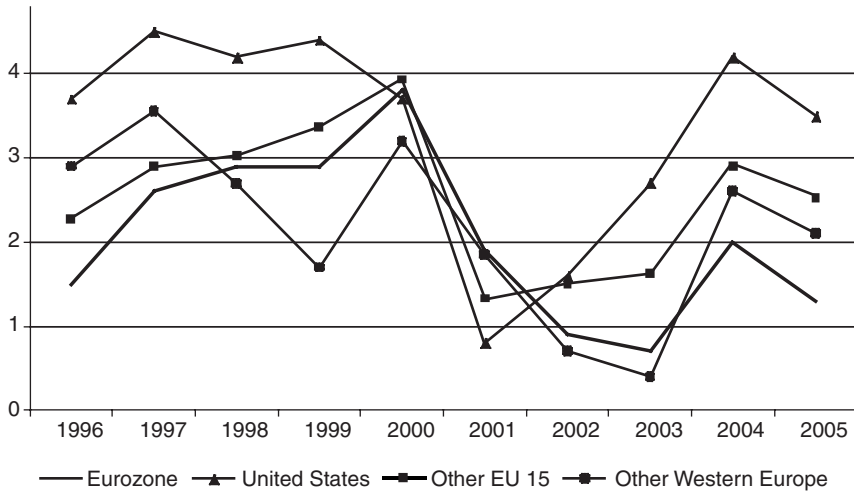


Figure 1.1 Real GDP growth

Notes and Sources: see under Table 1.1

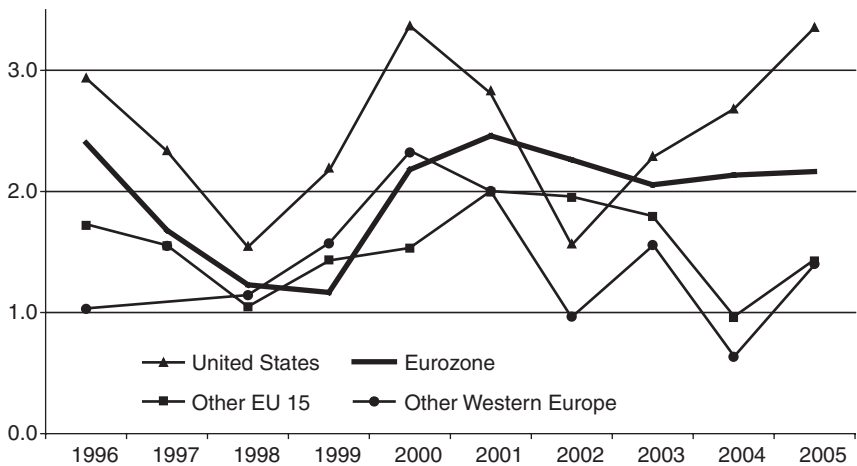


Figure 1.2 Consumer price inflation

Notes and Sources: see under Table 1.1

importance of monetary growth as well as other determinants of inflation, though they leave open the question of whether this emphasis should be reflected in a separate 'monetary pillar'. Michael Sumner makes the point in his comment that the Bundesbank's monetary framework, which was similar to the ECB's, was not criticised in the same way, and asks why.

#### 4 Introduction

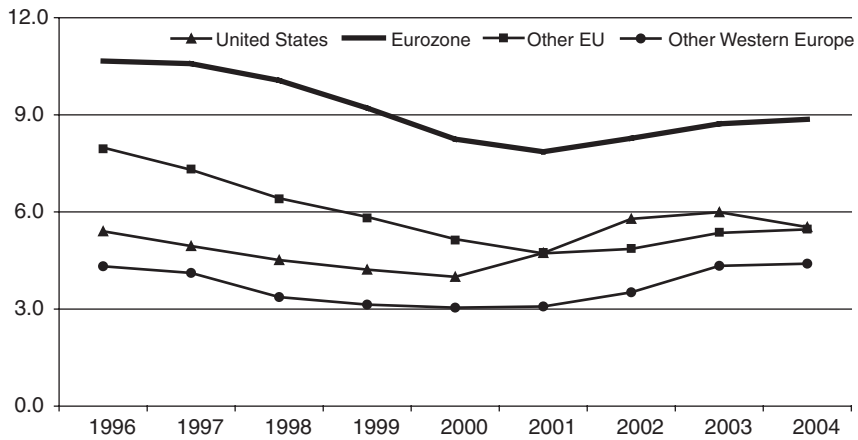


Figure 1.3 Standardised unemployment rates

Notes and Sources: see under Table 1.1

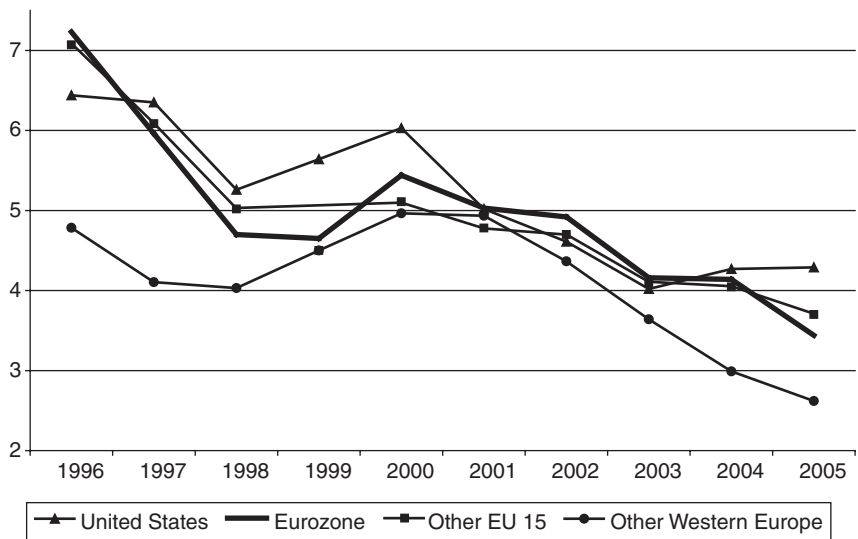


Figure 1.4 Government bond yields

Notes and Sources: see under Table 1.1

Paolo Surico focuses on the question of the determinants of inflation in a different perspective, by examining the New Keynesian Phillips curve (NKPC). He uses Monte Carlo simulations of a model where inflation is entirely forward-looking to show that, in a situation where the monetary authority does not ensure that real interest rates rise in response to a rise in

inflation, econometric estimates of the NKPC will find, spuriously, a significant backward-looking component. But if the monetary authority responds more than one for one to inflation movements the estimates will correctly find no such significant component. While his emphasis is on how to interpret estimates of the NKPC, and on the nature of inflation persistence, his empirical work on actual data for the eurozone gets essentially the same results as his work on recent data for the UK and the US: inflation seems to be entirely forward-looking, which in his model can be construed as a reflection of the sound anti-inflationary tendency of the monetary policy of all three central banks. Fabrizio Mattesini in his comment raises a number of questions regarding the model-dependence of Surico's 'indeterminacy bias', the extent of the change in US monetary policy between the 1960s–1970s and the later years, and the relation between indeterminacy and inflation persistence.

Bernd Hayo addresses the question of whether interest rates would have been different if EMU had not been created and individual countries had continued to set their own rates in the same way as they did in the preceding decade or so. He does this by regressing Taylor rule equations for each eurozone member and then using the results to predict interest rates on the basis of post-1999 national data on inflation and the output gap. The results are that for almost all countries national interest rates would on average have been higher in the non-EMU case; the exception is Germany where rates would on average have been slightly lower. The clear implication is that low growth in the eurozone cannot be attributed to excessively high interest rates set by the ECB. In his comment on the chapter, Carlo Favero argues that Hayo's Taylor rule estimates are sufficiently imprecise that it may be difficult to put much weight on these conclusions.

Christopher Allsopp and David Vines argue that the ECB's monetary policy is broadly comparable to that in the US and the UK in terms of its focus on price stability and its willingness to allow output to vary around the natural rate in order to control inflation. However, they then focus on the issue of inter-country adjustment within EMU, presenting an informal model to analyse how, in the presence of asymmetric shocks, countries need to use national fiscal policy to adjust their national price levels and hence their real exchange rates *vis-à-vis* other members of the eurozone, and arguing that the constraints of the SGP make the appropriate use of fiscal policy very difficult. In some respects their chapter is a restatement of optimum currency area theory in the context of modern macroeconomic policy thinking, and they offer a highly pessimistic view of the future of EMU. However, as Charles Nolan points out in his comment, they may be dismissing the potential contribution of structural reform along the lines of the Lisbon agenda rather too easily, while asymmetric shocks may be less common than they imagine. It is also worth noting that Paolo Surico's

work has shown that under EMU inflation is essentially forward-looking, which would also ease some of Allsopp and Vines's concerns.

Michael Artis and Luca Onorante address the issue of fiscal policy and the SGP from a very different angle. They estimate a structural VAR for the deficit/GDP ratio, the growth rate and inflation in each of the eurozone member countries, and undertake simulations to analyse the likely effects of the original SGP and the recent modifications to it on the variability of output in each country. Their historical analysis finds that discretionary fiscal policy did rather little to stabilise (or destabilise) output in the 1993–2004 period. Indeed they argue that, given the resources and information required to run an optimal fiscal policy and the limited gains from it, in practice it might be sensible to approximate the best policy 'by not using discretionary fiscal policy and simply letting the automatic stabilisers work freely'. Artis and Onorante then show through their simulations that the cost in terms of stabilisation of the original SGP was limited, but the recent modifications to the SGP offer relatively little additional freedom to national fiscal policy. Campbell Leith in his comment argues that there are a number of ways in which the Artis–Onorante analysis may underestimate the potential for fiscal policy to play a useful stabilising role.

Adam Posen and Daniel Gould investigate the extent to which EMU has affected 'wage restraint', that is the difference between real wage growth and productivity growth. They identify the change in wage restraint between 1991–98 and 1999–2004, discuss a range of relevant hypotheses, provide a cross-section analysis of wage restraint in relation to labour market institutions and EMU membership, and then undertake time-series analyses of Germany and Italy. They find that wage restraint did not change much post-EMU in member countries and increased by more in some non-EMU countries. Hypotheses that focus on labour market institutions seem to have little to contribute, and the change in monetary credibility, proxied by the change in the long-term bond rate – particularly large for some countries under EMU – turns out to be the most important determinant of the change in wage restraint. John Driffill's comment offers a wider perspective on the concept and measurement of wage restraint and on possible reasons for some of the results.

Ansgar Belke, Bernhard Herz and Lukas Vogel address the issue of whether EMU has encouraged structural reform of different kinds, by examining the relationship in two wider samples of countries between exchange rate fixity, which they interpret as a lack of monetary policy autonomy, and structural reform. While they find some support from their 'world' sample for the hypothesis that commitment encourages reform, there is little evidence of this in the smaller sample of OECD countries. In other words, EMU should not have been expected to stimulate structural reforms in the member countries and the low level of reform should be understood in that light. Gulcin Ozkan in her comment raises some important ques-

tions about the measures of reform used and the different types of reform considered, the relevance of the world sample, and the interpretation of exchange rate fixity as monetary discipline.

Philip Lane and Sébastien Wälti investigate the impact of EMU on financial integration, using both volume-based indicators and evidence from asset prices. They find that financial integration between EMU members has increased significantly, but they also identify a wider process of financial globalisation affecting non-EMU members as well. By examining carefully the time-varying correlation of returns they show that, other common things being equal, returns in EMU countries became more highly correlated from 1998 with a 'rapid, significant and persistent disconnect of correlations'. On the other hand, there are still major barriers to integration in banking at the retail and corporate levels. They also examine the international role of the euro, which has increased importantly in some dimensions but remains much smaller than that of the dollar. Robert Mochrie in his comment provides some useful perspective on and qualifications to the different results the authors have obtained, but emphasises the novel findings on stockmarket correlation as the chapter's key contribution.

Jayasri Dutta and Marco Ercolani provide a detailed study of the extent to which the changeover to euro notes and coin in January 2002 led – as widely believed in some EMU countries – to significant increases in prices and inflation. Using data disaggregated by countries and products, they first find only weak evidence of increases at the aggregate level, but go on to examine data for individual product groups and sub-groups. They confirm previous findings and common beliefs that restaurant prices were particularly affected in many countries, and find comparable results for a number of other sub-groups including cinemas and hairdressing salons, mainly but not exclusively in the service sector. Manfredi La Manna in his comment picks up on their discussion of the possible causes of these effects. He dismisses the menu cost explanation but presents a simple Bertrand duopoly model for a local oligopoly which offers some predictions in line with Dutta and Ercolani's results, but also emphasises the issue of the substitutability/complementarity of the products involved.

Miroslav Beblavý analyses the issues and problems involved in EMU accession for the Central and East European new members of the European Union. Beblavý shows that public opinion is by no means entirely favourable to EMU entry, but these countries have in effect signed up to entering EMU when they fulfil the Maastricht conditions, so his analysis then focuses on those conditions. It turns out that for most countries the most difficult conditions are the fiscal deficit and inflation conditions rather than the debt or interest rate ones. Beblavý relates countries' fiscal deficits to their fundamental political choices with regard to the size of the welfare states which they are trying to create, on the one hand, and their willingness and ability to levy taxes on the other. Inflation is something of a

lottery (partly because the critical level is low and somewhat erratic, since it depends on the levels in the lowest members of the EU, rather than EMU), and is particularly problematic for some of the Baltic countries where the use of currency boards has prevented nominal appreciation of a kind which could help to minimise inflation in the context of strong tendencies to appreciation of the (equilibrium and actual) real exchange rate. The exchange rate stability criterion, on the other hand, is viewed in the new accession countries as unavoidable but irrelevant or potentially dangerous. In his comments on the paper, Atanas Christev notes the advantages of a wider, micro-founded and welfare-based assessment of alternative exchange rate regimes, and stresses the importance of popular support for accession to EMU.

Finally, Ali Al-Eyd, Ray Barrell and Dawn Holland investigate one of the most striking macro phenomena of the EMU period, the euro's initial depreciation against the dollar and its later stronger appreciation. They explain the background in terms of movements in sectoral balances and different types of capital flows, and then, using a portfolio-balance approach, try to identify influences upon the *ex post* risk premium in the uncovered interest parity relationship between the US and the euro area. Although changes in net foreign asset positions and monetary and fiscal policy 'news' can explain some of the movements in the risk premium, there remains a large element of pure noise. However, their analysis leads them to conclude that the exchange rate movements were driven largely by US rather than eurozone developments (which goes against much of the early commentary on the euro's depreciation). Jacques Mélitz in his comment argues that the analysis would be more convincing if it included Japan and China, the US's two largest net creditors, rather than just the US and the eurozone.

What overall judgment can we reach on the travails of the eurozone in its first seven years? It seems clear that on the monetary side the judgment of the EMU project so far has to be strongly positive: the institutional changes (including the notes and coin changeover) were made efficiently, the ECB operates monetary policy broadly like other competent modern central banks, and it is hard to claim that excessively tight monetary policy has impeded growth. Moreover, there is some evidence that the strong swings in the euro's exchange rate have reflected US policy actions and developments rather than eurozone ones. Fiscal policy remains a more controversial issue: in this volume Allsopp and Vines emphasise a problem to which other economists have so far paid relatively little attention, while Artis and Onorante write with a very different (and less apocalyptic) focus and perspective. On structural reform there is widespread agreement that there has so far been less reform than is desirable (though financial integration has deepened significantly), and there is slightly less widespread agreement that the low level of reform is a major contributor to the slow

growth of the eurozone. However, it is important here to separate actions from words, since governments (for example in Germany and Italy) do not always act in accordance with their pronouncements, and in any case the aggregate development of the eurozone has been rather better than some commentators suggest.

Furthermore, in evaluating the achievements of the EMU project so far it is essential to choose the appropriate counterfactual (a point well made by Jacques Mélitz at the conference): if EMU had not taken place the member countries would almost certainly not be operating good modern monetary policy like the Federal Reserve Board or the post-1997 Bank of England, nor would they even be doing just what they were doing in the period between 1993 and 1998. Instead, it is likely that in many (but not all) of the EMU member countries monetary and fiscal policy would be less disciplined, inflation higher, output more variable and growth lower. Moreover, the existence and implementation of the EMU project has without doubt provided an important focus and anchor for the new accession countries in Central and Eastern Europe. In this light some of the criticisms made of the EMU project are only of second order importance, and the emphasis placed upon them underlines the progress made on first order issues.

Those favourable to EMU will inevitably feel more comfortable when there is firmer evidence of economic recovery and successful structural reform. But in the meantime the travails of the eurozone should be kept in perspective: they may be deeper and more prolonged than predictable teething problems, but they cannot detract from what is clearly a strong and successful project.

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